

Ventura County Health Care System Oversight Committee Administrative Policies

January 12, 2023

The following administrative policies were reviewed and recommended for approval by appropriate departments and committees.

1. 101.010 Cardiopulmonary Resuscitation (CPR) Training Requirements
2. 101.025 OSHA Bloodborne Pathogen Education
3. 103.001 Board of Supervisors Roles and Responsibilities
4. 103.003 Hospital Oversight Committee
5. 106.001 Safety Management Plan
6. 106.003 Hospital Emergency Call Codes
7. 106.006 Safety Officer
8. 106.044 Security Management Plan
9. 106.045 Utilities Management Plan
10. 106.075 Workplace Violence Prevention Plan
11. 107.023 Adverse Events, Sentinel Events, Unusual Occurrences
12. 108.025 Nurse Call System
13. F.114 Procedure for Alternate Helipad Usage
14. F.33 Humidity in the Operating Rooms
15. L.37 Laboratory Data Verification and Validation
16. L.42 Preservation of Laboratory Records and Specimens
17. L.54 Using ABBOTT iSTAT Handheld Analyzer
18. L.SPH.50 Linearity Studies
19. L.SPH.58 Method Correlations (Quantitative Tests)
20. PH.93 Pyxis Reports



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Last Approved 12/5/2022
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Owner **Sherri Block:**
Associate Chief
Nursing
Executive, VCMC
& SPH
Policy Area **Administrative -
Employee**

101.010 Cardiopulmonary Resuscitation (CPR) Training Requirements

POLICY:

In order to promote optimal patient safety, effective resuscitation services will be available throughout Ventura County Medical Center, Santa Paula Hospital, Inpatient Psychiatric Unit and licensed clinics. In order to meet this requirement, employees and medical staff shall maintain the following current certifications:

PROCEDURE:

- A. **Basic Life Support (BLS) Provider** - Every two (2) year recertification required. Must be an approved/accredited American Heart Association course or American Red Cross course with a "hands on" skills component.
- Nursing (Registered Nurse (RN), Licensed Vocational Nurse (LVN), Licensed Psychiatric Technician (LPT), Operating Room Technician (ORT), Medical Office Assistant (MOA), Nursing Assistant (NA), Medical Assistant (MA), Clinical Assistant (CA))
 - Imaging Services (Radiologic Technologist, Radiologic Specialist, Radiologic Supervisor)
 - Physical Therapist/Occupational Therapist/Speech Pathologist
 - Respiratory Therapist
 - Resident Physicians
- B. **Advanced Cardiac Life Support/Advanced Life Support (ACLS/ALS)** – every two (2) year recertification required. Must be an approved/accredited American Heart Association or American Red Cross course with a "hands on" skill component.

- Resident physicians
- Registered Nurses and Licensed Vocational Nurses working in the following patient care areas:
 - Post-Anesthesia Care Unit (PACU)
 - Preoperative Care Unit
 - Emergency Department (ED)
 - Definitive Observation Unit (DOU)
 - Telemetry (TELE)
 - Intensive Care Unit (ICU)
 - RNs and LVNs assigned monitoring for moderate sedation
- Respiratory Therapist
- ACLS/ALS is strongly recommended for RNs and LVNs who work in the perioperative and medical-surgical (Med-Surg) setting.

C. **Neonatal Resuscitation (NRP):** every two (2) year recertification required. Must be an approved/accredited American Academy of Pediatrics course with a "hands on" skill component.

- Resident physicians
- Registered Nurses and Licensed Vocational Nurses working in the following patient care areas:
 - Neonatal Intensive Care Unit (NICU)
 - Obstetrics (OB)
 - OR/PACU RNs participating in c-sections
- Respiratory Therapists working in the NICU and Santa Paula Hospital

D. **Pediatric Advanced Life Support (PALS)** every two (2) year recertification required. Must be an approved/accredited American Heart Association course with a "hands on" skill component.

- Resident physicians
- Registered Nurses and Licensed Vocational Nurses working in the following patient care areas:
 - Pediatrics
 - Pediatric Intensive Care Unit (PICU)
 - Intensive Care Unit (ICU)
 - Emergency Department (ED)/(unless they have completed Emergency Nursing Pediatric Course (ENPC))
- Respiratory Therapists
- PALS is strongly recommended for RNs and LVNs who work in the perioperative

setting.

- E. Medical staff members shall comply with the requirements specified in the Medical Staff bylaws, rules and regulations regarding BLS, ACLS/ALS, PALS and NRP certification/recertification. BLS must be an approved/accredited American Heart Association or American Red Cross equivalent course with a "hands on" skills component. ACLS/ALS and PALS must be an approved/accredited American Heart Association course with a "hands on" skills component. NRP must be an approved/accredited American Academy of Pediatrics course with a "hands on" skills component.

Course Offerings:

- All courses shall be taught according to the standards of, and approved/accredited by, the American Heart Association (AHA) or the American Red Cross (ARC) or the American Academy of Pediatrics (AAP).
- Cardiopulmonary Resuscitation (CPR) recertification courses (BLS Provider) shall be offered at least monthly.
- ACLS/ALS, NRP and PALS certification/recertification courses shall be offered at least biannually.
- Scheduling of AHA courses is the responsibility of the VCMC Nursing Education Department's AHA Training Center Coordinator. Continuing Education (CE) units shall be awarded for completion of ACLS, PALS and/or NRP courses.
- Maintaining required certification and scheduling of employees for courses is ultimately the responsibility of the individual employee (in conjunction with each department manager).

All Revision Dates

12/5/2022, 7/18/2022, 2/12/2019, 5/1/2006, 12/1/2004, 9/1/2001, 11/1/1998, 3/1/1995, 8/1/1992, 11/1/1989, 10/1/1986

Approval Signatures

Step Description	Approver	Date
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	12/5/2022
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/14/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/14/2022

Policy Owner

Sherri Block: Associate Chief
Nursing Executive, VCMC &
SPH

11/14/2022

COPY

Status **Active** PolicyStat ID **9950413**



Origination 6/1/2015
Last Approved 1/3/2023
Effective 1/3/2023
Last Revised 1/3/2023
Next Review 1/2/2026

Owner **Magdy Asaad:**
Infection
Prevention
Manager
Policy Area **Administrative -
Employee**

101.025 OSHA Bloodborne Pathogen Education

POLICY:

All staff who work at Ventura County Medical Center, Santa Paula Hospital, Inpatient Psychiatric Unit and Ambulatory Care Clinics shall have annual Bloodborne Pathogen Training.

PROCEDURE:

- A. Classes will be available on a monthly basis for newly hired staff.
 1. Classes will be conducted by an Infection Preventionist or other licensed personnel who are fully trained in Infection Prevention and Control.
- B. Annual training shall be provided within one year of their previous training via comprehensive self-learning module that include illustrations, demonstrations and post-test.
- C. Additional training shall also be provided via comprehensive self-learning module that include illustrations, demonstrations and post-test. This additional training shall be provided when changes such as modification of tasks or procedures or institution of new tasks or procedures affect the employee's occupational exposure. The additional training may be limited to addressing the new exposures created.

All Revision Dates

1/3/2023, 6/1/2015

Approval Signatures

Step Description	Approver	Date
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	1/3/2023
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	1/3/2023
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	10/3/2022
Policy Owner	Magdy Asaad: Infection Prevention Manager	8/24/2022

COPY



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 Effective 1/2/2023
 Last Revised 12/14/2022
 Next Review 12/13/2025

Owner John Fankhauser,
 MD: Chief
 Executive Officer,
 VCMC & SPH
 Policy Area Administrative -
 Board of
 Supervisors

103.001 Board of Supervisors Roles and Responsibilities

POLICY:

Because of the stature of Ventura County Medical Center/Santa Paula Hospital as a County-owned public institution(s), governing body responsibility is vested in the Ventura County Board of Supervisors. A current listing of the names and addresses of the Board of Supervisors is listed below.

VENTURA COUNTY BOARD OF SUPERVISORS

NAME	ADDRESS
DISTRICT 1 - MATT LAVERE	800 S. Victoria Ave. Ventura, California 93009
DISTRICT 2 - JEFF GORRELL	2100 E. Thousand Oaks Blvd., #C Thousand Oaks, California 91362
DISTRICT 3 - KELLY LONG	800 S. Victoria Ave. Ventura, California 93009
DISTRICT 4 - JANICE PARVIN	800 S. Victoria Ave. Ventura, California 93009
DISTRICT 5 - VIANEY LOPEZ	800 S. Victoria Ave. Ventura, California 93009

PROCEDURE:

Board Responsibilities

The Board of Supervisors of Ventura County along with the Health Care Agency Director has the ultimate authority for the management, operation and maintenance of Ventura County Medical Center/Santa Paula Hospital, which includes the hospital(s), inpatient psychiatric unit, medical clinics and behavioral health clinics.

Clarification of the policies pertaining to the admission and treatment of patients at the hospital was stated in a memorandum to the Board of Supervisors by the Hospital Administrator on February 2, 1966.

In the 1956 resolution, the following responsibilities were acknowledged:

1. Responsibility to provide for the indigent sick and those persons who require emergency care.
2. Accountability and responsibility of the Hospital Administrator.
3. Responsibility to provide medical care for non-indigent persons.

- 4. Responsibility for the cost of medical care furnished to County patients.

Governing Board Bylaws

Due to the nature of the County Board of Supervisors as a body of public, elected officials with responsibility for the entirety of county government in Ventura, the Governing Body Bylaws are dictated by County ordinance and incorporate responsibilities for all County agencies and departments. Because it is impractical to duplicate the preponderance of Board of Supervisor Bylaw and Ordinance documentation and because the Board does not have the time to devote to the hospital and clinic system that a single institution Board would, much of the routine Governing Body activity has been vested in a Joint Conference Committee, named the Ventura County Health Care System Oversight Committee. The Oversight Committee, which is described in detail in Administrative policy 103.003, includes representatives of the Board of Supervisors, Medical Staff, Health Care Agency, Hospital, Ambulatory Care, and Behavioral Health Administration and County government.

The duties and responsibilities for hospital oversight are included in Ventura County Health Care Agency Bylaws of the Ventura County Health Care System Oversight Committee

All Revision Dates

12/14/2022, 12/1/2010, 6/1/2009, 12/1/2007, 5/1/2006, 12/1/1995

Approval Signatures

Step Description	Approver	Date
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	12/14/2022
Hospital Administration	John Fankhauser, MD: Chief Executive Officer, VCMC & SPH	12/12/2022
Policy Owner	John Fankhauser, MD: Chief Executive Officer, VCMC & SPH	12/12/2022

Status **Active** PolicyStat ID **7733610**



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Last Revised 12/20/2022
Next Review 12/20/2022

Owner John Fankhauser,
MD: Chief
Executive Officer,
VCMC & SPH
Policy Area Administrative -
Board of
Supervisors

103.003 Hospital Oversight Committee

POLICY:

It is the policy of Ventura County Medical Center/Santa Paula Hospital to have an Oversight Committee consistent with the guidelines set by the Ventura County Board of Supervisors and regulatory agencies which include The Joint Commission, Center for Medicare & Medicaid Services, the California Department of Public Health. The resolution of the Board, outlining the responsibilities of the Oversight Committee is as follows below.

PROCEDURE:

The scope of the Oversight Committee encompasses the Ventura County Health Care System, comprised of the Ventura County Medical Center, Santa Paula Hospital and their associated clinics and operations, including the inpatient psychiatric unit (VCMC), the Ventura County primary care medical clinics (Ambulatory Care Clinics) including urgent cares, primary and specialty clinics and programs, and Behavioral Health Department outpatient clinics corresponding to enterprise services.

As the governing body of Ventura County Medical Center/Santa Paula Hospital, the Board has an ongoing need to be kept apprised of all developments and issues at Ventura County Medical Center/Santa Paula Hospital, as well as in the field of health care services within the Ventura County Health Care Agency. The Oversight Committee, consists of two members of the Board of Supervisors as approved and appointed by a majority of the Board of Supervisors, the County Executive Officer, the Health Care Agency Director, the VCMC/SPH Chief Executive Officer, the Ambulatory Care Chief Executive Officer, the VCMC/SPH Chief Medical Officer, the Chief of the Medical Staff, a public consumer member, the Behavioral Health Director, and the County Auditor-Controller. The Oversight Committee will be responsible for providing the mechanism for communication and coordination between the HCA Director, Chief Executive Officers, the Medical Staff, other County staff and the Board.

The Oversight Committee will draw on the necessary staff resources from the Health Care Agency,

Ventura County Medical Center/Santa Paula Hospital, the Ambulatory Care Clinics, the Medical Staff and the entire County as deemed necessary by the Committee.

The formation of this Committee has the full support of the Health Care Agency Director and the County Executive Officer.

All Revision Dates

12/20/2022, 10/1/2010, 6/1/2008, 5/1/2006, 12/1/1995, 12/1/1989

Attachments

[Exhibit 1 VCHCA Oversight Bylaws 8.29.22.pdf](#)

Approval Signatures

Step Description	Approver	Date
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	12/20/2022
Hospital Administration	John Fankhauser, MD: Chief Executive Officer, VCMC & SPH	12/19/2022
Policy Owner	John Fankhauser, MD: Chief Executive Officer, VCMC & SPH	12/19/2022



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Next Review 12/12/2023

Owner **Fernando Medina:**
Manager,
Hospital Support
Services
Policy Area **Administrative -
Environment of
Care**

106.001 Safety Management Plan

POLICY:

The Safety Management Plan is set up to provide oversight to ensure that Ventura County Medical Center (VCMC), Santa Paula Hospital (SPH), Inpatient Psychiatric Unit (IPU) and the Ambulatory Care clinics are functionally safe and to maintain a secure health care environment for patients, visitors, staff, medical staff and volunteers by requiring the establishment and supporting the maintenance of the primary functions of the Environment of Care. The scope of the Safety Management Plan defines the processes which the Ventura County Medical System provides for safety in the patient care setting and ensures effective preparation of staff responsible for the safety of patients.

PROCEDURE:

AUTHORITY:

- The Joint Commission Hospital Accreditation Standards
- National Fire Protection Association Life Safety 1001
- Occupational Safety and Health Administration
- Environmental Protection Agency
- Department of Transportation
- Air Pollution Control District
- Local Fire Department

ORGANIZATION:

1. The Safety Management Plan defines the mechanisms for interaction and oversight for the

primary functions involved in the Environment of Care (EOC). The program is overseen by the Safety Committee with functions and responsibilities decentralized into the following EOC subcommittees:

1. Safety Management
 2. Hazardous Material & Waste Management
 3. Fire & Life Safety
 4. Emergency Management
 5. Security Management
 6. Medical Equipment Management
 7. Utilities Management
2. The Chief Executive Officer (Hospital Administrator) and the Medical Staff Director shall appoint a Safety Officer who is qualified by experience and/or education to be responsible for the development, implementation, and monitoring of the program. The Safety Officer has the authority to intervene and take appropriate action when conditions exist that pose an immediate threat to life or health, or pose a threat of damage to equipment or buildings.
 3. The Safety Committee provides oversight on the design, implementation, and monitoring of each specific management plan for the primary functions involved in the Environment of Care.
 4. The Safety Committee Chair will report safety concerns to EOC Committee.
 5. The Safety Committee will meet at least quarterly to review issues identified by the Safety Committee and solicit interactive review of the safety of the organization. The Safety Committee members shall include representatives from the following areas:
 1. Administration
 2. Physicians
 3. Nursing and Ancillary Services
 4. Support Services
 5. Medical Staff
 6. Infection Control
 7. Performance Improvement
 8. Ambulatory Care Clinics
 6. The Chief Executive Officer will appoint the Radiation Safety Officer.
 7. The Medical Staff Director may appoint Medical Staff as members of either the Safety Committee and/or the EOC Committee.
 8. All policies of the Safety Management Plan are designed to apply to all departments, staff, volunteers, Medical Staff, patients, visitors, contractors and vendors.

OBJECTIVES:

1. The Safety Management Program will strive to minimize avoidable risks and injuries through sound planning, resource allocation, effective training implementation, ongoing monitoring and

- improvement of risk reduction activities.
2. The hospital conducts proactive risk assessments that evaluate potential adverse impact of buildings, grounds, equipment, occupants and internal systems on the safety and health of patients, staff and others.
 3. These identified risks are used to implement procedures and controls to achieve the lowest potential for adverse impact on patients, staff and others.
 4. The Safety Committee will meet as often as necessary, but at least quarterly, to analyze identified safety management issues, identify trends, make recommendations for actions and evaluate the effectiveness of actions taken.
 5. When problems are identified, corrective action will be developed and implemented by the appropriate individuals. Such action will be documented, monitored for effectiveness and revised as necessary.

EDUCATION:

1. In-service training on the Environment of Care general safety, area specific safety and job specific hazards is provided at the initial orientation, annually thereafter, and as necessary to all staff, volunteers and Medical Staff as determined by Environmental Tours.
2. Education will be provided as necessary based on performance measures and random questions or by surveillance EOC rounds.

PERFORMANCE EVALUATION:

1. The Safety Management Program works at the sub-committee level to establish standards. The sub-committees will implement, monitor, and document evidence of EOC performance measurement.
2. The Safety Committee will submit performance improvement tasks as part of each EOC Management Plan.
3. Staff will be able to demonstrate or describe their role and expected level of performance in the Safety Management Program.
4. Staff's knowledge of policies and procedures and responsibilities under the program are periodically assessed.

PERFORMANCE IMPROVEMENT:

1. Use of Environmental Surveillance Rounds summary to identify opportunities to improve the Environment of Care.
2. Monitor and report EOC rounds routinely to department heads.
3. Re-establishing regular reporting mechanisms with Employee Health for injuries to patients or others within the hospital facilities, occupational illnesses and staff injuries. Programs will be designed to address the most common injuries.
4. Reduce the Notice of Violation by determining the root cause of violation(s).

ANNUAL EVALUATION

1. The scope, objective, performance, effectiveness and goals of the Safety Management Program will be evaluated annually to ensure it meets Safety, Risk Management, and Performance Improvement needs.
2. Safety polices and procedures are established, distributed, practiced and enforced. The policies are reviewed as frequently as necessary, but at least every year.

All Revision Dates

12/12/2022, 9/17/2019, 4/1/2013, 3/1/2012, 4/1/2011, 7/1/2010, 9/1/2009, 1/1/2007, 5/1/2006, 4/1/2004, 11/1/2001, 12/1/1998, 11/1/1998, 10/1/1986

Attachments

[Annual Evaluation of Safety Management Plan](#)

Approval Signatures

Step Description	Approver	Date
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	12/12/2022
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/12/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	12/12/2022
Safety Committee	Fernando Medina: Manager, Hospital Support Services	12/12/2022
Policy Owner	Fernando Medina: Manager, Hospital Support Services	12/12/2022



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Owner **Fernando Medina:**
Manager,
Hospital Support
Services
Policy Area **Administrative -
Environment of
Care**

106.003 Hospital Emergency Call Codes

POLICY:

The call codes below are used to alert Ventura County Medical Center, Santa Paula Hospital staff and Ambulatory Care clinic staff to emergencies. Codes located at VCMC are to dial 7-6666 for paging. Codes located at SPH are to dial 7-8666 for paging. Codes located at the Ambulatory Care clinic are to dial 7-6666 for paging.

PROCEDURE:

CODE RED: Experiencing a fire, smoke or smell of something burning

- Response: Call paging with building, location floor & room # of "Code Red". Use an extinguisher to put out fire (If safe).
 - RACE: Rescue anyone in danger, Activate alarm, Close doors and windows and Extinguish fire (if safe)
 - PASS : Pull the pin, Aim hose at base of fire, Squeeze the handle and Sweep side to side

CODE STROKE: Person with sudden stroke symptoms onset. (Face drooping, arm weakness, difficulty speaking)

- Response: Assess need, call for help. Call paging with location of "Code Stroke".
- Refer to [100.226 Acute Stroke Management/Code Stroke](#).

CODE BLUE: Person 18 & older cardiopulmonary arrest.

- Response: Assess need, call for help & initiate CPR, bring crash cart. Call paging with location of "Code Blue".

- Refer to [100.055 Code Blue - Adult Medical Emergency](#).

CODE WHITE: Person under 18 cardiopulmonary arrest.

- Response: Assess need, call for help & initiate CPR, bring crash cart. Call paging with location of "Code White".
- Refer to [100.112 Code White - Pediatric Medical Emergency](#).

RAPID RESPONSE: Deteriorating patient status or failure to respond to treatment.

- Response: Assess & treat life threats - ABC's. Call paging with location of "Rapid Response" and if "child" or "adult". Maintain ABC's, assure IV access & bring crash cart.
- Refer to [100.086 Rapid Response Team](#).

Code Sepsis: Patients with a positive sepsis screen and initial hypotension criteria and/or lactate ≥ 4.0 mmol/L.

- Response: Call paging with location of "Code Sepsis".
- Refer to [100.201 Sepsis Management Policy](#).

CODE YELLOW: Trauma victim(s) MCI multi-casualty incident (3-8 patients), Tier 1 (highest acuity), Tier 2 (moderate acuity) and Tier 3 (low acuity)

- Response: ER & Staff prepare for patient arrival. Respond per VCMC Trauma Response Plan.
- Refer to [T.01 VCMC Trauma Response Plan](#) and [ER.13 Helicopter Safety](#).

CODE MATERNITY: OB hemorrhage

- Response: Call paging with location of "Code Maternity". Nursing Supervisor to call OR team.
- Refer to [OB.09 Code Maternity](#).

CODE PINK: Infant abduction under age one missing or reported kidnapped.

- Response: Call paging with location of "Code Pink". Go to the closest exit and watch for a person with a large package or an infant escorted by a person without a VCMC/SPH badge. Verify infant identity (wristband) or see contents of package.
- Follow up: Immediately report suspect description and direction of travel to security & nursing supervisor.
- Refer to [106.002 Code Pink/Code Purple - Known/Suspected Infant/Child Abduction](#).

CODE PURPLE: Child Abduction age 1-12, missing or reported kidnapped.

- Response: Call paging with location of "Code Purple". Go to closest exit, watch for anyone exhibiting unusual behavior. Verify child's identity (wristband).
- Follow up: Immediately report suspect description and direction of travel to security & nursing supervisor.
- Refer to [106.002 Code Pink/Code Purple - Known/Suspected Infant/Child Abduction](#).

CODE GREY: Security situation of an escalating/ potentially violent behavior.

- Clear the area to avoid others becoming involved. Call paging with location of “Code Gray”.
- Refer to [106.059 Code Grey](#).

CODE GREEN: At risk patient elopement

- All employees are to cover all exits & ask question of any patient in hospital attire. Call paging with location of “Code Green”.
- Refer to [100.237 Code Green - Patient Elopement](#).

CODE VIOLET: Irate visitor in behavioral health (IPU) lobby only.

- IPU operator to announce internal code. All available staff to report to location.

CODE ORANGE:

- Hazardous Material Spill or Release-Incidental Spill: a small spill presenting NO hazard to trained staff or environment
- Call paging with location of “Code Orange”.
- Trainer/User clean up spill.
- Use appropriate protective equipment/decontamination materials.
- Appropriately dispose of materials.
- Radioactive/Major Incident Emergency/Major Spill: a spill that presents hazard to people &/or an environment or effects are unknown.
 - Isolate the spill area (evacuate). Deny entry to others. Notify your supervisor. Seek/ coordinate medical treatment of decontaminated victim.
- Refer to [ER.50 Hazmat Shower and Tent Use](#) or [106.066 Hospital Evacuation Plan](#).

CODE TRIAGE DISASTER: Emergency Situation presenting hazard to employee or environment & interrupts normal service.

- Report to department to receive specific duty. If required, initiate your departments Callback list. Appropriately carry out your assignment. Seek/ coordinate medical treatment of victims.
 - Level 1 (9-20 Pts)
 - Level 2 (21+ Pts)
- Refer to [106.034 Emergency Management Plan](#) or [106.066 Hospital Evacuation Plan](#).

CODE ZERO: Evacuation of areas that may be hazardous to life, health, or safety.

- Administrator will notify all in area of need to evacuate.
- Evacuate ambulatory, wheelchair, & then bed ridden patients.
- Report to designated assembly area.
- Refer to [106.066 Hospital Evacuation Plan](#).

CODE SILVER: A person is brandishing a weapon and/or has taken a hostage(s) within the hospital or its property.

- Immediately call 911 & then call paging with # of suspects, physical descriptions, and type of weapon & location of “Code Silver”. Close the immediate area & initiate hospital lockdown. Seek cover/protection & warn others.
- Refer to [106.026 Code Silver – Weapon or Hostage Situation](#) or [106.066 Hospital Evacuation Plan](#).

CODE BLACK, ACTIVE SHOOTER: Person actively shooting a weapon.

- Escape the area if safe to do so, call 911, & then call paging stating there is an active shooter with their last known location, and location of “Code Black”.
- Refer to [106.064 Code Black - Active Shooter](#) or [106.066 Hospital Evacuation Plan](#)

LOCK DOWN: Civil disturbance; weapon or chemical spill on campus

- Monitor all entry and exits; ensure no one enters or exits the building.

All Revision Dates

12/14/2022, 6/1/2016, 2/1/2013, 1/1/2012, 4/1/2011, 5/1/2006, 9/1/2004, 10/1/2001, 12/1/1986, 5/1/1983

Approval Signatures

Step Description	Approver	Date
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	12/14/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	12/13/2022
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/13/2022
Environment of Care Committee	Ian McGraw: Manager Facility Operation	12/13/2022
Policy Owner	Fernando Medina: Manager, Hospital Support Services	12/12/2022

Status **Active** PolicyStat ID **9950374**



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Last Revised 12/14/2022
Next Review 12/13/2025

Owner **Fernando Medina:
Manager,
Hospital Support
Services**
Policy Area **Administrative -
Environment of
Care**

106.006 Safety Officer

POLICY:

The hospital's Chief Executive Officer (CEO) will recommend to the Medical Executive Committee (MEC) an individual to be appointed to serve as the hospital's Safety Officer. The Safety Officer shall be qualified by experience and/or education and will be responsible for the development, implementation, and monitoring of the Safety Program. The Safety Officer has the authority to intervene and take appropriate action when conditions exist that pose an immediate threat to life or health, or pose a threat of damage to equipment of buildings.

PROCEDURE:

The Safety Officer will immediately report the hazardous condition and any action taken to Hospital Administration and to the Safety Committee. The Safety Committee will ensure that all appropriate follow-up measures have been taken to avoid a re-occurrence of the hazardous condition.

All Revision Dates

12/14/2022, 8/1/2009, 5/1/2006, 4/1/2004, 11/1/2001, 7/1/1995, 1/1/1993, 11/1/1989, 10/1/1986

Approval Signatures

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Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	12/14/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	12/13/2022
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/13/2022
Safety Committee	Fernando Medina: Manager, Hospital Support Services	12/13/2022
Policy Owner	Fernando Medina: Manager, Hospital Support Services	12/13/2022

COPY



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Last Revised 12/12/2022
Next Review 12/12/2023

Owner **Ian McGraw:**
Manager Facility
Operation
Policy Area **Administrative -
Environment of
Care**

106.044 Security Management Plan

POLICY:

The Security Management Plan describes the methods of providing security for patients, visitors, staff and equipment for Ventura County Medical System (VCMS). Security protects individuals and property against harm or loss, including workplace violence, theft, infant abduction, and unauthorized entry. All security incidents are documented, tracked and trended for analysis.

The program applies to the Ventura County Medical Center (VCMC), Santa Paula Hospital (SPH), Inpatient Psychiatric Unit (IPU) and Ambulatory Care Clinics.

PROCEDURE:

FUNDAMENTALS

- A. A visible security presence in the hospitals helps reduce crime and increase feelings of security by patients, visitors, and staff.
- B. The incident tracking and trending is essential for the reduction in crime, injury and prevention as well as theft.
- C. Analysis of security incidents provides information to predict and prevent crime, injury, and other incidents.
- D. Training hospital staff is critical to ensuring their performance. Staff is trained to recognize and report either potential or actual incidents to ensure a timely response.
- E. Staff are trained and provided post orders to guide them with their roles and responsibilities for their designated areas.
- F. Violence in the workplace is a growing problem in health care. De-escalation training is essential for addressing workplace violence.

OBJECTIVES

The Objectives for the Security Program are developed from information gathered during annual statistical data tracking and trending and risk assessment, which provide measures for improvement of the program.

The objectives for this Plan are to:

- Provide the safest environment for all patients, staff, and visitors
- Provide and document adequate Security rounds on all shifts
- Respond to emergencies and requests for assistance in a timely fashion.
- Continue Security Guard training and competency evaluation
- Continue to provide a visual presence to deter crime.

ORGANIZATION & RESPONSIBILITY

- A. The Safety Committee receives regular reports of the activities of the Security Program. The Safety Committee reviews reports and, as appropriate, communicates concerns about identified issues with regards to safety.
- B. The Director of Security, in collaboration with the Safety Officer, is responsible for monitoring all aspects of the Security Program. The Director of Security advises and reports to the Safety Committee on security related issues which may necessitate changes to policies and procedures, orientation or education of staff.
- C. Department heads are responsible for orienting new staff members to the department and, as appropriate, to job and task specific security procedures. They are also responsible for the investigation of incidents occurring in their departments. When necessary, the Director of Security provides department heads with assistance in developing department security programs or policies.
- D. Individual staff members are responsible for learning and following job and task-specific procedures for secure operations.

SECURITY DEPARTMENT ORGANIZATION

Authority:

- The Chief Executive Officer (Hospital Administrator) has delegated American Guard to provide contractual security services for the Ventura County Medical System.
- The Safety Officer and Director of Security have immediate and complete access to all areas of the Hospitals and to all physical facility records that become necessary in carrying out security management responsibilities.

Security Services:

- Unarmed Security Guard Services are required for Ventura County Medical System. The focus in this area is to ensure that Ventura County Medical System employees and the general public are provided a safe environment to conduct official business. Security services include patient

watches, roving patrol, escort services, code response, temporary posts and many other security fire watch and other related requirements.

- American Guard coordinates the collection, processing, and reporting of security activity throughout the facility to support a reliable, efficient flow of information. The security staff oversees the daily operation of the VCMS security program and assists staff, patients and visitors with support and problem solving. Confidentiality will be maintained in accordance with VCMS policy.
- Respond to requests at VCMS for support and intervention. This intervention includes de-escalation of verbal irrate patients/vendors/staff, and intervention of physical altercations.

Elite Officers:

- Elite Officers must be physically capable and willing to assist VCMS staff in restraining violent persons at VCMS until authorities arrive. In the event of a physical altercation, guards may be required to physically intervene for the protection and safety of VCMS staff, clients and themselves. This response should be considered **ONLY** if verbal intervention fails, but it **must** be stipulated in the post instructions for all assigned guards. Assigned guards are special guards for special areas (Emergency Department/Inpatient Psychiatric Unit) and possess specific training.

PERFORMANCE ACTIVITIES

The performance measurement process is one part of the evaluation of the effectiveness of the Security program. Performance measures have been established to measure at least one important aspect of the Security program.

The performance measures for the Security program which are also reported to leadership include:

- 100% in performance of quarterly Code Pink Drills with appropriate written critique
- 100% in performance of quarterly Code Purple Drills with appropriate written critique
- 100% proper documentation of monthly security statistical data
- 100% camera surveillance

PROCESSES FOR MANAGING SECURITY RISKS

Management Plan

Ventura County Medical System develops, maintains and annually evaluates Security Management Plan for its effectiveness in managing the security risk of the staff, visitors, and patients at VCMS.

Security Risk Assessment

The Safety Officer and Director of Security manage the security risk assessment process for VCMS. In coordination with the Director of Security, the Safety Officer is designated to manage risk, coordinate risk reduction activities in the physical environment, collect deficiency information, and disseminate summaries of actions and results. The Safety Officer, Director of Security and the Risk Management department ensure compliance with applicable codes and regulations.

VCMS identifies security risks associated with the environment of care. Risks are identified from internal sources such as ongoing monitoring of the environment, results of annual proactive risk assessment of high-risk processes, and from daily observation and surveillance by American Guard, Department Managers, patients and incident reports.

The risk assessment is used to evaluate the impact of the environment of care on the ability of VCMS to perform clinical and business activities. The impact may include disruption of normal functions or injury to individuals. The assessment will evaluate the risk from a variety of functions, including structure of the environment, the performance of everyday tasks, workplace violence, theft, infant abduction, and unauthorized access to the facility.

Use of Risk Assessment Results

A Risk Assessment is used to evaluate the impact of the environment of care on the ability of VCMS to perform clinical and business activities. A risk assessment will be performed by type of risk/threat to the organization. Where risks are identified, the current programs and processes to manage those risks are compared to the risks that have been identified. Where the identified risks are not appropriately handled, action must be taken to eliminate or minimize the risk. The actions may include creating new programs, processes, procedures and training programs. Monitoring programs may be developed to assure the risks have been controlled to achieve the lowest potential for adverse impact on the security of patients, staff, and visitors.

Identification Program

All staff are required to display an identification badge on their upper body while on duty. Identification badges are to be displayed on the individual with the picture showing. Identification badges are retrieved by Department Managers upon termination of employment.

Visitors are required to wear the appropriate wristbands in order to visit a specific patient in the hospital. Wristbands are blue with the exception of Labor and Delivery, Neonatal Intensive Care Unit (NICU), Pediatric Intensive Care Unit (PICU), Pediatrics, Post-Partum and Obstetrics, in which case they are pink.

If a patient wristband is damaged, nursing staff shall replace it. Patient identification is not removed upon discharge. Patients are instructed to remove their identification band at home.

The Front Desk and Facilities Departments provides vendor and contractor identification. All vendors are required to have appropriate identification and a green wristband while in the hospital. See also policy [F.2 Vendor Access and Registration](#).

Sensitive Areas

The Director of Security works with hospital leadership to identify security sensitive areas by utilizing risk assessments and analysis of incident reports.

The following areas are currently designated as sensitive areas:

Ventura County Medical Center

- a. *Intensive Care Unit*

- b. *Emergency Department*
- c. *Obstetrics*
- d. *Newborn Nursery*
- e. *NICU*
- f. *Pharmacy*
- g. *Health Information Management*
- h. *Pediatrics*
- i. *IPU*
- j. *Crisis Stabilization Unit (CSU)*
- k. *Operating Room*
- l. *PICU*

Santa Paula Hospital

- a. *Intensive Care Unit*
- b. *Emergency Department*
- c. *Obstetrics*
- d. *Newborn Nursery*
- e. *Pharmacy*
- f. *Health Information Management*
- g. *Operating Room*

Security staff are reminded during their annual in-service about those areas of the facility that have been designated as sensitive. Security staff assigned to work in sensitive areas receive department level continuing education on an annual basis that focuses on special precautions or responses that pertain to their area.

Security Incident Procedures

The Director of Security, in coordination with VCMS leadership, develops post orders for area security covers. These post orders describes the written instructions for the security team. The Director of Security assists department heads in development of departmental security procedures, as requested. These policies and procedures include infant and pediatric abduction, workplace violence, and other events that are caused by individuals from either inside or outside the organization.

Individual department heads assist in the development of department-specific security policies and procedures for risks unique to their area of responsibility. The Director of Security also assists department heads in the development of new department security procedures. Organization-wide departmental security policies and procedures are distributed to all departments. Department heads are responsible for distribution of department level policies and procedures to their staff and for ensuring enforcement of security policies and procedures needed.

Security Incident Response

Upon notification of a security incident, the Director of Security or designee will assess the situation and implement the appropriate response procedures. The Director of Security will notify Administration if necessary to obtain additional support. Security incidents that occur in the Emergency Department will be managed initially by the Security Officer on Duty, or Law Enforcement officer on duty, by following the appropriate policies and procedures for that area. The Director of Security will be notified about the incident as soon as possible.

Security incidents that occur in the departments will be managed according to the departmental or facility-wide policy. The Director of Security will be notified about any incident that occurs in a department as soon as possible. Additional support will be provided from the Security Department.

In the event of an infant or child reported missing, see policy [106.002 Code Pink/Code Purple-Known/Suspected Infant Abduction](#).

Following any security incident, a written "Incident Report" will be filed by the Security Officer managing the incident. The Report will be reviewed by the appropriate Security Supervisor or Security Director if necessary. Any deficiencies identified in the report will be corrected. A summary of these Reports will be furnished to the Safety Committee on a regular basis.

Evaluating the Management Plan

On an annual basis, the Safety Committee and Director of Security evaluate the scope, objectives, performance, and effectiveness of the Security Plan for the safety of the staff, visitors and patients at Ventura County Medical System.

EDUCATION

Security Management in-service training is provided at the initial orientation level and subsequent annual retraining of all Security personnel. This is part of a structured staff development program that includes general security practices supplemented by sensitive areas. Sensitive areas are identified based on criteria to include the impact on the building, grounds, and organizational experience.

Security personnel receive the following training annually and/or when required by job description:

- Health Insurance Portability and Accountability Act (HIPAA)
- Emergency Medical Treatment & Labor Act (EMTALA)
- Blood Borne Pathogens (BBP)
- Crisis Prevention Intervention
- Workplace Violence
- Sexual Harassment
- Infant and Child Abduction Prevention
- First Aid/Cardiopulmonary Resuscitation (CPR)/Automated External Defibrillator (AED)
- Fire and Safety Procedures

- FEMA 100/200
- Interactions with patients, visitors and staff
- Safe Driving Procedures
- Management of aggressive behavior
- Metal detector training

ENVIRONMENT OF CARE

SECURITY RISK ASSESSMENT INSTRUCTIONS:

Evaluate every potential event in each of the three categories of probability, risk, and preparedness. Add additional events as necessary. Events are defined as potential hazards or risk categories that may be consequential to effective operations of a facility and ability to render safe, secure, efficient and effective services to patients, staff and visitors.

Issues to consider for probability (the probability of occurrence at the facility) include, but are not limited to:

1. Known risks at VCMS facilities
2. Historical data of occurrence
3. Reported and observed recent data
4. Known sensitive areas

Issues to consider for risk level potential (in response to threat to life, health and safety, high disruption, moderate disruption, low disruption) include, but are not limited to:

1. Threat to life and/or health
2. Disruption of services
3. Damage/failure possibilities
4. Loss of community trust
5. Inability to render services in a community emergency
6. Financial impact
7. Legal issues

Issues to consider for preparedness include, but are not limited to:

1. Status of current plans, policies and procedures to identify and reduce risks
2. New employee orientation on identifying and reporting potential risks
3. Continuing education for identification and reporting of risks
4. Financial commitment of leadership to reduce risks
5. Effectiveness of hazard surveillance rounds
6. 24 hour camera surveillance.

All Revision Dates

12/12/2022, 2/13/2019, 4/1/2013, 3/1/2012, 4/1/2011, 6/1/2010

Attachments

[Annual Eval Security Management Plan 2021](#)

Approval Signatures

Step Description	Approver	Date
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	12/12/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	12/12/2022
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/12/2022
Safety Committee	Fernando Medina: Manager, Hospital Support Services	12/12/2022
Policy Owner	Ian McGraw: Manager Facility Operation	12/9/2022



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Last Revised 12/5/2022
Next Review 12/5/2023

Owner Ian McGraw:
Manager Facility
Operation
Policy Area Administrative -
Environment of
Care

106.045 Utilities Management Plan

POLICY:

Ventura County Medical System (VCMS) strives to provide a facility that is functionally safe and maintains a secure health care environment for patients of all ages, visitors, medical staff, employees and volunteers by requiring and supporting the establishment and maintenance of an effective Utilities Management Plan (UMP). The UMP is based on applicable laws and regulations, and accepted practices, and applies to Ventura County Medical Center (VCMC), Santa Paula Hospital (SPH), Inpatient Psychiatric Unit (IPU) and Ambulatory Care clinic (AFMC).

The UMP is established to provide for the operational reliability, assess the special risks of and respond to failures within the utility systems that support patient care, so as to provide a safe, controlled and comfortable environment for patients, visitors, employees, volunteers and medical staff. The utility systems and associated staff will be managed so that risks can be minimized and benefits maximized.

PROCEDURE:

Authority

1. The HCA Facilities Manager has been selected by the Environment of Care Committee to be responsible for UMP management, monitoring and reporting regarding UMP.
2. The HCA Facilities Manager has immediate and complete access to all areas of the HCA VCMC/SPH campuses, all physical plant records and any other records that become necessary in carrying out UMP.

Organization

1. The HCA Facilities Manager shall report to the Environment of Care Committee. This report shall provide information and trends concerning systems indicators.

2. The Environment of Care Committee shall receive, review, investigate and take action as appropriate on all UMP reports.
3. The HCA Facilities Manager shall provide annual reports regarding the UMP to Hospital Administration, Environment of Care Committee.

RESPONSIBILITIES

1. The HCA Facilities Manager shall be responsible for ongoing monitoring, reporting, documentation, compiling of statistics and education aspects of the UMP.
2. All department heads are responsible for compliance with the requirements of the UMP as far as their individual department responsibilities mandate and will provide appropriate documentation relating to the requirements of the UMP as requested.
3. All individuals are responsible for compliance with the requirements of the UMP as far as their individual responsibilities mandate and shall cooperate with all appropriate provisions of the UMP.
4. The Facilities Maintenance department is responsible for collecting data, performing or overseeing repairs/preventive maintenance work and other aspects required of this program.
5. All employees have a role in the UMP, by effectively and safely utilizing resources such as electrical equipment, conserving energy, and by obtaining education regarding the utility systems and specific actions to be taken in the event of a utility failure. The goal of these actions is to maintain continuity of care and service.
6. All policies in the UMP are designed to apply to all departments, employees, volunteers, medical staff, patients and visitors.
7. The Environment of Care Committee will communicate UMP issues and summaries of activities, annually, to Administration, Executive Committee, Oversight Committee, and Managers of all departments/services. The department heads will communicate this information to staff.

ACTIVITIES

1. The UMP includes utilities that are considered to be critical/necessary to support safe, reliable treatment, diagnosis, or monitoring of patients and provide a safe, controlled and comfortable work environment for employees, volunteers, and medical staff.
2. The individual utilities included in the UMP (normal electrical power, emergency electrical power, fire systems, potable water, steam, natural gas, sewer, telephone, diesel fuel, medical gas systems, HVAC and elevators) are of such importance that separate policies, procedures, inspections and maintenance programs have been established by Facilities Maintenance and are individually managed.
3. Each utility will have a unique inventory of equipment/items made and maintained. This will be made and maintained by Facilities Maintenance. As equipment is added or deleted to the system, the inclusion of the equipment to this program will be set in Facilities Maintenance, or at the discretion of the HCA Facilities Manager. The decision will be based on the nature of the equipment, the role it plays in the performance and effect of equipment on the overall environment.
4. When a problem is identified, the system will be evaluated for cause and necessary remedial

action. Action will be taken by appropriate parties, including staff and/or outside resources. Actions taken will be documented, monitored, and revised, if not effective. Once action has proven to be effective, no other monitoring will be required, unless the problem recurs.

5. A summary of the UMP system indicators and problem will be reported to the Environment of Care Committee on a quarterly basis.
6. The UMP provides an integrated and coordinated effort to comply with State Licensing and the Office of Statewide Health Care Plan and Development (OSHPD), meet The Joint Commission (TJC), National Fire and Protection Association (NFPA) and, Occupational Safety and Health Administration (OSHA) standards and assists the facility in controlling losses related to professional and general liability.
7. The implementation of the UMP is a collaborative effort coordinated by the HCA Facility Manager. All departments shall have a role in the success of the program. Through this arrangement, surveillance, monitoring, tracking and reporting is done. When problems are identified, action will be taken by the appropriate individuals to resolve them. Action will be documented, monitored and reported. Once the corrective actions have proven to be effective, no other monitoring will be required.
8. The UMP is a dynamic program because of the ever changing needs, monitoring results, reporting, laws and regulations.
9. The UMP program includes, but is not limited to the following:
 - A. Inspecting, testing and maintaining critical operating components in accordance with manufacturers' recommendations
 - B. Developing and maintaining current utility system operational plans to help provide for reliability, minimize risks, and reduce failures.
 - C. Mapping the layout of utility systems and labeling controls for a partial or complete emergency shut-down.
 - D. Investigating utility systems management problems, failures or user errors and reporting incidents and corrective actions.
 - E. Building Maintenance Plan with priority codes and Equipment Management Program
10. The organization defines the intervals for maintenance, inspection, and testing of all equipment under preventative maintenance program. The equipment and the maintenance activity are based upon in accordance with manufacturers' recommendations, evaluated risk levels, and HCA maintenance experience. Most intervals are annual, semi-annual, quarterly, monthly, and weekly maintenance activities. The preventative maintenance activity is scheduled by a maintenance management system that generates work orders. The work orders are distributed to the appropriate staff, and when complete, the data is entered into the CMMS system.
11. HCA VCMC/SPH has identified and implemented emergency procedures for responding to utility system disruptions or failures that address the following:
 1. What to do if utility systems malfunction (on a departmental and organization wide basis)
 2. Identification of an alternative source of organization-defined essential utilities (where alternate sources are appropriate)

3. Shutting off the malfunctioning systems and notifying staff in affected areas
4. Obtaining repair services (this includes both internal and external resources)

The plans for these emergency responses are integrated with the Emergency Management Plan.

These plans are developed to include: the criteria and indications for implementing a utility response plan; the staff responsible for making the decisions; activities and resources used to mitigate the emergency (such as an emergency power system to mitigate external power failure); and preparation for the failure (e.g., flashlights, staff training about how to respond to a power failure).

12. The organization has identified and implemented processes to minimize pathogenic biological agents in cooling towers, domestic hot/cold water systems, and other aerosolizing water systems.

ORIENTATION AND EDUCATION PROGRAM

1. UMP in-service training is provided at new employee orientation for all employees, contractual service providers and volunteers. This is part of a structured staff development program that includes general safety practices which are supplemented by organization experience.
2. This training addresses the specific roles and responsibilities of personnel who would be affected by the loss of a utility.
3. Incident report training is provided at orientation for all employees, contractual service providers, and volunteers.
4. Each employee responsible for maintenance of utilities is provided departmental and job specific-related UMP training which is documented in his/her individual education file. Such training includes;
 - Capabilities, limitations and special application of utility systems
 - Emergency procedures in the event of system failure, identification of an alternative source of essential utilities; shut off of malfunctioning systems and notification of staff in affected areas, obtaining repair services, how/when to perform emergency clinical interventions when utility systems fail
 - Information/skills necessary to perform assigned maintenance responsibilities
 - Processes for reporting utility system management problems, failures and user errors.
5. Training for personnel maintaining utilities will be documented. Techniques of demonstration, appropriate actions, competency evaluation, etc. will be used to monitor training effectiveness.
6. The HCA Facilities Manager will be available for departmental or individual in-service training as requested.
7. The Department heads will provide for orientation and training of new employees, and for the ongoing training of all their employees.

DATA SOURCES

Information is gathered for the UMP through various means and sources including, but not be limited to VCMC-SPH incident reports, hospital staff EOC surveillance rounds, safety surveys, maintenance rounds, utility vendor information. In addition, the computerized Facilities CMMS is utilized to track, maintain, report, and assess the performance measures.

PERFORMANCE STANDARDS

1. Employee's knowledge of policies, procedures and responsibilities under the program are assessed:
 - Following each educational session by a competency evaluation
 - Staff meeting discussions with Q & A
2. Employees will be able to demonstrate or describe;
 - VCMC-SPH Incident reporting systems for events that involve UMP
 - Communication of reports to the HCA Facilities Manager
 - Actions to prevent, eliminate, minimize or report Utilities Management risks
 - Staff utility management knowledge/skill
 - Monitoring and inspection with documentation in the work order
3. The HCA Facility Manager and Department Heads can describe their roles in developing organizational utility policies and procedures reflecting the goals and performance standards of the UMP.

ANNUAL EVALUATION

At least annually, there will be an evaluation and review of the Utilities Management Plan's scope, objectives, performance and effectiveness. This will be reviewed by the Environment of Care Committee

All Revision Dates

12/5/2022, 2/13/2019, 4/1/2013, 3/1/2012, 4/1/2011, 6/1/2010

Attachments

[Annual Evaluation of the Utilities Management Plan 2021](#)

Approval Signatures

Step Description

Approver

Date

Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	12/5/2022
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/10/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/10/2022
Environment of Care Committee	Ian McGraw: Manager Facility Operation	11/10/2022
Policy Owner	Ian McGraw: Manager Facility Operation	10/24/2022

COPY



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Next Review 12/12/2025

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106.075 Workplace Violence Prevention Plan

POLICY:

It is the policy of Ventura County Medical System (VCMS), which includes Ventura County Medical Center (VCMC), Santa Paula Hospital (SPH), Inpatient Psychiatric Unit (IPU) and Ambulatory Care Clinics, to provide a safe and healthy environment for staff and the public. To help achieve this goal, the VCMS shall promote a comprehensive Workplace Violence Prevention Plan that integrates a cooperative effort to identify and eliminate risk associated with workplace violence, and to comply fully with all applicable safety and health regulations.

PROCEDURE:

The Workplace Violence Prevention Plan is designed to maintain a safe and healthy work environment on VCMS's campuses. Required by law, it complies with California Code of Regulations Title 8, Section 3342 (Violence Prevention in Health Care). By having a Workplace Violence Prevention Plan, VCMS leadership demonstrates an organizational concern for employees' emotional and physical safety and health; equal commitment to patient safety; demonstrates systems of accountability for involved managers and employees; creates and disseminates a clear policy of zero tolerance for workplace violence or threats of violence; and ensures no reprisals are taken against employees who report incidents and/or suggest ways to reduce or eliminate risks by assessing patient-specific risk factors. In addition, the Plan outlines a comprehensive plan for maintaining security in the workplace, and assigns responsibility and authority to individuals with appropriate training and skills. VCMS makes all reasonable efforts to:

- Protect the safety and health of all employees (for purposes herein, unless the context otherwise requires, "employee" means any person rendering services at the request of VCMS, whether in the status of paid employee, contractor, or volunteer)

- Provide a safe workplace – for all employees.
- Provide information to employees about workplace violence.
- Identify and encourage reporting of any workplace violence without reprisal.
- Provide information and safeguards for those on campus, per California Code of Regulations, Title 8, Section 3342 (<http://www.dir.ca.gov/Title8/3342.html>).

WORKPLACE VIOLENCE PREVENTION RESPONSIBLE PERSON(S):

VCMS's Safety Officer is responsible for implementing the Workplace Violence Prevention Plan. As part of its Injury and Illness Prevention Program (IIPP), VCMS has developed this Workplace Violence Prevention Plan which describes specific requirements for program responsibility, compliance, communication, hazard assessment, accident/exposure investigations, hazard correction, training, and recordkeeping.

MANAGEMENT RESPONSIBILITIES:

Managers are responsible for ensuring that the VCMS Workplace Violence Prevention Plan is communicated to and understood by all employees under their supervision. They must provide leadership by participating and fostering a safe work environment. Managers must allocate enough time for training and engaging their employees on safe and healthy work programs for their areas and encourage reporting. Managers are responsible for ensuring all workplace violence reporting is free of reprisal.

SUPERVISOR RESPONSIBILITIES:

Supervisors are responsible for carrying out the duties required to implement and enforce the Workplace Violence Prevention Plan in the areas they supervise. Supervisors must foster a healthy work environment, and immediately recognize and address any potential risk, as well as report concerns. Supervisors are responsible for ensuring employees are receiving general and job-specific workplace violence safety training. They must also identify and correct any hazards in the workplace. They are responsible for taking disciplinary actions against any employee that does not follow the Workplace Violence Prevention Plan or safety policies and procedures when working, and reports issues through their chain of command.

EMPLOYEE RESPONSIBILITIES:

Individual employees are responsible for following the Workplace Violence Prevention Plan. Employees are responsible for understanding the definition of workplace violence and how to report it. Workplace violence is defined as "any act of violence or threat of violence that occurs at the work site." The term "workplace violence" shall not include lawful acts of self-defense or defense of others. When employees are unsure of whether an act constitutes workplace violence, they are to seek assistance from their Supervisor, Manager, Regulatory Manager, or Safety Officer.

OUTSIDE EMPLOYEES WORKING AT VCMC/SPH/IPU:

The Safety Officer will be responsible for providing the same training provided to outside employees as to VCMS's employees.

ASSISTANCE FROM OTHER AGENCIES:

The Safety Office or designee, Administrator on Duty (AOD), Nursing Supervisor, and/or Regulatory Manager will involve any other agency deemed necessary to assist with any act of workplace violence (i.e., Employee Health Services, the Employee Assistance Program (EAP), Law Enforcement, Fire Department, etc.). In addition, employees will be encouraged to seek assistance from local emergency services or law enforcement when a violent incident occurs, without any punitive or retaliatory action against the employee.

PROCEDURES TO ACCEPT AND RESPOND TO REPORTS:

VCMS has created a workplace violence reporting system with access for all employees to report any workplace violence incident. This reporting system will notify the Safety Officer and Security Post Commander for investigations and documentation of each incident. Each incident will be investigated and documentation of resolution provided of each incident. Communication back to the reporting employee will be the responsibility of the Safety Officer or Post Commander.

DOCUMENTATION FROM SHIFT TO SHIFT:

All clinical staff will be responsible for documenting in Cerner any actual episodes of violence. In addition, all employees will verbally communicate at change of shift any concerns with regards to patients demonstrating aggression and/or risk for workplace violence.

COMPLIANCE:

Compliance includes, but is not limited to:

- A. Initial Workplace Violence Prevention Training
- B. Annual Workplace Violence Prevention Training
- C. Recognition – Employees who demonstrate and foster a safe work environment and who report workplace violence, should be recognized by their supervisor/manager and have this recognition mentioned in their performance evaluation
- D. Zero tolerance of any workplace violence, with appropriate discipline for any identified and proven case; and
- E. Employee engagement and development of Workplace Violence Prevention Plan which shall include line staff for recommendations and changes of the Workplace Violence Prevention Plan.

TRAINING:

VCMS is responsible for providing initial Workplace Violence training as well as annual training. VCMS is also responsible for ensuring any revision and/or changes to the Workplace Violence Prevention Plan are communicated to the organization. All training documentation will be kept in TargetSolutions by the HCA Compliance Office and shall be available to employees at all times.

COMMUNICATION:

Several mediums are utilized by VCMS to communicate with employees on matters related to occupational safety and health and specifically to Workplace Violence.

- VCMS provides employees with initial Workplace Violence Training
- Provides Annual Workplace Violence training as well as an annual Safety Update via the TargetSolutions online training platform.
- The use of the TargetSolutions platform provides the organization with time flexibility and does not limit training.
- VCMS has created an online safety intranet webpage.

HAZARD ASSESSMENT:

A workplace violence hazard assessment will be conducted annually by the Safety Officer and/or designee and the findings reported to the Safety Committee. The purpose of the assessment is to identify vulnerabilities as well as what is well controlled. Besides employee and patient reports and/or suggestions, some situations will require a formal investigation. All investigations shall be documented in the online workplace violence notification system and investigated by the Safety officer/designee or Post Commander.

ABATEMENT OF HAZARDS/WORKPLACE VIOLENCE:

It is VCMS's intention to abate all unsafe and unhealthy work practices and immediately abate the risk of any workplace violence. The Safety Officer and/or designee must document all such action taken and the completion dates on the online reporting system. Actions to abate hazards or risk shall include, but are not limited to:

- A. Protecting or removing individuals from exposure and or Immediate Dangerous Life and Health conditions,
- B. Implementing safer and healthier procedures,
- C. Training employees, and
- D. Posting warning notices.

WORKPLACE VIOLENCE RECORD KEEPING:

Records are to be kept in the online workplace violence system for all employees. The records shall be

tracked and trended for vulnerabilities and focused efforts should the Safety Officer see a trend of violence. Annual safety training is kept by the Compliance Officer; training records are accessible when needed. The following records shall be kept for three (3) years:

- A. All documentation that verifies that VCMS has maintained ongoing two-way communication with the employee, including, but not limited to, all written communication.
- B. All assessments, inspections, or investigations must include the date, name of the investigator, the workplace violence condition, and work practice notes and/or corrective action taken.
- C. All investigation records.
- D. Records containing training information must have a minimum of the employee's name, training date, type of training material, program and identification of the trainer.

EVALUATE ENVIRONMENTAL RISK FACTORS:

VCMS shall utilize a workplace violence risk assessment to evaluate environmental risk factors and report findings to the Safety Committee.

DEFINITIONS:

- A. Patient-Specific Risk Factors – factors specific to a patient that may increase the likelihood or severity of workplace violence incidents, such as use of drugs or alcohol, psychiatric condition or diagnosis associated with increased risk of violence, any condition or diseased process that would cause confusion and/or disorientation, or a history of violence.
- B. Patient contact – employees providing a patient with treatment, observation, comfort, direct assistance, bedside evaluations, office evaluations and any other actions that involves or allows direct physical contact with the patient.
- C. Threat of violence – a statement or conduct that causes a person to fear for his or her safety because there is a reasonable possibility the person might be physically injured, and that serves no legitimate purpose.
- D. Workplace controls – procedures, rules and staffing which effectively reduce workplace violence hazards. Workplace controls include, as applicable, but are not limited to: appropriate staffing levels; provision of dedicated safety personnel (i.e. security guards); employee training on workplace violence prevention methods; and employee training on procedures to follow in the event of workplace violence incident.
- E. Workplace violence – any act of violence or threat of violence that occurs at the work site. The term “workplace violence” shall not include lawful acts of self-defense or defense of others. Workplace violence includes the following:
 - 1. The threat or use of physical force against an employee that results in, or has a high likelihood in, injury, psychological trauma, or stress, regardless of whether the employee sustains an injury;
 - 2. An incident involving the threat or use of a firearm or other weapons, including the use of common objects as weapons regardless of whether the employee sustains an injury;

3. Four workplace violence types:
 - a. Type 1 violence – workplace violence committed by a person who has no legitimate business at the work site, including violent acts by anyone who enters the workplace with the intent to commit a crime.
 - b. Type 2 violence – workplace violence directed at employees by customers, clients, patient, students, inmates, or visitors or other individuals accompanying a patient.
 - c. Type 3 violence – workplace violence against an employee by a present or former employee, supervisor, or manager.
 - d. Type 4 violence – workplace violence committed by someone who does not work there, but has or is known to have had a personal relationship with an employee.

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Approval Signatures

Step Description	Approver	Date
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	12/13/2022
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/13/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	12/13/2022
Safety Committee	Fernando Medina: Manager, Hospital Support Services	12/13/2022
Policy Owner	Fernando Medina: Manager, Hospital Support Services	12/13/2022



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Owner Alicia Casapao:
Director of
Quality and
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Policy Area Administrative -
Operating
Policies

107.023 Adverse Events, Sentinel Events, Unusual Occurrences

POLICY:

Ventura County Medical Center (VCMC) and Santa Paula Hospital (SPH) shall comply with reporting requirements of unusual occurrences, adverse events and sentinel events to the California Department of Public Health (CDPH) in accordance with [Policy 107.008 California Department of Public Health Adverse Event Reporting](#). VCMC/SPH will also inform the patient or responsible party by the time the report is made. VCMC/SPH prohibits retaliation against anyone who reports an unusual occurrence, adverse event or sentinel event.

As well, VCMC/SPH shall comply with The Joint Commission (TJC) standards related to the identification, voluntary reporting and management of unusual occurrences, adverse events and sentinel events. An appropriate response may include conducting a timely, thorough and credible root cause or event analysis, developing an action plan designed to implement improvements to reduce risk, implementing the improvements and monitoring the effectiveness of those improvements.

PROCEDURE:

DEFINITIONS

Sentinel Event: is defined by The Joint Commission as a patient safety event (not primarily related to the natural course of the patient's illness or underlying condition) that reaches a patient and results in death, permanent harm, or severe temporary harm. Sentinel events are a subcategory of adverse events.

Such events are considered "sentinel" because they signal the need for immediate investigation and response. The following events (even if the outcome was not death or major permanent loss of

function) are considered Sentinel Events:

1. Suicide of any patient receiving care, treatment, and services in a staffed around-the-clock care setting or within 72 hours of discharge, including from the health care organization's Emergency Department (ED).
2. Unanticipated death of a full term infant.
3. Homicide of any patient receiving care, treatment and services while on site at the organization or while under the care or supervision of the organization.
4. Homicide of a staff member, licensed independent practitioner, visitor or vendor while on site at the organization or while providing care or supervision to patients.
5. Any intrapartum maternal death.
6. Severe maternal morbidity (leading to permanent harm or severe harm).
7. Sexual abuse/assault of any patient receiving care, treatment and services while on site at the organization or while under the care or supervision of the organization.
 - Sexual abuse/assault is defined as the nonconsensual sexual contact of any type with an individual. Sexual abuse includes but is not limited to, the following:
 - Unwanted intimate touching of any kind, especially of the breasts, buttocks, or perineal area
 - All types of sexual assault or battery, such as rape, sodomy, and coerced nudity (partial or complete)
 - Forced observation of masturbation and/or sexually explicit images, including pornography, texts, or social media
 - Taking sexually explicit photographs and/or audio/video recordings of an individual and maintaining and/or distributing them (for example, posting on social media); this would include, but is not limited to, nudity, fondling, and/or intercourse involving an individual
 - Generally, sexual contact is nonconsensual in the following situations:
 - When the individual lacks the cognitive or legal ability to consent even though appearing to want the contact to occur
 - When the individual does not want the contact to occur
 - Other examples of nonconsensual sexual contact may include, but are not limited to situations where an individual is sedated, is temporarily unconscious, or is in a coma. An individual's apparent consent to engage in sexual activity is not valid if it is obtained from the individual lacking the capacity to consent, or consent is obtained through intimidation, coercion, or fear, whether it is expressed by the individual or suspected by staff. Any forced, coerced, or extorted sexual activity with an individual, regardless of the existence of a preexisting or current sexual relationship, is considered to be sexual abuse.
 - Organizations are required to conduct an investigation and protect an individual(s) from nonconsensual sexual relations anytime the organization has reason to suspect that the individual(s) does not wish to engage in sexual activity or may not

have the cognitive or legal ability to consent.

8. Sexual abuse/assault of a staff member, licensed practitioner, visitor or vendor while on site at the organization or while providing care or supervision to patients. (*See above definition of sexual abuse/assault*).
9. Physical assault (leading to death, permanent harm or severe harm) of any patient receiving care, treatment and services while on site at the organization or while under the care or supervision of the organization.
10. Physical assault (leading to death, permanent harm or severe harm) of a staff member, licensed independent practitioner, visitor or vendor while on site at the organization or while providing care or supervision to patients.
11. Surgery or other invasive procedure performed at the wrong site, on the wrong patient or that is the wrong (unintended) procedure for a patient regardless of the type of procedure or the magnitude of the outcome.
12. Discharge of an infant to the wrong family.
13. Abduction of any patient receiving care, treatment, or services.
14. Any elopement (that is, unauthorized departure) of a patient from a staffed around-the-clock care setting (including the ED), leading to death, permanent harm, or severe temporary harm to the patient.
15. Administration of blood or blood products having unintended ABO and non-ABO (Rh, Duffy, Kell, Lewis and other clinically important blood groups) incompatibilities, hemolytic transfusion reactions or transfusions resulting in death, permanent harm or severe harm.
16. Unintended retention of a foreign object in a patient after an invasive procedure, including surgery.
17. Severe neonatal hyperbilirubinemia (bilirubin >30 milligrams/deciliter).
18. Fluoroscopy resulting in permanent tissue injury when clinical and technical optimization were not implemented and/or recognized practice parameters were not followed.
19. Any delivery of radiotherapy to the wrong patient, wrong body region, unintended procedure or >25% above the planned radiotherapy dose.
20. Fire, flame or unanticipated smoke, heat or flashes occurring during direct patient care caused by equipment operated and used by the organization. To be considered a sentinel event, equipment must be in use at the time of the event; staff do not need to be present.
21. Fall in a staffed, around-the-clock care setting or fall in a care setting not staffed around the clock during a time when staff are present resulting in any of the following:
 1. Any fracture.
 2. Surgery, casting or traction.
 3. Required consult/management or comfort care for a neurological (e.g. skull fracture, subdural or intracranial hemorrhage) or internal (e.g. rib fracture, small liver laceration) injury.
 4. Death or permanent harm as a result of injuries sustained from the fall (not from physiologic events causing the fall).

The above list is current as of January 1, 2022 The Joint Commission (TJC) Comprehensive Accreditation Manual for Hospitals (CAMH) chapter on Sentinel Events (SE).

Close Call or Near Miss: is defined by TJC as a patient safety event that did not reach the patient.

Adverse Event: is a patient safety event that resulted in harm to a patient. Per TJC definition, adverse events shall prompt notification of hospital leaders, investigation, and corrective actions, in accordance with VCMC/SPH's process for responding to patient safety events that do not meet the definition of sentinel event. An adverse event may or may not result from an error.

Serious Reportable Events (SREs) as defined by the National Quality Forum (NQF) include:

1. Surgical or Invasive Procedure Events

- a. Surgery or other invasive procedure performed on the wrong site.
- b. Surgery or other invasive procedure performed on the wrong patient.
- c. Wrong surgical or other invasive procedure performed on a patient.
- d. Unintended retention of a foreign object in a patient after surgery or other invasive procedure.
- e. Intraoperative or immediately post-operative/post-procedure death in an ASA Class 1 patient.

2. Product or Device Events

- a. Patient death or serious injury associated with the use of contaminated drugs, devices, or biologics provided by the health care setting.
- b. Patient death or serious injury associated with the use or function of a device in patient care, in which the device is used or functions other than as intended.
- c. Patient death or serious injury associated with intravascular air embolism that occurs while being cared for in a health care setting.

3. Patient Protection Events

- a. Discharge or release of a patient/resident of any age, who is unable to make decisions, to other than an authorized person.
- b. Patient death or serious injury associated with patient elopement (disappearance).
- c. Patient suicide, attempted suicide, or self-harm that results in serious injury, while being cared for in a health care setting.

4. Care Management Events

- a. Patient death or serious injury associated with a medication error (e.g., errors involving the wrong drug, wrong dose, wrong patient, wrong time, wrong rate, wrong preparation or wrong route of administration).
- b. Patient death or serious injury associated with unsafe administration of blood products.
- c. Maternal death or serious injury associated with labor or delivery in a low-risk pregnancy while being cared for in a health care setting.

- d. Death or serious injury of a neonate associated with labor or delivery in a low-risk pregnancy.
- e. Patient death or serious injury associated with a fall while being cared for in a health care setting.
- f. Any Stage 3, Stage 4 and unstageable pressure ulcers acquired after admission/presentation to a health care setting.
- g. Artificial insemination with the wrong donor sperm or wrong egg.
- h. Patient death or serious injury resulting from the irretrievable loss of an irreplaceable biological specimen.
- i. Patient death or serious injury resulting from failure to follow up or communicate laboratory, pathology or radiology test results.

5. Environmental Events

- a. Patient or staff death or serious injury associated with an electric shock in the course of a patient care process in a health care setting.
- b. Any incident in which systems designated for oxygen or other gas to be delivered to a patient contains no gas, the wrong gas or are contaminated by toxic substances.
- c. Patient or staff death or serious injury associated with a burn incurred from any source in the course of a patient care process in a health care setting.
- d. Patient death or serious injury associated with the use of physical restraints or bed rails while being cared for in a health care setting.

6. Radiologic Events

- a. Death or serious injury of a patient or staff associated with the introduction of a metallic object into the magnetic resonance imaging (MRI) area.

7. Potential Criminal Events

- a. Any instance of care ordered by or provided by someone impersonating a physician, nurse, pharmacist or other licensed health care provider.
- b. Abduction of a patient/resident of any age.
- c. Sexual abuse/assault on a patient or staff member within or on the grounds of a health care setting.
- d. Death or serious injury of a patient or staff member resulting from a physical assault (i.e., battery) that occurs within or on the grounds of a health care setting.

Unusual Occurrences: any occurrence that constitutes an interference with facility operations that affect the welfare, safety, or health of patients, personnel or visitors. The occurrences listed below are not intended to be all inclusive, but are examples of the types of events that should be reported. It is the policy of VCMC/SPH to report all unusual occurrences, adverse events and sentinel events to the California Department of Public Health (CDPH) in accordance with [Administrative Operating Policy 107.008 California Department of Public Health Adverse Event Reporting](#).

1. Earthquakes, floods, gas explosions, severe fires, power outages or other calamities which

cause damage to the facility or threaten the safety and welfare of patients, visitors and/or staff.

2. An epidemic outbreak of any disease, prevalence of communicable disease, infestation by parasites.
3. Poisonings.
4. Death or near death or injury of patient, employee or visitor because of unnatural causes (suicide, attempted suicide, homicide, accidents).
5. Actual or threatened employee walkout/strike or other curtailment of services or interruption of essential services provided by the facility/agency. Examples of essential services are: heating, air conditioning, food, water, linens, sewage or needed medical supplies.
6. Patient to patient altercations that result in an immediate threat to life, or patient to patient altercations involving three or more patients.

REPORTING

A. Identification of an Unusual Occurrence, Adverse Event or Sentinel Event

1. Potential Adverse Events, Sentinel Events, Unusual Occurrences, and "Near Misses" are to be immediately reported internally through the chain of command.
2. An appropriate designee or committee will be assigned by the Hospital Administrator or assigned designee(s) to determine if the incident(s) constitute an Adverse Event, Sentinel Event or Unusual Occurrence.
3. The Chief Executive Officer (CEO) or assigned designee(s) will conduct an investigation into the reported incidents. If an Adverse Event, Sentinel Event or Unusual Occurrence is substantiated, the Hospital will take immediate steps to correct the violation and prevent it from reoccurring.

B. Reporting

1. The Chief Executive Officer (CEO) or assigned designee has the authority to report the Adverse Event to CDPH. All Adverse Events will be reported to CDPH within five (5) days after the Adverse Event was identified or within 24 hours after detection, if the event is ongoing, urgent or emergent or a threat to the welfare, health, safety of a patient, visitor, or staff. Adverse Events will be reported via the Department's Secure Electronic Web-Based Portal. The CDPH provides alternative means, by email or telephone, for submission when the web-based portal is unavailable. This requirement preserves patient confidentiality and standardizes reporting requirements. Reports are limited to factual information and statements or speculation in causation are to be avoided.
 - a. Secure Electronic Web-Based Portal:
<https://healthcareportal.cdph.ca.gov/>.
 - b. California Department of Health Services,
Ventura District Office,
1889 North Rice Road, Suite #200
Oxnard, CA 93030
Toll Free Phone: 800.547.8267

Phone No. 805.604.2926
Fax: 805.604.2997
Email: CDPH-LNC-VENTURA@cdph.ca.gov

2. CDPH will investigate all reports. If there is ongoing threat of imminent danger of death or serious bodily injury, CDPH must perform an on-site investigation within 48 hours/2 business days. CDPH has 45 days to complete its investigation.
3. The penalty for failing to report an Adverse Event is a civil fine of \$100 per each day the event was not reported within the established time frame. If a deficiency is substantiated as causing an immediate jeopardy to the health or safety of a patient, the administrative penalty may be up to \$50,000 per violation. Administrative penalty for non-immediate jeopardy may be up to \$17,000 per violation.
4. All adverse report information is considered public information under the Public Records Act request.
5. The Chief Executive Officer or assigned designee has the authority to make a Sentinel Event Report to The Joint Commission (TJC).
6. VCMC/SPH will inform patient or responsible party of the Adverse Event at the time the report is made (see [Policy MS.102.002 Disclosure of Unanticipated Outcomes](#)).

C. **Root Cause Analysis** (see [Policy 107.024 Root Cause Analysis](#)).

All Revision Dates

12/22/2022, 4/17/2020, 9/1/2016, 12/1/2009, 6/1/2007

Approval Signatures

Step Description	Approver	Date
Hospital Administration	John Fankhauser, MD: Chief Executive Officer, VCMC & SPH	12/22/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	12/22/2022
Policy Owner	Alicia Casapao: Director of Quality and Performance Improvement	12/22/2022



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Next Review 11/17/2025

Owner **Sherri Block:**
Associate Chief
Nursing
Executive, VCMC
& SPH
Policy Area **Administrative -
Nursing**

108.025 Nurse Call System

POLICY:

To improve staff responsiveness to patient-initiated call lights by establishing guidelines to answering patient-initiated calls including a team approach and adhering to expected call light response times. Ventura County Medical Center (VCMC) and Santa Paula Hospital (SPH) are committed to answering every patient's visual and audible call light as soon as possible through collaborative measure by clinical and non-clinical staff as a standard of practice in our inpatient facilities.

A call system shall be maintained in operating order in all nursing units. A call station(s) providing a pillow speaker to each patient bed will be provided for each patient room. These pillow speaker shall be readily accessible to patients. A visible signal in the corridor above the door of each patient room will be maintained. An audible signal and light indicating the room from which the call originates shall be located at the nurses' stations. The call system shall be provided in each patient's toilet room, bathroom and shower room in locations easily accessible to the patients. Electric shock hazard shall be eliminated by grounding or by an equally effective method. The call systems shall be designed to require resetting at the calling station unless a two-way voice communication component is included in the system.

PROCEDURE:

1. Upon admission to the nursing unit, the admitting or primary nurse will familiarize the patient to the room including use of the call light system. Each patient room is equipped with a nurse call device attached to a call station on the headwall and a pillow speaker. The patient will in return demonstrate the use of the call light system to the nurse.
2. At the beginning of each shift, nursing staff will document on the patient communication board the name of the primary care nurse, nursing assistant, and respective phone numbers at the start of the shift.
3. When the patient call light signal goes on, staff (Registered Nurse (RN), Nurses' Aide (NA) or

Medical Office Assistant (MOA)) will answer the call light within two (2) minutes. After two minutes the call system will escalate the call to the designated back-up, and after the next 23 minutes the call system will escalate to the charge RN.

4. Most nurse call lights will be answered by the MOA manning the nurse call station. The MOA will direct nurse calls to the most appropriate person, i.e. RN or NA. However, any staff member in the vicinity who sees/hears a call light alarm is expected to enter the room and engage the patient to address the patient's needs.
5. If the patient requires immediate assistance, the staff person will immediately contact the primary care nurse or charge nurse.
6. The nurse call lights are color coded and located above the patient room door to visually alert responders to the nature of the call. An audible alarm will accompany all color coded lights. See Table A below for alarm schedule for the North and South Towers at VCMC only.
7. Nursing staff will complete training and a competency assessment for the nurse call system.

REFERENCES:

California Code of Regulations Title 22 Division 5 section §70859

TABLE A

Call Type	Escalation Sequence	Call activated from...	Default Call Text Displayed	Requested Call Text Displayed (Max 14 Char.)	Corridor Light & Icon Color	Corridor Light Flash Rate
Calls						
Patient Call	Routine - Patient	Nurse Call Button on patient pendant & bed side rail and gray "Call" button on patient station faceplate	Patient	Patient	White	Steady
Staff Call	Routine - Staff	Gray "Call" button on staff station faceplate	Staff	Staff	White	Steady
Cord Out	Priority	Disconnecting patient pendant cord and aux station cord	Cord Out	Cord Out	White	Flashing
Bed Cord Out	Priority	Disconnecting bed communications cord	Bed Cord	Bed Cord	White	Flashing
Aux A	Aux.	Alarm state of equipment connected to Aux Jack A	Aux A	Aux A	White	Flashing
Aux B	Aux.	Alarm state of equipment connected to Aux Jack B	Aux B	Aux B	White	Flashing
Aux C	Aux.	Alarm state of equipment connected to Aux Jack C	Aux C	Aux C	White	Flashing

Call Type	Escalation Sequence	Call activated from...	Default Call Text Displayed	Requested Call Text Displayed (Max 14 Char.)	Corridor Light & Icon Color	Corridor Light Flash Rate
Aux D	Aux.	Alarm state of equipment connected to Aux Jack D	Aux D	Aux D	White	Flashing
Fall Prevention	Fall Prevention	Alarm state of bed Fall Prevention system.	Bed Exit	Bed Exit	White	Flashing
Staff Emergency	Staff Emergency	Red "Emer" button on patient & staff station faceplate or red slide button (without pullcord)	Emergency	Staff Emerg	White	Triple Flash
Bath	Patient Emergency	Red slide button with pullcord located near toilet.	Toilet	Toilet	White	Flashing
Shower	Patient Emergency	Red slide button with pullcord located in shower area.	Shower	Shower	White	Flashing
Code Blue	Code Adult	Code Blue slide button.	Code Blue	Code Blue	Blue	Fast Flash
Smoke Alarm	Fire	Smoke Detector	Smoke Alarm	Smoke Alarm	Red	Fast Flash
Presence & Service Request						
RN Presence	N/A	Activated when presence button in room is pressed.	N/A	N/A	Green	Steady
RN Request	N/A	Activated from nursing station	N/A	N/A	Green	Flashing
Aide Presence	N/A	Activated when presence button in room is pressed.	N/A	N/A	Yellow	Steady
Aide Request	N/A	Activated from nursing station	N/A	N/A	Yellow	Flashing
Faults						
System Faults	Fault	Activated when system or component failure detected.	Fault	N/A	White	Slow Flash

All Revision Dates

11/18/2022, 1/28/2020, 2/1/2017

Approval Signatures

Step Description	Approver	Date
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/18/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/18/2022
Policy Owner	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/18/2022

COPY



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Owner **Ian McGraw:**
Manager Facility
Operation
Policy Area **Facilities**

F.33 Humidity in the Operating Rooms

POLICY:

To provide appropriate methods of monitoring and adjusting Surgical Suite temperature and relative humidity levels.

PROCEDURE:

BACKGROUND INFORMATION:

1. Although there are design criteria for operating room heating, ventilation and air conditioning (HVAC) systems related to temperature and humidity, the actual temperature and humidity within each operating room is mostly affected by the clinical requirements of the procedure and the heat and humidity load added by the operating team and equipment.
2. A relative humidity that is too high can result in damp or moist supplies with added opportunity for mold growth. It can also contribute to excess perspiration and occasional "sweat through" when combined with high temperatures. A relative humidity that is too low can result in excessive bacteria-carrying dust within the surgical environment. Low humidity also contributes to static electricity charges.
3. Although humidity and temperature during operations are important, frequent logging does not contribute to patient safety or staff comfort.

Preventative Maintenance of the Operating Room HVAC System: The Facilities Maintenance Department shall implement appropriate preventative maintenance and monitoring practices to ensure the HVAC system is working as designed. Because NFPA 99 requires operating room humidity to be within the 20-60% range, the Facilities Maintenance Department shall routinely monitor humidity (at least weekly checks) to ensure appropriate functioning of the equipment. Other routine monitoring of HVAC function will be prescribed by the Utilities Management Plan approved by the Environment of Care

Committee.

Operational Monitoring: Because the temperature and humidity fluctuate significantly throughout the day and because adjustments to temperature and humidity must be made in real time, no routine logging within the Operating Room is indicated. However, staff shall consider the following guidelines to adjust temperature and humidity as the day progresses;

- a. Consideration for adjustments to temperature:
 - 1. Comfort of the surgery team.
 - 2. Excessive perspiration.
 - 3. Clinical needs of the patient or the procedure.
- b. Considerations for adjustment to humidity:
 - 1. Excessive perspiration.

Process:

The circulating nurse shall be responsible for making in-room adjustments to temperature. Facilities Maintenance shall be contacted and shall respond promptly should these in-room adjustments prove ineffective or if adjustments to the humidity load provided by the HVAC system be indicated.

All Revision Dates

12/5/2022, 7/1/2016, 12/9/2013, 1/7/2008

Approval Signatures

Step Description	Approver	Date
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	12/5/2022
Facilities Department	Ian McGraw: Manager Facility Operation	11/10/2022



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Owner Ian McGraw:
Manager Facility
Operation
Policy Area Facilities
Maintenance/
Biomed/Support
Services

F.114 Procedure for Alternate Helipad Usage

POLICY:

To provide direction to Facilities Maintenance staff when an emergency notification of an inbound aircraft is received **and** the Fainer Wing elevator system is down. Facilities Maintenance staff shall complete the required preparation within 20 minutes of notification of an incoming flight. Security staff are responsible for assisting in physical preparation for receiving aircraft.

PROCEDURE:

- Despite the need for an emergency response, care shall be taken by staff accessing the roof of the hospital to secure the normal helipad site. Staff shall use caution when climbing over or under obstacles to gain access to the helipad from alternate routes.
- Staff shall use proper lifting techniques when handling heavy equipment
- During normal daytime operations, Facilities Maintenance staff shall make themselves available to assist with emergency prep and stand by until aircraft has left the site.
- While the Fainer Wing elevators are being repaired, Facilities Maintenance staff shall champion effective communication of updates with pertinent staff and departments to maximize the ability to respond to inbound aircraft.
- Emergency generators must be full of fuel at all times and secured safely with emergency landing lights and equipment.
- Batteries for emergency lighting must be included in the Facilities Maintenance PM program and inspected and tested at regular intervals.
- Supplemental area lighting at the alternative helipad site is available via a portable lighting station. However, this must NOT be utilized until after the pilot has landed the aircraft as to ensure safe vision for approach.
- A 20# fire extinguisher shall also be staged with the lighting and generators as a precaution.

Facilities Maintenance staff shall ensure this equipment is loaded with the gear at the time of implementation of this procedure.

Malfunction in Fainer Wing Elevators

A malfunction in the Fainer Wing elevator system can be communicated from a work order, a customer request, first-hand witnessing of operational failure or direct notification from hospital staff.

Upon notification of malfunction of the Fainer Wing elevators, Facilities Maintenance staff shall proceed as follows:

- Notify the Nursing Supervisor.
- Notify Lifeline Medical Transport at 1-805-653-5578 to alert them that last-minute notification of an in-bound aircraft is possible
- Notify Security Office on Campus.
- Notify the Facilities Maintenance Department manager
- Protectively lay out the yellow "X" on the normal hospital helipad to ensure it is not used during the period of time the Fainer Wing elevators are down. REMOVE the yellow "X" at the alternative helipad.
- Facilities Maintenance staff shall go to the storage area and inspect the condition and working order of all equipment. This will ensure reliable operation in the event of an emergency flight. Staff must also visit alternative helipad area to ensure area is free from obstacles that may prevent landing the aircraft.

Upon Notification of an Incoming Flight

- Immediately notify the Security Office and verbally confirm they have sent an officer directly to the normal hospital helipad. Though the CCTV security personnel are dedicated to 24/7 monitoring of surveillance systems, their role in this emergency response effort is part of their contract.
- Security staff shall access the VCMC normal helipad via the stairs or access the roof via elevator # 3 and traverse across to the helipad.
- Ensure that the normal helipad landing lights are OFF.
- Place the large yellow "X" on the normal helipad landing area to prevent landing.
- Immediately after directing Security staff to normal helipad area, Facilities Maintenance staff will meet with security patrol staff member at the storage area and load up equipment to take to alternative helipad site.
- Upon arrival at alternative helipad, immediately remove the large yellow "X" over the landing area.
- Place emergency generators at the pink line marked on the wall adjacent to the northernmost red obstruction light and the pink line on the concrete "K-rail" supporting the wind sock assembly.
- Place the 16 individual battery-powered landing perimeter lights on the pink spots painted on the asphalt representing the alternative landing area. With the toggle switch at the 12:00 position, the toggle shall be switched to the left to activate the steady beacon for each perimeter light.

- Start generators and run for 60 seconds. After steady idle is achieved, plug the power cord at the base of the obstruction light string into its dedicated generator. Plug the power cord at the base of the illuminated wind-sock assembly into its dedicated generator.
- At this point, there should be a steady and bright green illuminated circle for the pilot to reference for landing. The red obstruction lights should all be illuminated. The wind sock should be illuminated.

NOTE: At this point, the alternative helipad site is properly prepared for receiving aircraft. Staff shall move completely out of the way behind the k-rail the wind sock assembly is mounted on and shall remain outside of landing area until aircraft has landed. Only when signaled to shall staff approach area to offer support and ask if additional lighting is desired. If emergency personnel indicate additional lighting is desired, go over to portable lighting station and fire up additional lighting.

In the event of an emergency at VCMC during this response:

- If during this response effort the Hospital Maintenance Engineer (HME) receives notification of a code response or any other emergency situation within the hospital and there is not another maintenance person on-shift, Security must provide an additional support resource immediately at the alternative helipad site for the duration of the time the aircraft is at location.

Once aircraft has left VCMC property:

- Upon departure of the aircraft, Facilities Maintenance and Security staff will power down generators. Allow adequate cooling (5-7 minutes) before loading back into storage.
- Turn off all battery-powered landing area indicators and also return to storage.
- If the portable lighting station was activated, shut it down prior to leaving the alternative landing site.

Upon return of Fainer Wing elevator system to service, Facilities Maintenance staff shall proceed as follows:

- Notify the Nursing Supervisor.
- Notify the Administrator on Duty (AOD) if after hours.
- Notify Lifeline Medical Transport at 1-805-653-5578.
- Notify the Facilities Maintenance manager.
- Remove the large yellow "X" over the normal helipad landing area.
- Replace the large yellow "X" over the alternative helipad landing.

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12/5/2022

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Step Description	Approver	Date
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	12/5/2022
Facilities Department	Ian McGraw: Manager Facility Operation	11/10/2022

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Next Review 11/13/2024

Owner **Gayle Haider:**
Quality Assurance Supervisor, Laboratory Services
Policy Area **Laboratory Services**

L.37 Laboratory Data Verification and Validation

POLICY:

The purpose of laboratory method validation is to characterize system performance, to assess the potential for error, to identify method-to-method differences and to meet regulatory (CLIA 88 and CAP) guidelines. Method validation is done when placing a new system into service, at regular intervals to assess ongoing system performance, after the replacement of a component of the system, as advised by the manufacturer, and when troubleshooting system performance.

PROCEDURE:

Consult manufacturer's package inserts, evaluation protocol, manuals and supplemental protocols.

BASIC COMPONENTS OF METHOD VALIDATION STUDIES:

For unmodified FDA cleared or approved tests, the Laboratory may use data from manufacturer's information or published reports, but the Laboratory must verify outside data on accuracy, precision and reportable range.

ACCURACY (Measure of Bias, % Recovery)

1. Method to method studies comparing similar instruments
2. Minimum of 20 samples for statistical accuracy
3. Good distribution of sample values ranging from low to high

4. Measures systematic error of an analytical method
5. Limits: Endpoint assays should be within 10% of the standard's stated value or peer group comparison value, but at a minimum, manufacturer's stated tolerance limits should be met.

PRECISION (Measure of Spread, Standard Deviation, Coefficient of Variation)

1. Characterizes the reproducibility of a test system
2. Performed by repetitive testing of the same sample

Measures random error of an analysis:

Formula:

$$s = \sqrt{\frac{\sum (X - \bar{x})^2}{n - 1}}$$

s = sample standard deviation

\sum = sum of...

X = each value

\bar{x} = sample mean

n = number of values in the sample

- Around 68% of scores are within 1 standard deviation of the mean,
- Around 95% of scores are within 2 standard deviations of the mean,
- Around 99.7% of scores are within 3 standard deviations of the mean.
- Limits: Coefficient of Variation, which is a measure of precision, and is the standard deviation expressed as a percentage of the mean, ideally should also be less than 10%, or at a minimum, remain within the threshold of the manufacturer's stated acceptable performance.

• REPORTABLE RANGE: LIMIT OF DETECTION

Validation of Reportable Range, Analytical Measurement Range, Reference Range, Critical Limits and Calibration Verification (CAP POC July 2003 Checklist, Page 34 Commentary) can all be accomplished through the same protocol if the range of testing spans the broadest range.

Materials must be "matrix appropriate" such as: Split blood samples, linearity/calibration verification materials supplied by manufacturer or other vendor.

Verification of the Analytical Measurable Range may not apply to certain assays (for example, in immunology)

1. Reportable Range- The range of results for which a system has been proven to yield numerically accurate results.

2. Critical Limits- Low and high result limits which, when exceeded, require follow up action.
3. Analytical Measurement Range-The range of results through which a method yields numerical values
4. Calibration Verification/Linearity-The process of verifying that a system is properly calibrated.
5. Reference Range Studies

SENSITIVITY

1. Analytic Sensitivity (Low end). Note: For FDA cleared/approved tests, documentation may consist of data from manufacturer's or the published literature.

SPECIFICITY

1. CAP requires assessment of analytical interference

REFERENCE RANGE

1. CAP Requires verification of reference range

REFERENCES

CAP, COM.30980-40000, 08-17-2016

All Revision Dates

11/14/2022, 2/1/2017

Approval Signatures

Step Description	Approver	Date
Hospital Administration	Jason Arimura: Associate Hospital Administrator- Ancillary Services	11/14/2022
Laboratory Services Department	Brad Adler, MD: Medical Director, Laboratory Services	11/10/2022

Laboratory Services
Department

Gayle Haider: Quality
Assurance Supervisor,
Laboratory Services

11/10/2022

Laboratory Services
Department

Erlinda Roxas: Director
Laboratory Services

11/10/2022

COPY



Origination 12/6/2001
Last Approved 12/6/2022
Effective 12/6/2022
Last Revised 12/6/2022
Next Review 12/5/2024

Owner **Gayle Haider:**
Quality Assurance Supervisor, Laboratory Services
Policy Area **Laboratory Services**

L.42 Preservation of Laboratory Records and Specimens

POLICY:

To establish guidelines for the retention of Laboratory documents and specimens which comply with California Title 17 and Title 22, CLIA '88, College of American Pathologists (CAP), AABB (formerly Association of Blood Banks), and The Joint Commission requirements, and to maintain a system by which these items are available within a reasonable period of time.

Active files are those that are being used or consulted on a routine basis (quality control, preventive maintenance logs, manual test results logs) or those that are involved with any open investigation, audit, or litigation are retained in laboratory storage. They are considered inactive after 3 years of retention or after investigation, audits, or litigation case is closed.

Inactive files are those that are not routinely used but must be retained for reference or to meet full retention requirement. These files are retained in laboratory storage and are purged after required retention period.

Records of permanent destruction of laboratory records are retained in the laboratory (date of destruction, method of destruction, description of disposed or purged records, inclusive dates, attestation of destruction and signatures of the individuals supervising and witnessing the destruction). Records are destroyed by the contracted service provider.

Should the facility or laboratory cease operations, the laboratory ensures that all records and, as applicable, slides, blocks, and tissue are retained and available for the time frames specified in the table below. The entirety of laboratory records, slides, blocks, and tissues are sent off-site for retention until required retention period.

PROCEDURE:

Laboratory specimens and documents are frequently needed for retesting or review beyond the initial period of time in which they were obtained and reported. The documentation of test results of patients and quality control specimens must be filed and stored in an organized fashion for an appropriate period of time.

RECORDS			
GENERAL			CALIFORNIA LAW
Instrument Maintenance, Test System Performance Specifications	3	Years	CBPC §1265(j)(2)
Instrument Printouts (manual tests, instruments not interfaced)	3	Years	CALIFORNIA LAW
Manual Entry Worksheets	2	Years	
Patient Reports	20	Years**	CBPC §1265(j)(2)
Patient Test Records	3	Years	CBPC §1265(j)(2)
Performance Improvement, Quality Management Systems Assessment Records	3	Years	CBPC §1265(j)(2)
Proficiency Testing Records	2	Years	CLIA 2003
Quality Control Records	3	Years	CBPC §1265(j)(2)
Test Requisitions and Authorizations Records	3	Years	CBPC §1265(j)(2)
Signature List	Forever		
Job Descriptions and Personnel Records	5	Years	
Test Procedure Records/Manuals	3	Years	CBPC §1265(j)(2)
Test Procedure - Discontinued	3	Years from retired date	
BLOOD BANK (Related Policy: L.BB.11 Blood Bank Record Management)			
Product - Source, Disposition	Forever		
Immunohematology Test Reports and Transfusion Records	10	Years	CLIA 2003
Quality Control Records	10	Years	
Work Sheets	10	Years	
Testing Procedure - Discontinued	5	Years from retired date	
**Retained in Laboratory Information System (LIS)			
CYTOLOGY			

RECORDS		
Quality Control Records	3	Years
Work Sheets	3	Years
PATHOLOGY		
Accession Records	3	Years
Quality Control Records	3	Years
Work Sheets	2	Years
SPECIMENS		
BLOOD BANK		
Cord Blood	14	Days
Crossmatch	14	Days
Product Segments (Red Blood Cells)	14	Days
Sera, Unusual Antibody	1	Year
Type, Antibody Screen	14	Days
Type and Hold	14	Days (7 days post transfusion)
CLINICAL LAB:		
Chemistry	7	Days
Coagulation	6	Hours
Hematology		
Slides	7	Days
Specimens	2	Days
Microbiology		
Culture – AFB	2	Months
Culture – Blood	9	Days
Culture – Body Fluid	3	Days
Culture – Fungal	2	Months after final report
Culture – Plates	2	Days after final report
Culture – Thiol Broth	3	Weeks
Isolates – AFB		Sent to Public Health Department
Isolates – Blood, Fluid, Surgical	2	Months
Slides	6	Months
Specimens	2	Days

RECORDS			
Serology	7	Days	
Urinalysis	2	Days	
CYTOLOGY			
Slides - Negative/Positive	5	Years	
Blocks	5	Years	
PATHOLOGY			
Histopathology Slides	10	Years	
Paraffin Block	10	Years	
Pathology Test Reports	10	Years	CLIA 2003
Slides	10	Years	
Tissue - Autopsy	3	Months after final report	
Tissue - Surgical	2	Weeks after final report	

All Revision Dates

12/6/2022, 10/25/2022, 8/8/2022, 6/5/2020, 12/1/2016, 2/1/2009

Approval Signatures

Step Description	Approver	Date
Hospital Administration	Jason Arimura: Associate Hospital Administrator-Ancillary Services	12/6/2022
Laboratory Services Department	Gayle Haider: Quality Assurance Supervisor, Laboratory Services	12/6/2022
Laboratory Services Department	Brad Adler, MD: Medical Director, Laboratory Services	12/5/2022
Laboratory Services Department	Erlinda Roxas: Director Laboratory Services	12/4/2022



Origination 11/22/2022
Last Approved 11/29/2022
Effective 11/22/2022
Last Revised 11/29/2022
Next Review 11/28/2024

Owner **Erlinda Roxas:**
Director
Laboratory
Services
Policy Area **Laboratory
Services**

L.54 Using ABBOTT iSTAT Handheld Analyzer

PURPOSE:

To describe the procedure for point of care testing, using the i-STAT®1 analyzer.

- The i-STAT cardiac troponin I (cTnI) test is an in vitro diagnostic test for the quantitative measurement in whole blood or plasma.
- The i-STAT CHEM 8+ panel test is an in vitro diagnostic test for the quantitative measurement of electrolytes and metabolite testing in whole blood.
- The i-STAT CG4+ panel test is intended for use in the in vitro quantification of lactate and blood gases: pH, pCO₂, pO₂, TCO₂, HCO₃, base excess (BE), and sO₂.

CLINICAL SIGNIFICANCE:

Cardiac Testing

- **Troponin** - Measurements of cardiac troponin I are used in the diagnosis and treatment of myocardial infarction and as an aid in the risk stratification of patients with acute coronary syndromes with respect to their relative risk of mortality.

Electrolytes and Chemistries

- **Sodium** – Test for sodium in the blood are important in the diagnosis and treatment of patients suffering from hypertension, renal failure or impairment, cardiac distress, disorientation, dehydration, diabetes insipidus, salt poisoning, skin losses, hyperaldosteronism, and CNS disorders.
- **Potassium** - Test for potassium in the blood are important in the diagnosis and treatment of patients suffering from hypertension, renal failure or impairment, cardiac distress, disorientation, dehydration, nausea and diarrhea.
- **Ionized Calcium** – The biologically active fraction of calcium is free ionized calcium. Ionized calcium is vitally important in blood coagulation, nerve conduction, neuromuscular transmission and in muscle contraction. Increased ionized calcium (hypercalcemia) may result in coma. Prolonged hypocalcemia may result in bone demineralization (osteoporosis) which can lead to

spontaneous fractures. Measurements of ionized calcium have proven of value under the following clinical conditions: transfusion of citrated blood, liver transplantation, open heart surgery, neonatal hypocalcemia, renal disease, hyperparathyroidism, malignancy, hypertension, and pancreatitis.

- **Glucose** – Glucose is a primary energy source for the body and the only source of nutrients for brain tissue. Measurements for determination of blood glucose levels are important in the diagnosis and treatment of patients suffering from diabetes and hypoglycemia. Some causes for increased values of glucose include diabetes mellitus, pancreatitis, endocrine disorders (e.g. Cushing's syndrome), drugs (e.g. steroids, thyrotoxicosis), chronic renal failure, stress, or I.V. glucose infusion. Some causes of decreased values of glucose include insulinoma, adrenocortical insufficiency, hypopituitarism, massive liver disease, ethanol ingestion, reactive hypoglycemia, and glycogen storage disease.
- **Chloride** - Tests for chloride in the blood are important in the diagnosis and treatment of patients suffering from hypertension, renal failure or impairment, cardiac distress, disorientation, dehydration, nausea and diarrhea. Some causes of increased values for chloride include prolonged diarrhea, renal tubular disease, hyperparathyroidism and dehydration. Some causes for decreased values for chloride include prolonged vomiting, burns, salt-losing renal disease, overhydration and thiazide therapy.
- **BUN/UREA** - An abnormally high level of urea nitrogen in the blood is an indication of kidney function impairment or failure. Some other causes of increased values for urea nitrogen include prerenal azotemia (e.g. shock), postrenal azotemia, GI bleeding and a high protein diet. Some causes of decreased values for urea nitrogen include pregnancy, severe liver insufficiency, overhydration and malnutrition.
- **Creatinine** - Elevated levels of creatinine are mainly associated with abnormal renal function and occur whenever there is a significant reduction in glomerular filtration rate or when urine elimination is obstructed. The concentration of creatinine is a better indicator of renal function than urea or uric acid because it is not affected by diet, exercise, or hormones. The creatinine level has been used in combination with BUN to differentiate between prerenal and renal causes of an elevated urea/BUN.
- **TCO₂** - TCO₂ is a measure of carbon dioxide which exists in several states: CO₂ in physical solution or loosely bound to proteins, bicarbonate (HCO₃) or carbonate (CO₃) anions, and carbonic acid (H₂CO₃). Measurement of TCO₂ as part of an electrolyte profile is useful chiefly to evaluate HCO₃ concentration. TCO₂ and HCO₃ are useful in the assessment of acid- base imbalance (along with pH and PCO₂) and electrolyte imbalance.
- **Lactate** - Elevated levels of lactate are mainly found in conditions of hypoxia such as shock, hypovolemia, and left ventricular failure; in conditions associated with diseases such as diabetes mellitus, neoplasia, and liver disease; and in conditions associated with drugs or toxins such as ethanol, methanol, or salicylates. Hyperlactatemia is an indicator commonly used to detect tissue hypoperfusion, particularly in the case of sepsis, but also in trauma and surgical settings.

PRINCIPLE:

Cardiac Testing

- **Troponin** – The i-STAT cTnI test cartridge uses a two-site enzyme-linked immunosorbent assay (ELISA) method. Antibodies specific for human cardiac troponin I (cTnI) are located on an electrochemical sensor fabricated on a silicon chip. Also deposited in another location on the sensor silicon chip is an antibody/alkaline phosphatase enzyme conjugate specific to a separate portion of the cTnI molecule. The whole blood or plasma sample is brought into contact with the

sensors allowing the enzyme conjugate to dissolve into the sample. The cTnI within the sample becomes labeled with alkaline phosphatase and is captured onto the surface of the electrochemical sensor during an incubation period of approximately seven minutes. The sample, as well as excess enzyme conjugate, is washed off the sensors. Within the wash fluid is a substrate for the alkaline phosphatase enzyme. The enzyme bound to the antibody/antigen/antibody sandwich cleaves the substrate releasing an electrochemically detectable product. The electrochemical (amperometric) sensor measures this enzyme product which is proportional to the concentration of cTnI within the sample.

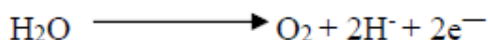
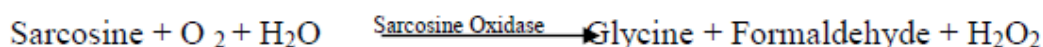
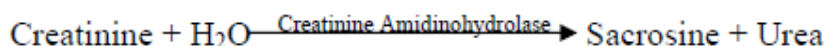
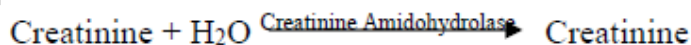
Electrolytes and Chemistries

- **Sodium, Potassium, Chloride and Ionized Calcium**, - are measured by ion selective electrode potentiometry. Concentrations are calculated from the measured potential through the Nernst equation.
- **Glucose** - is measured amperometrically. Oxidation of glucose, catalyzed by the enzyme glucose oxidase, produces hydrogen peroxide. The liberated hydrogen peroxide is oxidized at an electrode to produce an electric current which is proportional to the glucose concentration.
- **BUN** - Urea is hydrolyzed to ammonium ions in a reaction catalyzed by the enzyme urease.

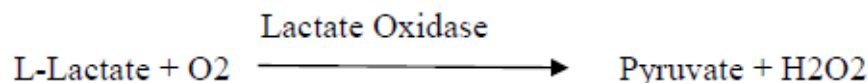


The ammonium ions are measured potentiometrically by an ion-selective electrode. In the calculation of results for urea, concentration is related to potential through the Nernst Equation.

- **Creatinine** - Creatinine is hydrolyzed to creatinine in a reaction catalyzed by the enzyme creatinine amidohydrolase. Creatinine is then hydrolyzed to sarcosine in a reaction catalyzed by the enzyme creatine amidinohydrolase. The oxidation of sarcosine, catalyzed by the enzyme sarcosine oxidase, produces hydrogen peroxide. The liberated hydrogen peroxide is oxidized at the platinum electrode to produce a current which is proportional to the creatinine concentration.



- **Lactate** - is measured amperometrically. The enzyme lactate oxidase, immobilized in the lactate biosensor, selectively converts lactate to pyruvate and hydrogen peroxide. The liberated hydrogen peroxide is oxidized at the platinum electrode to produce a current which is proportional to the lactate concentration.



REAGENTS AND MATERIALS:

1. i-STAT test device
2. i-STAT Cartridge: cTnI, CHEM 8+, CG4+

3. i-STAT rechargeable/downloader
4. i-STAT portable printer

COPY

SUPPLIES AND STORAGE CONDITIONS:

a. Cartridges

- i. Cartridges are sealed in individual pouches or portion packs.
- ii. Store the main supply of cartridges at a temperature between 2 to 8°C (35 to 46°F).
- iii. Do not allow cartridges to freeze.
- iv. Allow 5 minutes for an individual cartridge and one hour for a box of cartridge to come to room temperature before use.
- v. Chem8, BNP, cTnl, and β -hCG Cartridges may be stored at room temperature (18 to 30°C or 64 to 86°F) for 14 days. CG4+ (Lactate) cartridges may be stored at room temperature (18 to 30°C or 64 to 86°F) for 2 months.
- vi. Indicate revised expiration date on the cartridge box or pouch when stored at room temperature. Cartridges should not be returned to the refrigerator once they have been at room temperature, and should not be exposed to temperatures above 30°C(86°F).
- vii. If the pouch has been punctured, the cartridge should not be used. Cartridges should remain in pouches until time of use.
- viii. Do not use after the labeled expiration date
- ix. Periodic Procedures for Cartridges
 - a. For acceptance of newly received cartridge lots, check the Temperature Monitor and perform integrity testing.
 - b. i-STAT cartridges are shipped refrigerated with a four-window indicator to monitor temperature during transit.
- x. Note: All control and calibration verification materials, except for those shipped on dry ice will also include a four-window indicator to monitor temperature during transit.

Action:

- Fill out the record of receipt and forward materials to refrigerator.
- If all windows are white or if only the A or B windows are blue or the 1 or 2 windows are red, then transit temperatures were satisfactory and the cartridges can be used.

Remedial Action:

If the C or D windows are blue, the 3 or 4 windows are red:

- Quarantine the suspect cartons.
- Notify the Point of Care Coordinator immediately.
- DO NOT USE cartridges from the suspect cartons.
- Record the out-of-control event in the POC log for monitoring of supplies.

b. i-STAT Controls

- i. i-STAT Troponin Controls (Level 1 and 3)
 - a. No reconstitution or frozen storage is required.
 - b. The controls are stable until the expiration date on the vial when stored

unopened at 2-8°C (35-46°F).

- c. Once opened, controls are stable for 30 days when stored tightly capped at 2-8°C (35-46°F).
- ii. i-STAT CHEM 8 and CG4+ (Lactate) Controls (TriControls Level 1 and 3)
 - a. Refrigerated storage at 2-8°C (35-46°F) should be maintained until the printed expiration date on the box and ampule labels.
 - b. TriControls solutions may also be maintained at room temperature 18- 30°C; 64-86°F) for up to 5 days.
 - c. Do not use TriControls solutions past the labeled expiration date on the box and ampule labels.
- c. Electronic Simulator
Store at room temperature and protect contact pads from contamination by replacing the plastic cap and placing the Electronic Simulator in its protective case after use.

SPECIMEN COLLECTION, PREPARATION AND REQUIREMENTS:

1. Collection

Acceptable collection sources:

- i. Venipuncture
 - a. CHEM 8 & LACTATE (Lithium heparin)
- ii. Capillary samples are NOT recommended for Troponin/cTnl
- iii. Arterial puncture
 - a. CHEM 8, LACTATE & TROPONIN: Plain syringe or blood gas syringe with heparin and labeled for the assays performed or with the least amount of heparin to prevent clotting (10 units heparin/mL of blood)

2. Sample Requirements

CHEM 8, LACTATE, cTNI - Fresh whole blood collected in a collection tube with lithium anticoagulant. Fill collection tubes to capacity.

3. Unacceptable Samples

- i. Evidence of clotting.
- ii. Specimens collected in vacuum tubes with anticoagulant other than lithium heparin for Chem8, cTnl, Lactate.
- iii. Specimens collected in vacuum tubes with anticoagulant other than EDTA for BNP.
- iv. Other sample types such as urine, CSF, and pleural fluid.

4. Avoid the following circumstances

- i. Drawing a specimen from an arm with an intravenous line.
- ii. Stasis (tourniquet left on longer than one minute before venipuncture).
- iii. Extra muscle activity (fist pumping).

- iv. Hemolysis (alcohol left over puncture site, or a traumatic draw).
- v. Icing before filling cartridge.

TEST PROCEDURE:

1. Identify the sample appropriately, using two patient identifiers. Refer to Laboratory Policy and Procedure Point of Care Testing QM (Waived & Moderate Complexity).
2. Press the On/Off key to turn analyzer on.
3. Press 2 for i-STAT Cartridge from the Test Menu.
4. Scan or Enter Operator ID. Repeat if prompted
5. Scan or Enter Patient ID. Repeat if prompted.
6. Scan Cartridge Lot number from the cartridge portion pack.
7. Remove cartridge from portion pack. Handle the cartridge by its edges. Avoid touching the contact pads or exerting pressure over the center of the cartridge.
8. Following thorough mixing of the sample, discard 1 drop from the delivery device to clear unseen bubbles. Hang drop(s) slightly larger than the round “target well”. Touch the drop to the well allowing cartridge to draw sample in. **Do NOT load cartridge with a needle.** Confirm sample volume lines up with top of fill mark. Close cartridge. After closing the cartridge, grasp the cartridge for insertion.
 - i. Original cartridge design: grasp the closure between your thumb and first finger. There is a recess for your thumb on the closure.
 - ii. Redesigned cartridge: grasp the thumbwell between your thumb and first finger. Guide the cartridge into the analyzer gently, until a soft click is heard. The analyzer must remain on a level surface with the display facing up during testing. Motion of the analyzer during testing can increase the frequency of suppressed results or quality check codes.
9. The Time to Results countdown bar will then be displayed. Once time has elapsed, view results on analyzer’s display.
10. Remove cartridge after Cartridge Locked message disappears. The analyzer is ready for the next test immediately.
11. Print results.
12. Results are automatically transferred to the laboratory information system for wireless i-STAT meters. Non-wireless meters require downloading for transmission of results.
13. To manually transmit a result, Press: MENU, Option 6 – TRANSMIT DATA, Option 5- UNSENT.
14. For interfaced analyzers: Once result, test results will automatically transmit to the LIS system. Verify that the patient information is correct before releasing results by downloading analyzer.

REPORTING OF RESULTS:

Analyte	Reference Range	Critical Ranges	Reportable Range
Troponin I	0.00 - 0.079 mg/dL	>0.08 Positive	0 - 0.50
Lactate	07 - 2.0 mmol/L	>2.0	0.3 - 20.0
Analyte	Reference Range	Critical Ranges	Reportable

			Range
Sodium	137-145 mmol/L	Adult: <120 >160 Neonatal: <120 >160	100 - 180
Potassium	3.4 - 5.0 mmol/L	Adult: <2.8 >6.2 <2.5 >7.5	2.0 - 9.0
Chloride	98 – 107 mmol/L	N/A	65 - 140
Glucose	74 – 106 mg/dL	Adult: <50 >400 Neonatal: <35 >300	20 - 600
TCO2	22 - 30 mmol/L	<10 >40	5.0 - 50
Ionized Calcium	1.12 - 1.32 mmol/L	N/A	0.25 - 2.5
BUN	7.0-17 mg/dL	N/A	3 -140
Creatinine	Males: 0.66-1.25 mg/dL Females: 0.52-1.04 mg/dL	N/A	0.45 - 14.0

CRITICAL VALUE NOTIFICATION:

1. TigerText may be used to report critical values. Document in LIS (accession number) dialogue for reporting critical values.
2. Suppressed Values
 - i. Results outside the System's reportable ranges are flagged with a < or >, indicating that the result is below the lower limit or above the upper limit of the reportable range respectively. Verify these results by testing specimens with the main laboratory analyzer.

These results are no reportable and will flag with a symbol < or >. For interfaced analyzers, this will not transmit to patient's electronic medical record.

ACTION: Analyze specimen again using fresh sample and another cartridge.

3. Cartridge results are not reportable based on internal QC rejection criteria that are flagged with ***

ACTION: Analyze specimen again using fresh sample and another cartridge.
4. A quality check message will be reported instead of results if the hand-held detects a problem with the sample, calibrant solution, sensors, or mechanical or electrical functions of the hand-held during the test cycle.

Refer to the i-STAT Manual troubleshooting section or the Analyzer Coded Messages" technical bulletin if necessary.

QUALITY CONTROL

A. Analyzer Verification

1. The internal Electronic Simulator test cycle is automatically activated every eight hour or when a cartridge is inserted after the customized interval is reached. If the analyzer passes the simulator test, the cartridge test cycle proceeds. If not, the analyzer displays "ELECTRONIC SIMULATOR FAIL." If the analyzer is customized to block testing when it fails the simulator test, the same cartridge can be re-inserted immediately after the FAIL message is displayed. If the analyzer fails the simulator test again repeat the procedure with the external simulator.
2. External Simulator Procedure
 - a. Press the ON/OFF key to turn the analyzer on.
 - b. Press the MENU key.
 - c. Press 3 to select Quality Tests.
 - d. Press 4 to select Simulator
 - e. Press SCAN to scan the Operator ID or manually enter the Operator ID and press Enter
 - f. Press Scan to scan the Simulator ID or manually enter the Simulator ID and press Enter
 - g. Remove the cover protecting the contact pads and insert the simulator straight into the analyzer. Avoid touching the contact pads.
 - h. Do not attempt to remove the simulator until the results are displayed and the "Simulator Locked" message is removed.
 - i. If PASS is displayed, continue to use the analyzer. Remove the simulator and return it to its protective case.
 - j. If FAIL is displayed, Do Not analyze patient samples, transmit the results to the Central Data Station, deliver the faulty analyzer to the Point of Care Coordinator.

B. Check Refrigerator Storage Daily

Verify that the cartridges stored in the refrigerator are within the expiration date printed on the boxes. Verify that the storage refrigerator did not exceed the temperature limits of 2 to 8 °C (35 to 46 °F). If storage conditions are in doubt, use controls to verify that the cartridges are performing properly. This is especially important if freezing conditions are suspected at the back of the refrigerator. Document verification on the Temperature/Maintenance Log.

C. Check Room Temperature Storage Daily

Verify that the cartridges stored at room temperature are within the expiration date and that the cartridges have been out of the refrigerator less than the time frame indicated on the cartridge box. If the temperature at which the cartridges are stored is in doubt, use controls to verify that the cartridges are performing properly. Document verification on the Temperature/ Maintenance Log.

D. Liquid Quality Control (QC Levels 1 and 3) Testing for each cartridge type being tested: Chem 8, cTNI, CG4+

Perform external controls, i-STAT Level 1 and 3, for each new lot number or shipment of each type of cartridges, and minimum every 30 days whichever comes first and when a physician question a patient result.

- i. Perform QC procedure under the CONTROL option in the Administration Menu.

(Administration Menu > Option 3, Quality Tests> Option 1, Control)

- ii. Immediately before use
 - a. Troponin Cartridge: Equilibrate QC bottle at room temperature for 15 minutes. Thoroughly mix by gently swirling the bottle. Avoid foaming the sample. Dispense a drop of sample directly into the cartridge and seal cartridge.
 - b. CHEM 8 and CG4+ (Lacatate) Cartridges: Equilibrate the ampule to room temperature for approximately 30 minutes. Immediately before use, shake the ampule vigorously for 5 to 10 seconds to equilibrate the liquid and gas phases. To shake, hold the ampule at the tip and bottom with forefinger and thumb to minimize increasing the temperature of the solution. Protect fingers with gauze, tissue, or glove, or use an ampule breaker to snap off the tip of the ampule at the neck. Immediately transfer solution from the ampule into syringe and then to the cartridge for testing.
 - iii. Electronic Value assignment sheets are used with acceptable ranges. A PASS or FAIL value will be obtained. Parameter being tested must PASS; if PASS is received proceed to next level. If FAIL is obtained, repeat level being tested.
 - iv. Target values and acceptable ranges can also be printed on a Value Assignment Sheet which can be found on the value assignment sheets on the web at <http://www.abbottpointofcare.com/> . Select Value Assignment Sheet; Select the current clew, control and current lot #.
 - v. Check that the lot number on the control ampule matches the lot number on the value assignment sheet and that the software version listed on the insert matches the software installed in the analyzer.
- NOTE: All results must fall within tolerance limits to be acceptable. If all results are within expected ranges, use the cartridges as needed. Place i-STAT in downloader to transmit the results.
- vi. Remedial Action for QC outliers
See Point of Care Policy and Procedure, Point of Care Laboratory Test QM (Waived & Moderate Complexity), Section, Guidelines for Out of Range Quality Control, for remedial action for quality control results exceeding manufacturer's tolerance limits.

If any results are outside the published expected ranges

- a. Repeat testing using a new control and new cartridge.
- b. If continue to receive failures, refer to i-STAT procedure manual and contact technical support.
- c. Do not use cartridges from the suspect lot.
- d. Quarantine the lot and immediately notify supervisor.
- e. Record the QC failure in the i-STAT QC action log along with the action taken.

MAINTENANCE:

- A. As needed. (Refer to Care and software updates section in the i-STAT System Manual for details or go to: <https://www.abbottpointofcare.com/support/technical-documentation/istat-system->

manuals

- i. Clean the analyzer and downloader
 - ii. Remove and Replace disposable batteries (9 Volt Lithium Battery), as applicable
- B. Biannual Maintenance
- i. Checking the Thermal Probes
 - a. Perform External Simulator testing.
 - b. When results are displayed, the difference between the thermal probes can be viewed on the analyzer's screen: Press the PERIOD key.
 - c. Interpretation of the thermal probe check value:
 - i. Acceptable: a value equal to or less than 0.1 (≤ 0.1)
 - ii. Not acceptable: a FAIL message with a "t" Quality Check Code or a value greater than 0.1. Repeat the procedure to confirm results. Contact your Technical Support representative if the repeat thermal check value is greater than 0.1.
 - iii. Repeat the procedure: if "--" is displayed. Take care to handle the simulator a little as possible. It may help to partially insert the simulator into the analyzer and let it stand for 15 minutes before inserting all the way.
 - ii. Updating the Software Software updates are equivalent to adjusting calibration on a traditional analyzer. New CLEW re-establishes the standardization and incorporates refinements to the internal quality monitoring system. The "Application" software is updated to enable the analyzer to recognize new cartridges and to enable new features. Software updates occur twice a year. Supervisor will initiate the process.

CALIBRATION:

A one point calibration is preformed automatically as a part of the test cycle on each cartridge type. Operator intervention is not necessary.

CALIBRATION VERIFICATION:

- A. Calibration verification is performed as follows:
- i. At least every six months.
 - ii. At changes of reagent lots for chemically or physically active or critical components, unless the laboratory can demonstrate that the use of different lots does not affect the accuracy of patient/client test results and the range used to report patient/client test data
 - iii. When Calibration Fails
 - iv. QC fails to meet established criteria
 - v. After major maintenance or service
 - vi. When recommended by the manufacturer
- B. Calibration Verification (CV) Reagents

- i. i-STAT Troponin: i-STAT Cardiac Markers Calibration Verification Control Set Levels 1-3
 - a. Refrigerator storage at 2-8°C must be maintained until the printed expiration date on the box.
 - b. Once opened, controls are stable for 30 days when stored tightly capped at 2-8°C (35-46°F).
- C. i-STAT CHEM 8 and CG4+ (Lactate)

i-STAT Tricontrols Levels 1-5 While the Calibration Verification Set contains five levels, verification of the measurement range could be accomplished using the lowest, highest and mid levels (levels 1, 3 and 5)

- i. Refrigerated storage at 2-8°C (35-46°F) should be maintained until the printed expiration date on the box and ampule labels.
- ii. TriControls solutions may also be maintained at room temperature 18- 30°C; 64-86°F) for up to 5 days.
- iii. Do not use TriControls solutions past the labeled expiration date on the box and ampule labels.

PROCEDURE(S):

A. cTNI

- i. Perform CV procedure under the CAL VER option in the Administration Menu. (Administration Menu > Option 3, Quality Tests > Option 3, Cal Ver. Enter the required information.
- ii. Immediately before use, gently mix the contents of the vial to ensure homogeneity. Avoid foaming of the sample.
- iii. Open the vial and transfer a drop of the fluid into the i-STAT cartridge using the dropper tip, a plain capillary tube, plain syringe, or plastic transfer pipette. Tightly recap the vial and store it at 2-8 °C (35-46 °F).
- iv. Seal the cartridge and immediately insert it into the i-STAT handheld.

B. Chem8 and CG4+ (Lactate)

- i. Perform CV procedure under the CAL VER option in the Administration Menu. (Administration Menu > Option 3, Quality Tests > Option 3, Cal Ver) Enter the required information.
- ii. 2. Immediately before use, shake the ampule vigorously for 5 to 10 seconds to equilibrate the liquid and gas phases.
- iii. Protect fingers with gauze, tissue or glove, or use an ampule breaker to snap off tip of the ampule at the neck.
- iv. Immediately transfer the solution from the ampule into a plain capillary tube or plain syringe, and then immediately transfer the solution into a cartridge.
- v. Immediately seal the cartridge and insert it into the i-STAT handheld. – it is important not to expose the solution to room air since this will alter the results.

Acceptable Criteria

Target values and acceptable ranges can be printed on a Value Assignment Sheet which can be found on the value assignment sheets on the web at <http://www.abbottpointofcare.com/> . Select Value Assignment Sheet; Select the current clew, control and current lot #.

Calibration throughout the reportable range of each analyte is verified if each analyte value falls within the corresponding range in the Value Assignment Sheet. If a result for a level is outside the range published in the Value Assignment Sheet, two additional cartridge runs should be performed on this level and the three results averaged and then compared to the Value Assignment Sheet range. If this average value is still outside the acceptable range, troubleshooting may be required.

All three levels must be within limits to proceed with patient testing. Please notify tech support and supervisor of failure

LIMITATIONS:

A. Troponin

Cardiac troponin may not appear in circulation for 4-6 hours following the onset of symptoms of MI. Consequently, a single negative result is insufficient to rule out MI. The use of a serial sampling protocol is recommended practice.

Partially clotted samples can result in elevated cTnI results above the reference range, as well as quality check code errors. To prevent this from occurring, upon drawing the whole blood sample into a heparinized collection tube, the sample should be inverted gently at least 10 times to ensure even dissolution of the heparin anticoagulant.

Grossly hemolyzed samples can cause a decreased alkaline phosphatase activity, resulting in decreased detection of cTnI, increased assay backgrounds, and/or quality check codes.

Hematocrits in the range of 0-65 % PCV have been demonstrated not to affect results. Samples with hematocrit levels above this range have demonstrated increases in the test imprecision and quality check codes.

The analyzer must remain on a level surface with the display facing up during testing. Motion of the analyzer during testing can increase the frequency of suppressed results or quality check codes. A level surface includes running the handheld in the downloader/recharger.

- i. **Interference Testing** The following substances were found to have no significant effect (less than 10%) on the cTnI method, when added to a plasma pool containing approximately 2 ng/mL of cardiac troponin I, at the concentrations indicated:

Compound	Test Level (µmol/L unless otherwise indicated)
Acetaminophen	1660
Allopurinol	294
Ascorbic Acid	227
Acetyl Salicylic Acid	3330

Compound	Test Level (µmol/L unless otherwise indicated)
Atenolol	37.6
Caffeine	308
Captopril	23
Chloramphenicol	155
Diclofenac	169
Digoxin	6.15
Dopamine	5.87
Enalaprilat	0.86
Erythromycin	81.6
Furosemide	181
Sodium Heparin*	36 U/mL
Ibuprofen	2425
Isosorbide dinitrate	636
Methyldopa	71
Nicotine	6.2
Nifedipine	1.156
Phenytoin	198
Propranolol	7.71
Salicylic Acid	43400
Theophylline	222
Verapamil	4.4
Warfarin	64.9

B. CHEM 8

i. SODIUM Interference Testing

Sodium heparin may increase sodium results up to 1mmol/L7.

Hemodilution of the plasma by more than 20% associated with priming cardiopulmonary bypass pumps, plasma volume expansion or other fluid administration therapies using certain solutions may cause clinically significant error on sodium, chloride, ionized calcium and pH results. These errors are associated with solutions that do not match the ionic characteristics of plasma. To avoid these errors when hemodiluting by more than 20%, use physiologically balanced multi-electrolyte solutions containing low-mobility anions (e.g. gluconate) such as Normosol®-R (Abbott Laboratories), Plasma-Lyte®-A (Baxter Healthcare Corporation), and Isolyte®-S (B Braun Medical) rather than solutions such as normal saline or Ringer's Lactate.

Test concentrations used were as per the CLSI guidance document,8 unless otherwise indicated.

Substance	Test Concentration (mmol/L)	Interference
Bromide	37.5	Increased i-STAT Sodium results

NOTE: Bromide has been tested at two levels; the CLSI recommended level and a therapeutic plasma concentration level of 2.5 mmol/L. The latter is the peak plasma concentration associated with halothane anesthesia, in which bromide is released. APOC has not identified a therapeutic condition that would lead to levels consistent with the CLSI recommended level. Bromide at a concentration of 37.5 mmol/L increased i-STAT sodium results, while a therapeutic range of bromide (2.5 mmol/L) did not significantly interfere with i-STAT sodium results.

ii. **Potassium Interfering Substances**

If heparinized whole blood is allowed to stand before testing, potassium values will first decrease slightly, then increase over time. Potassium values will increase in iced specimens. Potassium values from anticoagulated samples are preferred to serum values because 0.1 to 0.7 mmol/L potassium can be released from platelets¹ and red blood cells during the clotting process. Potassium values obtained from skin puncture samples may vary due to hemolysis or an increase in tissue fluid from improper technique during the collection procedure.

iii. **Chloride Interfering Substances**

Hemodilution of the plasma by more than 20% associated with priming cardiopulmonary bypass pumps, plasma volume expansion or other fluid administration therapies using certain solutions may cause clinically significant error on sodium, chloride, ionized calcium and pH results. These errors are associated with solutions that do not match the ionic characteristics of plasma. To avoid these errors when hemodiluting by more than 20%, use physiologically balanced multi-electrolyte solutions containing low-mobility anions (e.g. gluconate) such as Normosol®-R (Abbott Laboratories), Plasma-Lyte®-A (Baxter Healthcare Corporation), and Isolyte®-S (B Braun Medical) rather than solutions such as normal saline or Ringer's Lactate.

Test concentrations used were as per the CLSI guidance document,⁷ unless otherwise indicated.

Substance	Test Concentration (mmol/L)	Interference
Acetylcysteine	10.2	Decreased i-STAT Chloride results.
Bromide	37.5	Decreased i-STAT Chloride results.
Bromide (therapeutic)	2.5, 8, 9, 10	Increased i-STAT Chloride results. Use another method.
Salicylate	4.34	Increased i-STAT Chloride results. Use another method.
Thiocyanate	6.9	Increased i-STAT Chloride results. Use another method.

iv. **Glucose Interfering Substances**

Glucose values will decrease in whole blood samples over time. Venous blood glucose is

as much as 7 mg/dL less than capillary blood glucose as a result of tissue utilization.⁶ Test concentrations used were as per the CLSI guidance Document, 7 unless otherwise indicated.

Substance	Test Concentration (mmol/L)	Interference
Acetaminophen	1.32	Increased i-STAT Glucose results.
Acetylcysteine	10.2	Increased i-STAT Glucose results.
Bromide	37.5	Increased i-STAT Glucose results.
Bromide (therapeutic)	2.5, (8,9,10)	Decreased i-STAT Glucose results by approximately 5 mg/dL
Hydroxyurea	0.92	Increased i-STAT Glucose results. Use another method
Thiocyanate	6.9	Decreased i-STAT Glucose results by approximately 7 mg/dL

v. Creatinine Interfering Substances

Test concentrations used were as per the CLSI guidance document,⁶ unless otherwise indicated.

The following substances are known to interfere with the i-STAT Creatinine assay:

C. CG4+ - Lactate

Special collection procedures are necessary to prevent changes in lactate both during and after the blood is drawn. For steady state lactate concentrations, patients should be at rest for 2 hours and fasting. Venous samples should be obtained without the use of a tourniquet or immediately after the tourniquet is applied. Both venous and arterial samples may be collected into heparinized syringes. Samples for lactate should be analyzed immediately on drawing as lactate increases by as much as 70% within 30 minutes at 25 °C as a result of glycolysis. Test concentrations used were as per the CLSI guidance document unless otherwise indicated.

The following substances are known to interfere with the i-STAT lactate assay:

Substance	Test Concentration (mmol/L)	Interference
Bromide	37.5	Decreased i-STAT lactate results.
Glycolic Acid	10.0	Increased i-STAT lactate results.
Hydroxyurea	0.92	Increased i-STAT lactate results.

TROUBLESHOOTING:

- A. Refer to Manufacturer manual (section 19, Troubleshooting the Analyzer) or contact technical support (800-366-8020)
- B. Notify the Pathology Department and Supervisor.

REFERENCE(S):

i-STAT®1 System Manual and Procedure Manual (Updated November 2015) b) Cartridge Test Information Sheets (CTI) – www.abbottpointofcare.com

- Sodium (Art# 714173-00M)
- Potassium (Art# 714174-00J)
- Chloride (Art# 714175-00K)
- BUN/Urea (Art# 714176-00L)
- Glucose (Art# 714177-00N)
- Hematocrit (Art# 714178-00L)
- Creatinine (Art# 714183-00T)
- Cardiac Troponin I/cTnI (Art# 715595-00R)
- Lactate (Art# 714184-00N)

All Revision Dates

11/29/2022

Approval Signatures

Step Description

Approver

Date

Hospital Administration	Jason Arimura: Associate Hospital Administrator- AncillaryServices	11/29/2022
Laboratory Services Department	Brad Adler, MD: Medical Director, Laboratory Services	11/22/2022
Laboratory Services Department	Erlinda Roxas: Director Laboratory Services	11/21/2022



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Effective 12/5/2022
Last Revised 12/5/2022
Next Review 12/4/2024

Owner Erlinda Roxas:
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L.SPH.50 Linearity Studies

POLICY:

Linearity studies are performed in the laboratory to determine the linear reportable range for an analyte. The linearity for each analyte is assessed by checking the performance of recovery throughout the manufacturer's stated range of the testing system. This is done using a set of standards containing varying levels of an analyte in high enough and low enough concentrations so as to span the entire range of the test system.

The analytical measurable range (AMR) is the range of concentrations that an instrument can measure without any pre-treatment of the sample (concentration or dilution) that would change the concentration of an analyte. The analytical system should show linearity over this analytical measurement range.

Linearities are performed whenever a new analyzer, analyte or method is introduced into the laboratory, or an analyzer is replaced. Linearities may also be performed for troubleshooting purposes when quality control is unacceptable and deviations from acceptable data cannot be explained, or major analyzer repair or replacement of components has taken place. Performing linearity studies as scheduled can detect problems earlier than quality control or proficiency testing.

Linearities are performed on assays that do not have 3 or more point calibration.

Sodium, Potassium, Chloride Linearity: Perform the linearity using Verichem Linearity material (or other suitable commercial linearity material). Analyze Na, K, and Cl in duplicate for each standard.

Calibrators should be traceable to a reference method to ensure accuracy. Reference table below.

Submit the data to the Laboratory Supervisor, for review, acceptance and statistical analyses. Final authorization for implementation is done by the Laboratory Medical Director.

PROCEDURE

1. Linearity studies will be performed as part of the procedure "Evaluation of Automated Test Methods" in order to determine linear reportable range. For each analyte, a set of linearity standards will be tested in the same manner as patient samples.
2. Testing should be performed at a minimum in duplicate, when performed within a single run. If one value deviates greatly from the others due to random error, it may be removed from the data analysis and repeated.
3. The test results will be graphed and statistically analyzed as described below under "Evaluation of Linearity Study Data."
4. Once a linearity study has been performed to determine the linear reportable range for a test method, it may be repeated as recommended by the manufacturer (i.e.: following relocation of the instrument or after major maintenance) or calibration verification may be performed in accordance with CLIA guidelines, to verify continued acceptable performance of calibration and stated reportable range of the analyzer or analyte.

EVALUATION OF LINEARITY STUDY DATA

The data from the linearity study will be recorded on a linearity study sheet or programmed or downloaded into an available software program. Some manufacturers of linearity standards provide online data entry with real time comparison with peer group data and the capability to download linear regression graphs.

Values are plotted as observed values (Y axis) vs. expected values (X axis). Examine the raw data for obvious errors. If an analytical or technical problem is found, repeat the testing. Assessment will be made by evaluating the data and statistics using the following guidelines.

- A quantitative analytical method is considered linear when there exists a mathematically verified straight-line relationship between the observed values and the true concentrations or activities of the analyte.
- The linearity of a system is measured by testing levels of an analyte which are known formulation or known relative to each other (not necessarily known absolutely).¹

ACCURACY AND PRECISION

Review the linearity data for acceptable accuracy and precision. Ideally, endpoint assays should be within 10% of the standard's stated value or peer group comparison value, but at a minimum, manufacturer's stated tolerance limits should be met. Coefficient of Variation, which is a measure of precision, and is the standard deviation expressed as a percentage of the mean, ideally should also be less than 10%, or at a minimum, remain within the threshold of the manufacturer's stated acceptable performance. It is ultimately the responsibility of the laboratory director to determine acceptability of this data and the validity of analyzer results with respect to accuracy and precision.

SLOPE AND Y-INTERCEPT

Two key statistical values in determining linearity are:

Slope: Equal to 1.0

Acceptable Range: 0.9-1.1

If the slope is outside the acceptable range; examine the results of the highest standard first. It is possible that the test is nonlinear at its highest value.

Y-intercept:

Ideally, the Y-intercept is equal to zero. For enzyme determinations and other assays with results in high numerical values, the Y-intercept may be much higher with no clinical significance. The Y-intercept for assays with low numerical values should be 0.0 ± 1.0 .

REPORTABLE RANGE

A reportable range will be established for each analyte tested. The upper limit of the reportable range will be set at the concentration of the highest standard tested which exhibited acceptable results for linearity, accuracy and precision. This concentration, however, may not exceed the manufacturer's stated linear range.

For analytes which have a lower limit of linearity, the lower limit of the reportable range will be set at the lowest standard tested which exhibits acceptable results, however, this concentration may not exceed the manufacturer's lower limit. Patient samples with concentrations which exceed the reportable range will be diluted with the appropriate diluent and retested, when the analyzer provides this capability. Samples with concentrations which are lower than the reportable range will be reported as "Less than (the lower limit)."

CALIBRATION VERIFICATION

Calibration verification is necessary to verify that an analyte's calibration is still valid, and confirms that testing provides continued accurate results throughout the previously established reportable range.

Calibration of an analyte or test system is performed every six months, utilizing three or more calibrators across a majority of the reportable range, then calibration verification is automatically met, and the laboratory does not need to perform further verification.

For analyzers and analytes that are not calibrated with a minimum of three calibrators verifying the low, midpoint and high end of the reportable range, calibration verification must be performed to substantiate the continued accuracy of the monitors throughout the reportable range, after initial validation studies are performed with the setup of the analyzer.

Calibration verification is performed every six months, as stated in current CLIA regulations. Calibration verification should also be performed under the following conditions:

1. Whenever major maintenance is performed or a critical component part of an analyzer has been replaced
2. Whenever reagent lots are completely changed (unless it has been stated and shown that these lot changes do not affect test results, as with manufacturer's instructions and guidelines in package inserts and analyzer specific manuals)
3. When control values are found to be continually unacceptable, as with shifts and trends in Levy-Jennings graphs over a period of time

To perform calibration verification, low, midpoint and high level standards are tested in the same manner as patient samples. Evaluation of this analysis is achieved through use of slope, intercept, correlation coefficient or manufacturer established guidelines for acceptability criteria.

Each laboratory and its director should establish its own acceptance criteria for calibration verification. When acceptable performance is met, the calibration has been verified. If calibration verification is found to be unacceptable, the instrument must be re-calibrated and all corrective action must be documented.

Assays with less than three point calibration. The Linearities can be performed by the Siemens EXL analyzer. Once the Linearity is completed, should be reviewed, accepted and printed by the Clinical Laboratory Scientist.

Analyte	CAP CVL Program	Linearity Material (3 Levels)	Limits of Acceptability
Acetaminophen (ACTM)	LN3	Drug II Calibrator	+/-25%
HDL Cholesterol (AHDL)	LN2	AHDL Calibrator	+/-30%
Albumin (ALB)	LN2	TP/ALB Calibrator	+/-10%
LDL Cholesterol (ALDL)	LN2	ALDL Calibrator	+/-15%
Alkaline Phosphatase (ALPI)	LN2	ALPI Calibrator	+/-30%
Alanine Aminotransferase (ALTI)	LN2	Enzyme II Calibrator	+/- 20%
Ammonia	LN32	AMON Calibrator	+/-5%
Amylase (AMY)	LN2	Enzyme Verifier	+/-30%
Aspartate Aminotransferase (AST)	LN2	Enzyme Verifier	+/-20%
Blood Urea Nitrogen (BUN)	LN2	CHEM I Calibrator	+/-2 mg/dL or +/-9%
Calcium (CA)	LN2	CHEM I Calibrator	+/-1.0 mg/dL
Cholesterol (CHOL)	LN2	CHOL Calibrator	+/-10%
Creatine Kinase	LN2	CKI Calibrator	+/-30%
Creatinine (CRE2)	LN2	CHEM I Calibrator	+/-0.3 mg/dL or +/-15%
Direct Bilirubin (DBIL)	LN2	TBI/DBI Calibrator	+/-20%

Analyte	CAP CVL Program	Linearity Material (3 Levels)	Limits of Acceptability
Digoxin (DGNA)	LN3	DRUG Calibrator II	+/-0.2 nmol/L or +/-10%
Enzymatic Carbonate (ECO2) nmol?L	LN2	CHEM III Calibrator	+/-20%
Ethyl Alcohol (ETOH)	LN11	CHEM III Calibrator	+/* 25%
Glucose (GLUC)	LN2	CHEM I Calibrator	+/- 6 mg/dL or +/-10%
Human Chorionic Gonadotropin (HCG)	LN5	HCG Calibrator	+/- 3SD
Lactic Acid (LA)	LN2	CHEM I Calibrator	+/- 2SD
Lactate Dehydrogenase (LDI)	LN2	LDI Calibrator	+/-20%
Lipase (LIPL)	LN2	LIPL Calibrator	+/- 30%
N-terminal Pro-Brain Natriuretic Peptide (LNTP)	LN30	LOCI NTP Calibrator	+/-10%
Magnesium (MG)	LN2	CHEM II Calibrator	+/-25%
Phosphorus (PHOS)	LN2	CHEM II Calibrator	+/-15%
C-Reactive Protein (RCRP)	LN21	RCRP Calibrator	+/-15%
Salicylate (SAL)	LN3	SAL Calibrator	+/- 25%
Direct Bilirubin (DBI)	LN2	TBI/DBI Calibrator	+/-20%
Neonatal Bilirubin (NBIL)	LN2	TBI/DBI Calibrator	+/-20%
Total Bilirubin (TBI)	LN2	TBI/DBI Calibrator	+/-10%
Triglyceride (TGL)	LN2	CHEM II Calibrator	+/-25%
Uric Acid	LN2	CHEM I Calibrator	+/-17%
Total Protein (TP)	LN2	TP/ALB Calibrator	+/-10%
Valproic Acid (VALP)	LN3	DRUG II Calibrator	+/-25%
Vancomycin (VANC)	LN3	DRUG II Calibrator	+/- 3SD
Sodium (NA)	LN2	Verichem Linearity Kit	+/- 4.0 mmol/L
Potassium (K)	LN2	Verichem Linearity Kit	+/-0.5 mmol/L
Chloride (CL)	LN2	Verichem Linearity Kit	+/-5%

TROUBLESHOOTING

1. Specimens Excluded from the Linear Range

- Does the linear range cover the AMR?
 - If the high specimen is above the AMR, was the specimen diluted following

appropriate dilution protocol?

- If the linear range does not cover the AMR, check reagents, specimen handling, preventive maintenance of the test system.
- Review quality control, proficiency testing, and calibration data.
- Perform the appropriate corrective action to resolve the issues identified and re-run linearity.
- If necessary, consider adjusting AMR to cover the linear range.

2. Non-Linear Data

- Is the peer group generally linear?
 - If the peer group is generally linear, review how specimens were handled or preventive maintenance records of the test system.
 - Review QC, calibration, and proficiency testing data.
 - Diagnose and fix any identified test system issues.
 - Perform corrective action appropriate to the issues identified.
 - Re-run linearity studies.

3. Large Replicate Imprecision

- Pattern suggests pipetting problems which requires careful investigation
- Review preventive maintenance, test system failures
- Perform appropriate corrective action required for problems identified.
- Re-run linearity study

References

1. [Siemens Healthineers · datasheets S4 portrait · Template \(siemens-healthineers.com\)](https://www.healthineers.com/datasheets/S4-portrait-Template) **Siemens Dimension EXL with LM.**
Retrieved December 4, 2022.
2. <https://documents.cap.org/documents/2011-05-06-calibration-verification-linearity-program-webinar-slides.pdf> **College of American Pathologists,**
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All Revision Dates

12/5/2022, 12/1/2016

Attachments

[Siemens Calibration-Fast Facts.pdf](#)

Approval Signatures

Step Description	Approver	Date
Hospital Administration	Jason Arimura: Associate Hospital Administrator- AncillaryServices	12/5/2022
Laboratory Services Department	Brad Adler, MD: Medical Director, Laboratory Services	12/5/2022
Laboratory Services Department	Erlinda Roxas: Director Laboratory Services	12/4/2022



Status **Active** PolicyStat ID **12775665**



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Last Approved 12/5/2022
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Last Revised 12/5/2022
Next Review 12/4/2024

Owner Erlinda Roxas:
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L.SPH.58 Method Correlations (Quantitative Tests)

BACKGROUND INFORMATION:

Correlation or comparison testing is a method of measuring the relationship between two or more laboratory instruments testing the same analyte. Westgard refers to correlation testing as “a comparison of methods experiment...performed to estimate inaccuracy or systematic error”. Correlation means association - more precisely, it is a measure of the extent to which two variables are related.

The performance of correlation testing between two or more similar instruments is required by the College of American Pathologists (CAP), Joint Commission, and CLIA and it is part of good laboratory practice. Correlation must be performed between all instruments running the same assay in the same laboratory and between a primary laboratory and their back-up laboratory. It is vital for the purposes of patient care that physicians can be assured that all laboratory results released from an institution are equivalent.

This procedure assumes that for routine correlation testing, the instruments have been validated, appropriately calibrated and maintained and that internal QC is within acceptable limits.

CAP Accreditation Checklist:

Questions pertaining to correlation testing between two instruments can be found in the Quality Management General Issues All Common Checklist (COM.04250). The check list states that: “If the laboratory uses more than one nonwaived instrument/method to test for a given analyte, the instruments and methods are checked against each other at least twice a year for comparability of results”. Correlation testing is also a CLIA (Clinical Laboratory Improvement Act) requirement under the final rule published in 2003.

PURPOSE:

A correlation study is performed to verify the comparability of quantitative laboratory results for analytes

tested on different analytical systems or methods.

PROCEDURE(S):

1. Pre-Analytic Procedure (Refer to appropriate laboratory procedures.)

- Patient Preparation
- Specimen Collection
- Safety
- Specimen Handling and Storage
- Appropriate operations procedures

2. Planning and Preparation

- Review the historic CV of the internal quality controls for each analyte.
 - The tracking of the CV can be accomplished through the instrument manufacturer's system or the Laboratory Information (LIS) system.
- Before starting the correlation study ensure that:
 - Appropriate personnel have been informed about the correlation testing, that they have been trained and know how to proceed once the samples are collected.
 - All instruments for the correlation study have:
 - Up-to-date maintenance and calibration
 - Validation (to include precision, accuracy, linearity, and reference range) completed.
 - Internal Quality Control (QC) results that are within acceptable range and that there are no biases observed.
 - All issues identified should have appropriate corrective action done prior to the correlation study

3. Sample Selection

- The use of fresh human samples (whole blood, serum, plasma, urine, etc.) is recommended.
- Linearity samples and/or commercial controls may be necessary to ensure that low, normal, and high specimens are tested.
- Ensure that prior to starting a correlation study that the following are done:
 - The laboratory has access to appropriate samples for correlation
 - The samples can be run on both instruments at the same time or within 2 hours
 - If stored samples are used, ensure that the samples are stored appropriately and

that the storage conditions are the same for samples run on both instruments.

4. Frequency

- The frequency and number of samples for correlation testing is at the discretion of the Laboratory Medical Director. Given the availability of samples and reagents, it is recommended to compare a minimum of six (6) samples of varying assay levels (low, normal, and high) every six (6) months.
- Several factors should be taken into consideration:
 - Impact of different results from different analytical systems on patient care
 - Possibility of detecting insignificant error such as that associated with sample handling versus not detecting significant error
 - Time involved in acquiring, transporting, testing, evaluating, and storing samples
 - Cost of reagents and other materials involved
 - Availability of samples
- Special reasons for performing correlation studies include the following:
 - Failure of periodic monitoring of comparison testing
 - Internal quality control failure
 - After major instrument maintenance
 - Clinician inquiry regarding the accuracy of results

5. Documentation

- All documentation are reviewed by the responsible Clinical Laboratory Scientist III and approved by the Laboratory Medical Director or designee.

6. Procedure

- Select appropriate samples, Ensure that samples include one sample with a low abnormal assay value, one with a normal valud, and one with a high abnormal value.
- Run the samples on the first instrument in duplicate at minimum.
- Run the samples on the second instrument, also in duplicate, as soon as possible, ideally within two hours.
- Calculate the mean for each sample on both instruments.
- Calculate the difference between the mean of the first and second instruments.
- Calculate percent difference by dividing the difference from the grand mean.

Step-by-Step Example

Table 1:

Glucose	
Instrument #1	Instrument #2

Sample	Replicate 1	Replicate 2	Mean	Replicate 1	Replicate 2	Mean
Sample 1	92	93	92.5	91	87	89
Sample 2	58	59	58.5	58	57	57.5
Sample 3	136	137	136.5	130	127	128.7
Sample 4	302	303	302.5	278	275	276.5
Sample 5	215	214	214.5	209	205	207

Table 2:

Glucose						
	Instrument #1			Instrument #2		
	Replicate 1	Replicate 2	Mean	Replicate 1	Replicate 2	Mean
Sample 1	92	93	92.5	91	87	89

Calculate the Grand Mean: $(\text{Mean from Instrument \#1}) + (\text{Mean from Instrument \#2})/2$
 $(92.5 + 89)/2 = 90.75$

Table 3

Glucose						
	Instrument #1			Instrument #2		
	Replicate 1	Replicate 2	Mean	Replicate 1	Replicate 2	Mean
Sample 1	92	93	92.5	91	87	89

Difference (Δ) = (Instrument #1 Mean) - (Instrument #2 Mean) = $92.5 - 89 = 3.5$

Calculate the percent difference by dividing the Difference (Δ) by the Grand Mean from Table 2: $3.5/90.75 \times 100 = 3.85\%$

Evaluating Results

- Obtain the cumulative CV of your quality control level that is closest to the grand mean from step #5 in the procedure above.
 - This can usually be obtained from the instrumentation on which you run the control, or from your Laboratory Information System (LIS). Contact SMILE if you need more information on how to obtain your cumulative CV.
- Divide the percent difference from step #7 above by your cumulative CV to obtain your correlation ratio.

$\frac{\% \text{ Difference (3.85\%)}}{\text{Cumulative CV (2.5\%)}} = 1.54$

This ratio can be calculated for each instrument pair and measures the percent difference in multiples of your cumulative CV. The cumulative CV is the percentage equivalent to 1SD of your

quality control system.

Dividing the % Difference by the cumulative CV provides a ratio similar to a standard deviation index (SDI) which is the difference of a mean of values from one of those values, divided by 1 SD ((individual value – mean of values)/ 1SD) .

- Determine the tolerance limit for your correlation ratio.
 - A tolerance limit of ≤ 3 when you begin monitoring correlation ratio. If dissimilar methods are compared, this limit may have to be increased.
 - Using ≤ 3 as a tolerance limit for the correlation ratio is equivalent to using $\leq 3SD$ in your quality control evaluation. In other words, if the correlation ratio is equal to 3, the results from your instruments are more than 3SD apart from each other.

Table IV below shows an example of how to capture your correlation results using the acceptable tolerance limit of ≤ 3 .

Table IV

Analyte	Instr. 1 Mean	Instr. 2 Mean	Grand Mean	Difference (Δ)	%Diff (% Δ)	Cumulative CV	%Diff/CV ratio	Acceptable % Diff/CV Ratio	Pass/Fail
Glucose	92.5	89	90.75	3.5	3.9	2.5	1.5	≤ 3	Pass
Glucose	58.5	57.5	58	1	1.7	2.5	0.7	≤ 3	Pass
Glucose	136.5	128.7	132.6	7.8	5.9	2.5	2.4	≤ 3	Pass
Glucose	302.5	276.5	289.5	26	9.0	2.2	3.6	≤ 3	Fail
Glucose	214.5	207	210.75	7.5	3.6	2.2	1.4	≤ 3	Pass

Developing Acceptability Criteria

Criteria for acceptability is based on the capability of the instrument reflected in internal imprecision data since it measures the accuracy of the results.

Correlation coefficient should not be used as a method to evaluate the acceptability of the correlation study. It is a means to look for a relationship, not agreement between pairs. Two methods may have a perfect correlation throughout the measuring range but may not agree in value.

Troubleshooting

A variety of problems with instruments may affect results when performing a correlation study. In general, any type of issue that would cause a malfunction in the instrument and reflect in bias, shifts, or trends in the quality control could cause a discrepancy when comparing to another instrument.

When comparing instruments it is assumed to be in good working order as evidenced by good quality control data. It is importance to consider the differences between the instruments which might cause discrepant results. Review every function and parameters of the instruments being compared and note

any differences. Once the difference(s) are reconciled, re-run the correlation study to see if the discrepancy is resolved.

Such differences might be:

- Different methodologies
- Difference in calibration
- Difference in imprecision
- Difference in reagent lot or shipment (storage)
- Difference in lot of calibrators or assignement of values
- Difference in age of calibrators (date opened)
- Difference in reagent life on instrument
- Difference in instrument parameters (dilution ratios, incubation times, etc.)

REFERENCE:

All Common Laboratory Accreditation Checklist, Current Edition.

COPY

All Revision Dates

12/5/2022

Approval Signatures

Step Description	Approver	Date
Hospital Administration	Jason Arimura: Associate Hospital Administrator- AncillaryServices	12/5/2022
Laboratory Services Department	Brad Adler, MD: Medical Director, Laboratory Services	12/5/2022
Laboratory Services Department	Erlinda Roxas: Director Laboratory Services	12/5/2022



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Next Review 12/29/2025

Owner Sul Jung:
Associate
Director of
Pharmacy
Services
Policy Area Administrative -
Operating
Policies

PH.93 Pyxis Reports

POLICY:

The following describes the type and purpose of various routinely generated Pyxis reports.

PROCEDURE:

- A. Pharmacy shall review, sign and file all appropriate reports generated from the Healthsight Viewer.
- B. Pharmacy staff shall review discrepancy reports in a timely manner.
- C. Discarded reports shall be shredded to comply with the Health Insurance Portability and Accountability Act (HIPAA).
- D. Nursing staff may run various reports at the Medstation.
- E. The Clinical Nurse Manager or designee may request special reports generated by the Pharmacy Department.
- F. List of reports

- 1. Open Discrepancies

This report is to be used to ensure that all discrepancies are resolved in a timely manner. This report pertains to controlled substances and is generated daily by the Pharmacy Department.

- 2. Discrepancy Report

This report is used by the unit charge nurse to verify with the following shift unit charge nurse that there are no unresolved discrepancies. This report should be generated at the end of each shift and handed to the oncoming unit charge nurse at

shift change.

3. Refill pick and Delivery Report

This report is used to identify which medications need to be restocked in the Pyxis Medstations. It shall be printed daily for all medications stocked in the Pyxis Medstations. Pharmacy technicians shall use this report when refilling the Pyxis Medstations.

4. Ordered Medications Not Loaded

This report is generated manually in the pharmacy each time a medication is entered into the electronic health record (EHR) and is eligible for being stocked in the Pyxis Medstations, but is currently not stocked there. The Pharmacy Department shall use the report to identify which medications could be added to the Pyxis Medstations.

5. Stock Out Report

This report is used to identify when medications that are normally stocked in the Pyxis Medstations are zero. This report is generated automatically throughout the day whenever a stock supply gets to zero. Pharmacy technicians shall use this report to restock medications. The report should be filled in the Pharmacy with the daily orders.

6. Profile Override

This report is used to verify that all medications that were obtained were obtained from the Pyxis Medstations during the day via "override" have an order entered into the EHR. This report is generated and used by nursing staff. It should be generated just prior to the end of a shift. Pharmacy staff may also generate this report as a means of identifying orders that have been overridden throughout the day.

7. Non-access Report

This report will be generated by the Pharmacy Department to identify which medications are not being used frequently. A decision will be made to remove such medications.

All Revision Dates

12/30/2022, 3/1/2015, 6/1/2006

Approval Signatures

Step Description

Approver

Date

Hospital Administration

Jason Arimura: Associate
Hospital Administrator-
AncillaryServices

12/30/2022

Pharmacy Services

Sul Jung: Associate Director of
Pharmacy Services

12/30/2022

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Medical Executive Committee Document Approval Report

January 2023

Document Approval

Policies & Procedures/Documents

The following were reviewed and recommended for approval by the appropriate Departments, Committees, and the Medical Executive Committee

a. Policies & Procedures / Clinical Practice Guidelines / Forms / Orders

1.	100.265 Epidural Analgesia	page 1-8
2.	100.265 Penicillin VK Oral Desensitization Protocol	page 9-10
3.	108.036 ED and Inpatient STEMI (revised)	page 11-15
4.	CC.08 Critical Care Unit Alternate Patient Placement	page 16-17
5.	CC.09 Critical Care Unit Admission Criteria and Scope of Care	page 18-20
6.	DM.002 Pediatric Inpatient Diabetes and Hyperglycemic Management	page 21-24
7.	DM.004 Adult IV Insulin Infusion Policy	page 25-26
8.	DM.006 Inpatient Use of Patient's Own Insulin Pump	page 27-31
9.	IS.26 Pharmacologic Stress Test	page 32-39
10.	IS.27 Dobutamine Stress Test	page 40-44
11.	R.13 Assisted Cough (Quad Cough)	page 45-48
12.	R.92 Sputum Inductions	page 49-52
13.	R.96 Inhaled Epoprostenol (Flolan)	page 53-58
14.	OB.65 Admission and Ongoing Care of a Well Newborn	page 59-65
15.	MCH.02 Newborn Screening of Infants	page 66-70
16.	MCH.11 Transfer Criteria of Stable Neonates	page 71-73
17.	MCH.15 Thermoregulation of the Neonate	page 74-77
18.	MCH.24 Management of Early Onset Sepsis (EOS) in the Newborn	page 78-81
19.	MCH.27 Newborn Admission Medications	page 82-84
20.	N.37 Monitoring Neonates in the NICU	page 85-89
21.	N.46 Neonatal Preoperative and Postoperative Surgical Care	page 90-91
22.	N.62 Neonatal Injection Administration	page 92-94
23.	P.09 Pediatrics Discharge Planning	page 95-100
24.	P.15 Psychosocial Needs of the Pediatric Patient	page 101-104
25.	P.24 Transportation of PICU Patients within the Hospital	page 105-107
26.	R.NP.11 Respiratory Plan of Care in the NICU	page 108-109
27.	S.42 Scheduling of Emergent and Urgent Surgical Cases	page 110-112
28.	S.71 Visitors in the PACU	page 113-114
29.	ER.03 Against Medical Advice (AMA)	page 115-116
30.	ER.06 Discharge from the Emergency Department	page 117-118
31.	ER.13 Helicopter Safety	page 119-120
32.	ER.14 Admitted Patients/Holding Patients in the Emergency Department	page 121-122
33.	ER.15 Health Care Agency (HCA) Employee Industrial Injuries	page 123-125
34.	ER.19 Organization of the Emergency Department	page 126-127
35.	ER.21 Guidelines for Ventura County Medical Center as a Base Hospital	page 128-129
36.	ER.30 Mandatory Reporting in the Emergency Department	page 130-131
37.	ER.33 Mobile Intensive Care Nurse (MICN) Staffing in the Emergency Department	page 132-133
38.	ER.34 Narcotics Administration in the Emergency Department	page 134-135
39.	ER.35 Obstetrical (OB) Admissions from the Emergency Department	page 136-137
40.	ER.36 Paramedic Base Hospital Designation	page 138-139
41.	ER.37 Patient Care Philosophy and Goals of the Emergency Department	page 140-141

42.	ER.39 Personal and Professional Relationships of Law Enforcement in the Emergency Department	page 142
43.	ER.40 Rabies, Tetanus and Diphtheria Prophylaxis	page 143-145
44.	ER.43 Sudden Infant Death Syndrome (SIDS)	page 146-147
45.	ER.46 Treatment of Jail Inmates/Persons on a Legal Hold	page 148-149
46.	ER.48 Volatile Situations in the Emergency Department	page 150-151
47.	ER.49 Documentation Standards in the Emergency Department	page 152-154
48.	100.009 Sterilization Regulations, Required Consent and Waiting Periods	page 155-159
49.	100.013 Do Not Resuscitate (DNR) Orders	page 160-162
50.	100.014 Patient Transfer to Ventura County Medical Center and Santa Paula Hospital	page 163-164
51.	100.020 Occupational Exposure to Tuberculosis	page 165-166
52.	100.022 Withdrawal of Patient Life Support	page 167-171
53.	100.026 Declaration of Brain Death and Apnea Testing	page 172-175
54.	100.033 Blood Alcohol Test Procedures	page 176-178
55.	100.036 Disposition of Foreign Bodies Removed for Legal Evidence	page 179-180
56.	100.042 Patient Leaves of Absence	page 181-182
57.	100.048 Referral of Potential Organ and Tissue Donors	page 183-192
58.	100.049 Advance Healthcare Directives	page 193-196
59.	100.066 Ambulatory Care Clinic Referral Procedure	page 197-198
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61.	100.077 Newborn Abandonment	page 203-204
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63.	100.089 Point of Care Testing, Waived Tests and Provider-Performed Microscopy (PPM)	page 209-213
64.	100.100 Palliative Care Program	page 214-217
65.	100.101 Electronic Health Record (EHR) Planned Downtime	page 218-225
66.	100.102 Electronic Health Record (EHR) Unplanned Downtime	page 226-231
67.	100.113 Crash Cart Checks and Restocking Attachment A (Updated)	page 232-233
68.	100.220 Electronic Order Management	page 234-236
69.	100.223 Discharge Against Medical Advice (AMA)	page 237-238
70.	100.224 Emergency Medical Treatment and Labor Act (EMTALA)	page 239-242
71.	100.236 Patient Safety Plan	page 243-248
72.	100.240 Suicide Risk Assessment	page 249-255
73.	100.257 Malignant Hyperthermia Cart Restocking Process Attachment A (Updated)	page 256
74.	100.258 Blood Culture Specimen Collection	page 257-261
75.	100.261 Safety Enclosure Beds (Posey Beds)	page 262-266
76.	106.015 Bloodborne Pathogen Post-Exposure Evaluation and Management	page 267-268
77.	106.018 Infection Control Standard Precautions	page 269-272
78.	106.029 Aerosol Transmissible Disease Exposure Control Plan	page 273-276
79.	106.057 Infection Control Patient Education	page 277-278
80.	106.058 Infectious Disease Surge Planning Guidelines	page 279-285
81.	106.060 Guidelines for the Management of Prion Disease	page 286-292
82.	106.067 Infection Outbreak Investigation Response Guideline	page 293-294
83.	107.027 Quality Assessment and Performance Improvement Plan	page 295-304
84.	108.006 Nurse Staffing and Scheduling	page 305-312
85.	108.020 Lippincott Procedures	page 313-314
86.	108.021 Pressure Injury Prevention and Wound Management	page 315-319
87.	108.023 Blood Warmer Usage and Safety	page 320-323
88.	108.032 Blood Glucose Testing with the Nova StatStrip® Glucose Meter	page 324-337
89.	108.045 Urinary Catheter Insertion/Maintenance/De-escalation	page 338-341
90.	HIM.08 Healthcare Agency Use of Scribes	page 342-343
91.	MS.102.019 Monitoring Medicare Opt-Out Verifications	page 344-345
92.	PH.115 Medication Boxes and Kits Attachment A-C (Updated)	page 346-351

93.	PH.27.00 Hazardous Drug Overview Attachment A and B (Updated)	page 352-367
94.	PH.27.01 Hazardous Drug Training, and Safety Program Attachment A (New)	page 368-371
95.	PH.27.02 Hazardous Drug Storage, Handling, Labeling and Transport	page 372-375
96.	PH.27.03 Hazardous Drug Garbing, and Compounding	page 376-379
97.	PH.27.04 Decontamination, Spill and Waste Management	page 380-382
98.	PH.35 Drug Formulary	page 383-386
99.	PH.72 Staff Authorized to Administer Medications	page 387-388
100.	PH.92 Automated Dispensing Cabinet (ADC) Usage and Documentation	page 389-396
101.	PH.98 Automated Dispensing Cabinet Controlled Substance Discrepancy Resolution	page 397-398
102.	AC.21 Amniotic Fluid Ultrasound Scanning and Fetal Monitoring	page 399-400
103.	OB.36 Fetal Fibronectin Specimen Collection for Enzyme Immunoassay	page 401-404
104.	OB.50 Management of Patient in Second Stage of Labor	page 405-407
105.	OB.68 Newborn Pulse Oximetry Screening	page 408-409
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107.	OB.73 Water Immersion During Labor	page 414-416
108.	DM.003 Pediatric Hypoglycemia	page 417-420
b.	Medical Staff Forms	
1.	Transgender/Gender Affirming Surgery Privileges (Also approved by the Dept. of Surgery)	page 421-424



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 1/1/2004
Last Approved: N/A
Last Revised: 11/19/2022
Next Review: 3 years after approval
Owner: Kristina Swaim: Clinical Nurse
Manager, OB
Policy Area: Administrative - Patient Care
References:

100.265 Epidural Analgesia

POLICY:

Ventura County Medical Center (VCMC) and Santa Paula Hospital (SPH) provides safe and effective administration and management of epidural analgesia. The scope of this policy and procedure is to outline the patient care and management of inpatients who receive epidural analgesia for labor pain and surgical procedures.

OVERVIEW:

- A. The Department of Anesthesia is the primary service responsible for assessment and management of all epidural drug administration
- B. An epidural catheter may be inserted/initiated in the Operating Room (OR), Post Anesthesia Care Unit (PACU), Interventional Radiology (IR), Intensive Care Unit (ICU), and Labor and Delivery.
- C. For Obstetrics (OB) patients, epidural anesthesia should not be administered until a baseline maternal-fetal assessment, physical exam, and progress of labor are evaluated by the Licensed Independent Practitioner (LIP) on duty for OB.
- D. For guidance on the timing between anticoagulant and epidural insertion/removal, see CPG.46 Anticoagulation Management Surrounding Epidural-Intrathecal-Lumbar Puncture
- E. Nursing shall provide nursing care consistent with the guidelines and procedures outlined in this policy. See Lippincott's for detailed process.
 - 1. Assessment, evaluation, and documentation of the patient's baseline vital signs which include patient's level of pain, level of consciousness, motor/sensory function, effectiveness of epidural analgesia, and any untoward effects related to epidural analgesia. See policy 100.076 Pain Assessment, Management, and Documentation.
 - 2. Maintenance of the epidural catheter and tubing used for continuous infusion.
 - 3. Assessment of the epidural catheter site and dressing every shift.
 - 4. Contacting Anesthesia Service for assessment and evaluation of the patient as needed
- F. Controlled substance waste must be documented as per policy PH.88 Controlled Substances

PROCEDURE:

Equipment

- A. Epidural Pump Set-Up
 - 1. ICU Medical Sapphire Patient Controlled Epidural Analgesia (PCEA) Pump
 - 2. Dedicated lock box with yellow label "Epidural Only"
 - 3. Dedicated yellow, portless epidural tubing
- B. Epidural kit
- C. Monitoring equipment for continuous vital signs and SaO₂ monitoring
- D. Emergency supplies
 - 1. Crash Cart
 - 2. Epidural Cart (OB only)
 - 3. Oxygen and suction set up
- E. Epidural medication bag with yellow label "Epidural Only"

Roles and Responsibilities

Licensed Independent Practitioner (LIP)

- A. The LIP shall consult with the patient, explain the procedure prior to initiation, and document the patient's approval.
 - 1. For OB patients the LIP shall also determine the woman's knowledge, desires and concerns about methods of labor pain management. Education about analgesia and anesthesia techniques and effects, acknowledging and respecting individual and socio-cultural preferences
 - 2. For OB patients, the LIP shall must assess patients for appropriateness in using a PCEA. The patient must be able to comprehend instructions, be willing to self-dose, and be assessed according to patient specific monitoring and assessment criteria.
- B. The LIP shall make certain there are no contraindications to the procedure including platelet count, previous spinal surgery, etc.
- C. The LIP shall communicate with the nurse regarding the need for the epidural.
- D. The LIP shall initiate epidural orders using the appropriate, approved Epidural PowerPlan
- E. The following orders may be entered by the LIP, under Anesthesia supervision:
 - 1. Changes to the standard starting continuous infusion rate
 - 2. Changes to the PCEA dosing parameters
 - 3. Single re-bolus injection from a vial.
- F. Upon cessation of therapy, the LIP must discontinue all orders from the EHR.

Anesthesiologist

- A. Anesthesia will monitor and maintain a sterile, patent epidural catheter in a tamper-free environment, to administer continuous analgesia for the relief of labor or surgical pain, and to decrease the incidence of

CNS depression and pulmonary complications.

- B. Anesthesia will place the epidural catheter, administer the initial injection, connect the tubing to the epidural catheter connector, and initiate the continuous infusion.
 - 1. Additional re-boluses from the vial may be administered by the LIP.
- C. Anesthesia will evaluate the catheter placement including re-evaluation of potential catheter mis-positioning with bolus test doses of local anesthetic.
- D. Anesthesia will assess the duration of time the catheter will remain in place and the duration of the epidural therapy.

Nurse (RN)

- A. After informed consent is given by the LIP, Nursing will obtain patient signature on the consent forms, assess and reinforce patient knowledge about procedure, and answer any questions or appropriately refer them to the Anesthesiologist.
- B. Set Up
 - 1. The RN shall ensure the patient has IV access and administer IV fluid preload as ordered.
 - 2. The RN shall gather the necessary equipment and supplies prior to anesthesiologist's arrival.
 - 3. The RN shall place patient on continuous vital sign, SpO2 and if indicated, a fetal monitor.
 - a. Continuous Fetal Heart Rate (FHR) monitoring should be maintained to the best of RN's ability during catheter placement. If there is concern regarding the status of the fetus, consideration should be given to placement of fetal scalp electrode for monitoring. If the FHR has not been assessed for >15 minutes, the provider should pause to allow the RN to assess the FHR and then proceed with catheter placement.
 - 4. The RN shall assist the Anesthesiologist to clear visitors including support person from room.
 - 5. The RN shall assist the patient and Anesthesiologist with positioning patient for catheter insertion.
- C. Administration
 - 1. The initial double check is completed with anesthesia as Anesthesiologists are initiating the initial infusion or setting as ordered.
 - 2. Once the epidural infusion has been established by Anesthesia, the RN has the following pump privileges:
 - a. Stop and/or continue the epidural infusion
 - b. Prime the pump, hang a new bag, and continue the epidural infusion at the previous ordered setting.
 - c. Ordered rate change -- not to exceed 4 mL/hr per rate change.
 - 3. Nursing shall perform an Independent Double Check with required witness cosign in the electronic health record (EHR) for epidural medications following rate and bag changes. See policy [PH.70 High Alert Medications](#).
- D. PCEA Education (OB patients only)
 - 1. The RN shall educate the patient on the proper use of the patient controlled bolus handle and the safety measures with the use of the PCEA including hourly limits and lockout time.
 - 2. The RN shall instruct the patient and family members that "PCEA by proxy" is not allowed.

3. The RN should encourage the patient to use the bolus handle for breakthrough pain
4. The RN should inform the patient it usually takes 10-15 minutes before the full effect of the demand dose is reached.
5. The RN shall document the education to the patient and family in the EHR.
6. If the patient controlled boluses do not bring adequate pain relief, the anesthesia service should be notified for evaluation and troubleshooting.

E. Monitoring and Documentation

1. ~~The RN shall monitor and document vital signs and assess pain, respiratory rate (RR), pain score, level of sensation, and catheter site at the ordered frequency.~~
 - a. ~~Test dose of local Anesthetic: Blood pressure, heart rate, and SpO2 should be checked before and after~~
 - b. ~~Following initiation and after each provider bolus: Blood pressure should be checked every 5 minutes throughout the administration of anesthetic dose and for 15 minutes afterwards, then every 15 minutes x 2, then every 30 minutes until the epidural is discontinued~~
 - c. ~~Respiratory rate, ETCO2, SpO2 should be checked at the following frequency~~
 - i. ~~Every 1 hours x 12 hours, then~~
 - ii. ~~Every 2 hours x 12 hours, then~~
 - iii. ~~Every 4 hours until the epidural is discontinued~~

Nursing should follow the following monitoring guidelines:

Prior to Epidural Placement		
Unit	Monitoring Parameter	Frequency
OB	Vital signs, SP02	Baseline or as ordered
	Fetal monitoring	Continuous or as ordered
ICU/DOU	Vital signs, pain, respiratory rate (RR)	Baseline
	Level of sensation (Dermatome)	Baseline
	Continuous ETCO2 if ordered	As ordered
Immediately BEFORE/AFTER Epidural Placement by Anesthesia		
Unit	Monitoring Parameter	Frequency
OB	BP, HR, Sp02	Test dose (before and after)
		Insertion: every 15 minutes x 1 hour
ICU/DOU	BP, HR, Sp02	Test dose (before and after)
		Insertion: every 15 minutes x 1 hour
	Pain, sedation, RR, level of sensation (Dermatome)	Test dose (before and after)
	Continuous ETCO2 if ordered	Insertion: every 15 minutes x 1 hour
		As ordered

Following Initiation and after each LIP bolus		
Unit	Monitoring Parameter	Frequency
OB	BP	Every (Q) 5 minutes throughout the administration of anesthetic dose, then every 15 minutes x 2, then every 60 minutes until epidural discontinued unless otherwise indicated
	Fetal Monitoring	Continuous per policy OB.45 OB management of fetal heart rate tracing
	RR, SP02	Q1h until epidural is discontinued.
	Level of sensation (Dermatome)	Q1-2 hours, as ordered
	Pain	Q1 hour
	PCEA – total amount received	Q shift
	Line status and dressing every shift	Q shift and PRN and when assuming care
ICU/DOU	BP	Q1 hour x 4 hours, then every 2 hours while on the epidural
	RR, ETCO2, SP02	Q1 hour x 12 hours, then Q2 hours x 12 hours, then Q4h until epidural is discontinued.
	Level of sensation (Dermatome)	Q1-2 hours, as ordered
	Pain	Q1 hour
	PCEA – total amount received	Q shift
	Line status and dressing every shift	Q shift and PRN and when assuming care
	After discontinuation of Epidural Catheter by Approved Clinician	
OB and ICU/DOU	Level of sensation (Dermatome)	Every 4 hrs X 24 hours
	Post-removal site	Every 4 hours x 24 hours

2. Documentation in the Electronic health record
 - a. Vital signs
 - b. Level of sensation (every 1-2 hours as ordered)
 - c. Pain scale assessment (every hour and PRN)
 - d. Any interventions associated with assessments
 - e. Rate and Bag changes with independent double check
 - f. Total amount received from PCEA each shift
 - g. Condition of dressing
 - h. Notation of discontinuation of epidural catheter, date, time, by whom, condition of catheter
 - i. Wasted medication in Pyxis requires two nurse visual verification
 - j. Document epidural medication in EHR
3. For OB patients, see Maternal and Fetal Monitoring and Management for additional information.

F. Dressing Change

1. There is no need for regular dressing changes.
2. Secure catheter with tape or plastic dressing the entire length, to one side of the spine and secure connector to patient's gown and shoulder or neck.
3. If dressing is compromised (e.g., pad is gone or wet), call LIP.

G. Discontinuing the Catheter

1. Epidural catheter may be removed or discontinued by a LIP or OB RN who has met competency. The epidural catheter should be removed prior to transfer to another unit, unless there is a LIP's order to state otherwise.
2. If patient has been receiving anticoagulant therapy of any type while the epidural has been in place will require consultation with the anesthesiologist before removing (see CPG.46 Anticoagulation Management Surrounding Epidural-Intrathecal-Lumbar Puncture).
3. Removal of the epidural catheter will take place when the patient is stable, comfortable, and the infusion is no longer required. For OB patients, epidural catheters should be discontinued after delivery unless otherwise ordered.

4. Explain procedure to patient.
5. Position patient on their side, with their back rounded.
6. Remove tape, pulling in a downward motion.
7. If any resistance other than gentle pressure, stop and notify physician.
8. Assess skin site for redness, edema or discharge,
9. Cover site with a band-aid to the epidural site if needed.

~~Epidural catheter may be removed or discontinued by RN who has met competency. The epidural catheter should be removed prior to transfer to another unit, unless there is a LIP's order to state otherwise.~~

~~If patient has been receiving anticoagulant therapy of any type while the epidural has been in place will require consultation with the anesthesiologist before removing.~~

10. Inspect catheter tip for intactness once removed, document in EHR that catheter tip is intact. If the catheter tip is not intact notify the anesthesia team ***immediately***.

Maternal and Fetal Monitoring and Management

A. Maternal and Fetal Maintenance

1. Responses to initial catheter dosing or during the perianesthesia period may include hypotension, alterations in fetal heart rate (FHR), signs of Intravenous (IV) injection of local anesthetic and pruritus. Nursing assessment and interventions include but are not limited to:
2. Monitoring maternal vital signs, SpO2, and FHR patterns as directed by LIP based on consideration of factors such as the type of anesthesia, route and dose of medication, the maternal-fetal response to medication, maternal-fetal condition and the stage of labor.
3. Facilitate lateral or upright maternal position with uterine displacement to minimize hypotension.
4. Patients will receive continuous fetal monitoring for at least one hour following initiation of epidural anesthesia and ongoing fetal monitoring should be performed in accordance to policy OB.45 Ob Management of Fetal Heart Rate Tracing

5. Managing hypotension or non-reassuring FHR patterns, which may include notifying the anesthesia or OB care provider or both, repositioning the patient, administering IV fluid bolus, oxygen or medications as needed and ordered.
6. Monitoring for signs of IV injection of local anesthetic, which may include FHR alterations, hypertension, dizziness, tinnitus, metallic taste in mouth, maternal dysrhythmia and loss of consciousness.
7. Notify anesthesiologist immediately if patient complains of numbness in upper extremities or shows difficulty in breathing. If this occurs, discontinue the infusion by turning off the pump.
8. Managing IV injection of local anesthetic, including initiation of emergency procedures if necessary and notifying the anesthesia or OB care provider or both.
9. Monitoring for pruritus that may occur initially or persist after medication administration; administering medication as ordered for severe or unresolved itching.

B. Pain and Motor Blockade Assessment

1. Evaluate maternal pain and comfort levels using pain assessment tools.
2. The dermatome level (level of sensation) should be monitored every hour by using ice or an alcohol swab to stroke the skin comparing areas of normal sensation with areas of block. Start on one thigh and work upward to determine upper boundary and repeat on the other side. (Refer to Attachment A for dermatome levels). If dermatome level is higher than T4, stop infusion and notify anesthesiologist. The goal is to maintain patients comfort with a dermatome level no more than T4.
3. NEVER administer narcotics, sedatives or anticoagulants without first discussing with and getting an order from the Anesthesiologist.
4. Urinary retention should be anticipated. Insert Foley Catheter

C. Assessment and Management of Maternal Side Effects

1. Monitor for nausea and vomiting; administer medication as ordered and intervene to prevent aspiration if vomiting occurs.
2. Monitor for elevations in maternal temperature and differentiate between benign fever related to anesthesia vs. infection by assessing for fetal tachycardia, uterine tenderness, foul-smelling amniotic fluid or vaginal discharge, and laboratory results.
3. Monitor of signs of postdural puncture headache; if present, avoid the upright position, provide support, administer medications as ordered and prepare for blood patch procedure if ordered.

D. Assessment and Management of Neonatal Side Effects

1. Communicate information about medications used for regional analgesia/anesthesia to neonatal care providers.
2. Monitor the neonate for neurobehavioral changes or decreased respiratory rate.
3. Administer narcotic antagonist as ordered if indicated.

REFERENCES:

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11/19/2022, 10/11/2022, 3/21/2019, 3/1/2016, 1/1/2015, 6/1/2014, 11/1/2013, 7/1/2010, 3/1/2009, 6/1/2006, 8/1/2004

Attachments

Attachment A - Dermatomes Chart

Approval Signatures

Step Description	Approver	Date
Medical Staff Committees: OB & Surgery	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/14/2022
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/14/2022
Policy Owner	Kristina Swaim: Clinical Nurse Manager, OB	11/14/2022



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: N/A
Last Approved: N/A
Last Revised: N/A
Next Review: 3 years after approval
Owner: Erica Caffarini: Pharmacy
Clinical Coordinator
Policy Area: Pharmacy Services
References:

100.265 Penicillin VK Oral Desensitization Protocol

Purpose

There is a high prevalence of reported penicillin allergy. Penicillin desensitization may be required when there is no alternative antimicrobial therapy. This policy outlines the work flow for completing oral penicillin desensitization.

Procedure

- Consult Infectious Disease/Stewardship to discuss possible alternative therapies before initiating this protocol.
- If pregnant, consult Obstetric.
- Obtain informed consent.
- Admit patient to ICU.
- Patient MUST be full code for the desensitization procedure and thru the next full dose is administered. If patient is DNR/DNI, the primary team should discuss with the patient or legal guardian whether they are willing to reverse the status to FULL CODE for the duration of the procedure.
- If patient is taking a beta blocker, HOLD beta blocker for 24 hours before protocol is administered.
- Locate hospital approved Anaphylaxis Kit and Crash Cart. Review policy and procedures prior to starting desensitization protocol if needed.
- Obtain IV access.
- Must administer the therapeutic penicillin dose within 24 hours of desensitization or else the desensitization procedure must be repeated.

Monitoring Requirements

- A. Monitor and document vital signs and oxygen saturation prior to the first dose, prior to each dose escalation, and every 5 minutes after each dose x 2 measurements.
- B. Assess breath sounds prior to first dose, prior to each dose escalation, and upon complaints of respiratory symptoms including dyspnea or chest tightness.
- C. Notify licensed independent provider (LIP) and hold subsequent dose if following occurs:
 1. Neurological: Change in activity level, anxiety, "light headedness", feeling "impending doom", loss of consciousness
 2. Oral: Pruritus of lips, tongue, and palate, oral "tingling", edema of lips and tongue, metallic taste in the mouth

3. Respiratory: Nasal congestion or sneezing, rhinorrhea, tightness in the throat, hoarseness, “barky” cough, difficulty swallowing, dyspnea, chest tightness, wheezing, stridor, drop in oxygen saturation, cyanosis, respiratory distress
 4. Cardiovascular: Tachycardia (increase > 15 beats/min), dysrhythmia, mild hypotension, bradycardia, profound hypotension, cardiac arrest
 5. GI: Abdominal cramps or pain (colic), nausea, vomiting, diarrhea, loss of bowel control
 6. Skin: Localized or generalized itching, flushing, hives, swelling (angioedema), morbilliform rash
- D. If anaphylactic reaction occurs call LIP immediately and follow [CPG.73 Acute management of Anaphylaxis](#).

Pharmacy Compounding Instruction

- Use Pharmacy Department Oral Compounding Recipe for Penicillin VK Oral Suspension – Desensitization Protocol
- Pharmacist must be present during compounding and verify/initial each step of dilution.

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1. Workowski K, Bachmann L, Chan P, et al. Sexually Transmitted Infections Treatment Guidelines, 2021 MMWR Recomm Rep 2021; 70(4):1-187.
2. Wendel G, Stark B, Jamison R, et al. Penicillin allergy and desensitization in serious infections during pregnancy. New Eng J Med 1985; 12(19):1229-1232.

All revision dates:

Attachments

Penicillin V ORAL Suspension Desensitization Protocol.pdf

Approval Signatures

Step Description	Approver	Date
Medicine Committee	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	9/13/2022
Nursing Administration	Sherri Block: Interim Chief Nursing Officer	9/13/2022
Policy Owner	Erica Caffarini: Pharmacy Clinical Coordinator	9/13/2022

Current Status: Pending

PolicyStat ID: 11940975



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 7/10/2019
Last Approved: N/A
Last Revised: 9/12/2022
Next Review: 3 years after approval
Owner: Sherri Block: Associate Chief
Nursing Executive, VCMC &
SPH
Policy Area: Administrative - Nursing
References:

108.036 ED and Inpatient STEMI

POLICY:

To identify, triage, and manage patients with evidence of ST-segment elevation myocardial infarction (STEMI). Early identification, triage, and management of STEMI patients require evidence-based processes that may require invasive PCI or conservative treatment to achieve best outcomes. Ventura County Medical Center (VCMC)/Santa Paula Hospital (SPH) is not equipped for PCI; therefore, patients must be transferred to a STEMI receiving center. The American Heart Association recommends a door-to-door transfer time of <30 minutes and a door-to-needle time of <90 minutes.

PROCEDURE:

Abbreviations:

- CBC- complete blood count
- CXR- chest x-ray
- ECG- electrocardiogram
- ED- emergency department
- IVD- Intravenous drip
- LBBB- left bundle branch block
- RRT- rapid response team
- PCI- percutaneous coronary intervention
- RV- right ventricle
- RN - Registered Nurse

STEMI Definition:

- **New ST-elevation at the J point in 2 contiguous leads reaching the following thresholds:**
 - ³ 1mm in two contiguous leads other than V2-V3, V4R, V7-V9
 - For V2-V3:
 - Men < 40 years of age: 2.5 mm
 - Men ³ ≥ 40 years of age: 2 mm
 - Women: ³ 1.5 mm
 - For V4R: 0.5 mm (1 mm in Men < 30 years of age)²
 - For V7-V9: 0.5 mm (1 mm in Men <40 years of age)⁵
 - New horizontal or downsloping ST-depression ≥ 0.5 mm in two contiguous leads and/or T inversion > 1 mm in two contiguous leads with prominent R wave or R/S ratio > 1

ED Patients Presenting with Angina:

1. STAT 12-lead ECG with review and interpretation by attending physician within 10 minutes.
2. ~~Attending physician activates CODE STEMI if one (1) or more of the following:~~
 - ~~◦ J point elevation in leads V2-V3 of ≥ 2 mm in men or ≥ 1.5 mm in women or ≥ 1 mm in any 2 other contiguous leads~~
 - ~~◦ Isolated ST depression ≥ 2 mm in leads V1-V3 with posterior ECG that shows ST elevation in these leads~~

Attending physician activates CODE STEMI if one (1) or more of the above STEMI criteria are met.
3. Referral for PCI to STEMI receiving center.
 - Call Fire Communications Center at 1-805-384-1500. State "CODE STEMI for STAT transport"
 - VCMC ED attending physician shall call the receiving center Emergency physician:
CMH: 1-805-948-0842 SJRMC: 1-805-988-2618
4. Apply continuous cardiac monitor with defibrillator capability.
5. Place hands-free pads on patient.
6. Administer antiplatelet (i.e. aspirin) if no contraindication.
7. Administer nitrate (i.e. nitroglycerin) if no contraindication.
 - Withhold if SBP < 90 mmHg or suspected RV infarction
8. Administer statin (i.e., atorvastatin) if no contraindication.
9. Consider oral beta blocker (i.e., metoprolol) if no contraindication:
 - ~~◦ Withhold if apical pulse is < 50 bpm~~

(below):⁶

 - Cardiogenic shock or low EF
 - Age > 70
 - HR < 50 or > 110
 - SBP < 120
 - PR > 0.24 s
 - AV Block
10. Consideration for anticoagulation therapy (i.e. Heparin) in consultation with cardiology if anticipated delay to PCI-capable hospital.
11. Consideration for thrombolysis (i.e., t-PA) in consultation with cardiology if anticipated delay.
12. Administer oxygen via nasal cannula if necessary to maintain SpO₂ $> 94\%$.
13. Start two (2) large-bore IVs.

NOTE: DIAGNOSTIC TESTS SHOULD NOT DELAY TRANSFER
14. Obtain serum sample for cardiac markers.
15. Order cardiac markers and other labs.
16. Obtain a portable CXR, if time permits.
17. Ongoing pain assessment and management with nitrates and other analgesics if necessary.

18. Obtain patient and physician signed consent and transfer forms.
19. ED technician or RN to ride with patient with copies of CXR, labs, ED chart and one (1) original ECG.
 - RN must accompany patient if requiring care outside of EMT-P scope of practice; including but not limited to:
 1. Nitroglycerine IVD > 50 mcg/min
 2. Thrombolytic administration ongoing
 3. Vasopressor IVD
 4. Sedative IVD
 5. Transvenous Pacemaker in place
 6. Arterial catheter in place
 - **NOTE:** Documentation must not delay priority patient care and transfer to receiving center. Documentation should be completed prior to transfer, but can be faxed after patient departure.
20. Notify nursing supervisor.
21. Patient transported within 30 minutes.
22. VCMC ED RN gives report to receiving center RN.

Inpatients with Suspected STEMI (evidenced by unexpected changes in diagnostic tests, laboratory markers and/or clinical presentation):

1. Activate RRT.
2. Unit charge nurse or other available staff STAT call to ICU attending physician.
3. STAT 12-lead ECG with review and interpretation by attending physician within 10 minutes.
4. Attending physician activates CODE STEMI if one (1) or more of the following:
 - J point elevation in leads V2-V3 of $\geq 2\text{mm}$ in men or $\geq 1.5\text{mm}$ in women or $\geq 1\text{mm}$ in any 2 other contiguous leads
 - New LBBB
 - Isolated ST depression $\geq 2\text{mm}$ in leads V1-V3 with posterior ECG that shows ST elevation in these leads
5. Consult cardiology/interventional cardiologist.
6. Consider transfer to ICU 3 for thrombolysis if anticipated delay to PCI-capable hospital **OR** referral for PCI to STEMI receiving center.
 - Call Fire Communications Center at 1-805-384-1500. State "CODE STEMI for STAT transport"
 - VCMC ICU attending physician shall call the receiving center physician
CMH: ~~1-805-948-0842~~ 1-805-948-8100 SJRMC: 1-805-988-2618
7. Apply continuous cardiac monitor with defibrillator capability.
8. Place hands-free pads on patient.
9. Administer antiplatelet (i.e., aspirin) if no contraindication.
10. Administer nitrate (i.e., nitroglycerin) if no contraindication.
 - Withhold if SBP < 90 mmHg or suspected RV infarction

11. Administer statin (i.e., atorvastatin) if no contraindication.
12. Consider beta blocker (i.e., metoprolol) if no contraindication.
 - Withhold if apical pulse is <50 bpm
13. Consideration for anticoagulation therapy (i.e., heparin) in consultation with cardiology if anticipated delay to PCI-capable hospital.
14. Consideration for thrombolysis (i.e., t-PA) in consultation with cardiology if anticipated delay to PCI-capable hospital.
15. Administer oxygen via nasal cannula if necessary to maintain SpO₂ > 94%.
16. Start two (2) large-bore IVs.

NOTE: DIAGNOSTIC TESTS SHOULD NOT DELAY TRANSFER
17. Obtain serum sample for cardiac markers and other labs as indicated.
18. Obtain a portable CXR, if time permits.
19. Ongoing pain assessment and management with nitrates and other analgesics, if necessary.
20. Obtain patient and physician signed consent and transfer forms.
21. RN to ride with the patient with copies of CXR, labs, ED chart and one (1) original ECG.
 - **NOTE:** Documentation must not delay priority patient care and transfer to receiving center. Documentation should be completed prior to transfer, but can be faxed after patient departure.
22. Notify nursing supervisor.
23. Patient transported within 30 minutes.
24. VCMC RN gives report to receiving center RN.

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- ~~ACLS Training Center. (2018). Acute coronary syndromes algorithm. Retrieved from <https://www.acls.net/acute-coronary-syndromes-algorithm.htm>~~
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 - ~~O'Gara, P. T., Kushner, F. G., Ascheim, D. D., Casey, D. E., Chung, M. K., Lemos, J. A., . . . Zhao, D. X. (2013). 2013 ACCF/AHA guideline for the management of ST-elevation myocardial infarction: executive summary. Journal of the American College of Cardiology, 61(4), 485-510. doi:10.1016/j.jacc.2012.11.018~~
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6. [Kushner FG, Hand M, Smith SC Jr, King SB 3rd, Anderson JL, Antman EM, Bailey SR, Bates ER, Blankenship JC, Casey DE Jr, Green LA, Hochman JS, Jacobs AK, Krumholz HM, Morrison DA, Ornato JP, Pearle DL, Peterson ED, Sloan MA, Whitlow PL, Williams DO. 2009 focused updates: ACC/AHA guidelines for the management of patients with ST-elevation myocardial infarction \(updating the 2004 guideline and 2007 focused update\) and ACC/AHA/SCAI guidelines on percutaneous coronary intervention \(updating the 2005 guideline and 2007 focused update\) a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. J Am Coll Cardiol. 2009 Dec 1;54\(23\):2205-41. doi: 10.1016/j.jacc.2009.10.015. Erratum in: J Am Coll Cardiol. 2009 Dec 15;54\(25\):2464. Erratum in: J Am Coll Cardiol. 2010 Feb 9;55\(6\):612. Dosage error in article text. PMID: 19942100.](#)

Attachments:

- Attachment A - STEMI Inpatient Algorithm
- Attachment B - STEMI ED Algorithm

All revision dates:

9/12/2022, 7/10/2019

Attachments

- 108.036 - Attachment A - STEMI Inpatient Algorithm.pdf
- 108.036 - Attachment B - STEMI ED Algorithm.pdf

Approval Signatures

Step Description	Approver	Date
Medical Executive and Oversight Committees	Tracy Chapman: VCMC - Med Staff	pending

Current Status: Pending

PolicyStat ID: 10249352



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 12/1/1982
Last Approved: N/A
Last Revised: 9/27/2018
Next Review: 3 years after approval
Owner: Joy Reed: Interim Clinical Nurse
Manager-ICU/DOU/Telemetry
Policy Area: Intensive Care Unit
References:

CC.08 Critical Care Unit Alternative Patient Placement

POLICY:

To provide safe, competent patient care for Critical Care Unit (CCU) patients during periods of high census. As approved by the Medical Executive Committee, in the event of the unavailability of a CCU bed for a critical patient meeting the criteria for admission, patients may be held in the Emergency Department or PACU. All efforts will be made to provide CCU staff to care for the patient. Staff caring for the patient will be a CCU, ED or PACU Registered Nurse possessing the appropriate competencies for the critical care specialty.

PROCEDURE :

- A. When all CCU beds are occupied:
 - 1. The CCU Resource RN will:
 - a. Call the on call physician for possible transfers.
 - b. Call the Director of CCU for possible transfers.
 - c. Notify the Clinical Nurse Manager and/or the Nursing Supervisor.
 - 2. The Nursing Supervisor will:
 - a. Inform the Chief Nurse Executive regarding possible ambulance diversion
 - b. Notify the ED to hold the patient.
 - c. Attempt to find a critical care RN to care for the boarding patients from:

Per Diem Pool
Off duty Nurses
Registry
In House Registry

All revision dates:

9/27/2018, 1/1/2017, 11/1/1995, 11/1/1989

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medicine Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	10/17/2022
Policy Owner	Joy Reed: Interim Clinical Nurse Manager-ICU/DOU/Telemetry	3/22/2022



VENTURA COUNTY
HEALTH CARE AGENCY

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Last Revised: 3/29/2018
Next Review: 3 years after approval
Owner: Joy Reed: Interim Clinical Nurse
Manager-ICU/DOU/Telemetry
Policy Area: Intensive Care Unit
References:

CC.09 Critical Care Unit Admission Criteria and Scope of Care

POLICY:

To outline the Critical Care Unit (CCU) criteria and process for patient admission as well as the CCU scope of care.

PROCEDURE:

- A. Patients admitted to the CCU meet specific criteria, including:
1. Acutely ill, life-threatening as determined by the Critical Care Team.
 2. Acutely ill in perioperative state, sometimes after being recovered in the Post Anesthesia Recovery Room. (The anesthesiologist determines recovery area based on the patient's condition, availability of equipment and nursing staff.)
 3. Massive GI bleeding.
 4. Obstetrical emergencies: eclampsia/bleeding disorders.
 5. Major traumas/multiple traumas.
 6. Head trauma/CVA.
 7. Acute respiratory distress/respiratory failure.
 8. Acute renal failure.
 9. Metabolic/endocrine emergencies.
 10. Shock: septic/cardiogenic/hypovolemic/anaphylaxis.
 11. Coma.
 12. Drug overdose.
 13. Cardiovascular disease: unstable angina/acute MI/CHF needing acute intervention, s/p vascular surgeries.
 14. Ventura County Medical Center (VCMC) only: acutely ill pediatric patients.
- B. All patients admitted or transferred will be accompanied by a physician or RN with written physician's orders or orders will be written within 30 minutes of arrival.

- C. Patients admitted to the CCU will have appropriate consultations by a qualified medical specialist. (See Physician Consultation.)
- D. Direct Admissions (*see Administrative policy 100.037, Hospital Admission Procedures*)
 - 1. Interfacility inpatient transfers must be cleared via protocol in the Pre-admitting Department at ext. 6024 prior to conversation between the physicians.
 - 2. The patient is to be evaluated immediately upon arrival by the Emergency Department (ED) physician with the patient remaining on the ambulance gurney.
 - 3. The resident physician assigned to the CCU will be notified. ED physician or RN will accompany the patient to the unit. If HO is not immediately available, the float resident will assume responsibility for the patient until the unit HO arrives.

CCU Scope of Care

- A. The CCU accepts any patient with a current or potentially life-threatening medical or surgical condition.
- B. The unit is jointly managed by the CCU Team and Nursing. The Family Care Residency department provides the unit with physician care 24 hours a day. VCMC Only: there are attending full-time intensivists and attending physicians.
- C. Nursing staff includes a Clinical Nurse Manager, Registered Nurses (RNs), nursing assistants and a medical office assistant (MOA). Patients are provided nursing care by an all-RN staff. The unit is staffed in nurse-to-patient ratios based on needs of the patient as well as Title 22.
- D. Therapies include vasoactive drug administration, dialysis and ventilator support. Monitoring provided includes central venous pressure, hemodynamic monitoring, arterial line, electrocardiogram and pulse oximetry. VCMC Only: intracranial pressure monitoring.
- E. Respiratory therapy support is continuously provided.
- F. It is the responsibility of the CCU physician director, or the CCU attending physician, to decide if a patient meets eligibility requirements for the CCU and, as necessary, which patients should be given priority.
 - 1. **Priority 1:** Critically ill, unstable patients in need of intensive treatment such as ventilator support and continuous vasoactive drug infusion.
 - a. Respiratory failure.
 - b. Endocrine emergencies (e.g. complicated diabetic ketoacidosis (DKA), hyperosmolar coma)
 - c. Uncertain or unstable hemodynamic status requiring invasive monitoring.
 - d. Acute neurologic events requiring therapeutic intervention
 - e. Hemodialysis (in an unstable patient).
 - f. Continuous arterial venous hemofiltration (in an unstable patient).
 - 2. **Priority 2:** Patients who, at the time of admission, are not critically ill but whose condition requires the technologic monitoring services of CCU. These patients would benefit from intensive monitoring (e.g., peripheral or pulmonary arterial lines) and are at risk for needing immediate intensive treatment which may include, but is not limited to:
 - a. Major vascular surgery in a patient who has arrhythmias, acute or subacute neurologic deficits, hemodynamic instability, respiratory failure or its potential.
 - b. Acute gastrointestinal bleeding for 24 hours if unstable.

- c. Drug overdose if unstable.
 - d. Acute neurologic events (including subarachnoid hemorrhage) requiring continuous observation.
 - e. DKA requiring blood glucose checks every hour or less.
3. **Priority 3** : Critically ill, unstable patients whose previous state of health, underlying disease, or acute illness - either alone or in combination - severely reduce the likelihood of recovery and benefit due to CCU treatment. Examples of such admissions may include, but are not limited to, patients with pericardial tamponade, airway obstruction, metastatic malignancy complicated by infection, or end-stage heart or lung disease complicated by a severe acute illness. Priority 3 patients receive intensive therapy to relieve acute complications, but therapeutic efforts might stop short of other measures such as intubation or cardiopulmonary resuscitation.

On occasion, at the discretion of the Director, patients may be admitted to the unit for procedures requiring a high degree of monitoring and/or care during the conduct of a procedure (e.g., cardioversion or recurring sedation). Such patients are discharged from the unit at the termination of the procedure.

All revision dates:

3/29/2018, 1/1/2017, 12/1/2009, 5/1/2006, 12/1/2004, 5/1/2004, 5/1/2001, 5/1/1998, 2/1/1996, 11/1/1995, 1/1/1992, 3/1/1991, 11/1/1990, 11/1/1989, 11/1/1988, 12/1/1986, 12/1/1984

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medicine Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	10/17/2022
Policy Owner	Joy Reed: Interim Clinical Nurse Manager-ICU/DOU/Telemetry	5/2/2022
Nursing Administration	Michelle Sayre: Chief Nursing Officer	6/25/2021



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 12/1/2014
 Last Approved: N/A
 Last Revised: 9/28/2022
 Next Review: 3 years after approval
 Owner: Hugo Ortiz: Diabetes Nurse
 Educator
 Policy Area: Diabetes Management
 References:

DM.002 Pediatric Inpatient Diabetes and Hyperglycemia Management

POLICY:

To state the importance of glucose management at Ventura County Medical Center and Santa Paula Hospital. Glycemic control results in lower rates of hospital complications. Glycemic targets can be reached safely and reliably through the use of clinical practice guidelines and policies.

PROCEDURE:

I. Definitions

- A. ~~Hyperglycemia~~ Severe hyperglycemia is defined as blood glucose (BG) ~~>180~~ >300 mg/dL.
- B. ~~Hypoglycemia~~ Hyperglycemia is defined as blood glucose ~~<70~~ >180 mg/dL.
- C. ~~Critical hypoglycemia~~ Hypoglycemia is defined as blood glucose ~~<40~~ <70 mg/dL.
- D. Critical hypoglycemia is defined as blood glucose ~~<40~~ <40 mg/dL.

II. Multidisciplinary Diabetes Management Team

- A. The Diabetes Management Team, led by the Director of Diabetes Management, includes physicians, nurses, registered dietitians (RD), certified diabetes educators, pharmacists, laboratory staff and case managers.
- B. This team shall monitor and manage patients with diabetes according to this policy when admitted to our hospitals.
- C. Audits of insulin use are conducted by the Diabetes Management Team.

III. Glycemic monitoring in the hospital

- A. Pediatric patients with known diabetes will have laboratory blood glucose testing upon admission.
- B. Pediatric patients with diabetes will have point-of-care (POC) blood glucose monitoring at least four (4) times a day with appropriate therapeutic intervention.
- C. The provider will order a HbA1c on admission, if one has not been performed in the preceding 2-3 months.

IV. Glycemic management in the non-critical care setting

- A. POC BG testing will be performed by nursing staff according to the following schedules:

1. Patients who are eating or receiving bolus enteral feeds: before meals and at bedtime or with each bolus.
2. Patients who are NPO, receiving continuous enteral feeds or TPN: every six (6) hours.

B. Coordination of insulin administration and meal delivery:

1. Nursing staff (Registered Nurses, Licensed Vocational Nurses, and Nursing Assistants) shall check BG prior to each meal.
2. Meal tray is delivered to the patient per ~~Dietary~~ the Food and Nutrition Services Department schedule.
3. Nursing staff assesses mealtime carbohydrate intake.
4. Nurse administers rapid-acting analog insulin to cover carbohydrates and to correct pre-meal hyperglycemia, per provider's orders.

V. Glycemic management in the critical care setting

- A. Critical care patients with hyperglycemia can be managed with subcutaneous insulin if hemodynamically stable, without need for pressor agents, and if they remain well-controlled.
- B. Critical care patients with diabetic ketoacidosis or persistent hyperglycemia shall be managed with continuous intravenous insulin infusion.

VI. Subcutaneous insulin use

- A. Providers shall use approved subcutaneous insulin electronic order-set in the Electronic Health Record (EHR).
- B. Basal-bolus insulin therapy is used for inpatient diabetes treatment, rather than exclusively using a "sliding scale" method.
- C. Scheduled subcutaneous insulin therapy consists of basal insulin given once or twice a day in combination with rapid-acting insulin administered before meals.
- D. Mealtime rapid-acting insulin bolus administration is based on observed or predicted carbohydrate intake.

VII. ~~IV insulin infusion~~

- A. ~~See policy DM.004~~
- B. ~~IV insulin software is approved for children age two (2) years and above.~~
IV insulin infusion to be managed by PICU Attending in consultation with Pediatric Endocrinologist.

VIII. Insulin pump use in the hospital: refer to policy ~~DM~~DM.006 Inpatient Use Of Patient's Own Insulin Pump.006.

IX. Prevention and management of hypoglycemia

- A. Provider reevaluates POC BGs daily and adjusts insulin regimen as needed to maintain BGs in the target range.
- B. Provider should consider modifying therapy when BG values fall below 90 mg/dL.
- C. Provider shall modify therapy when BG values fall below 70 mg/dL.
- D. Nurses will treat hypoglycemia per VCMC administration policy DM.003 or per IV Insulin software program.
- E. Blood glucose data will be routinely tracked by the Diabetes Management Team, with intervention

and communication with the provider if patient is hypoglycemic without a change in management.

- F. Critical hypoglycemia cases (BG<40 mg/dL) are reported to the Diabetes Committee and the Medication Safety Officer for review.

X. Medical Nutrition Therapy

- A. Medical nutrition therapy (MNT) is provided for patients with diabetes.
- B. ~~Registered Dietician~~RD assesses the appropriateness of MNT per dietary protocol.
- C. Provider may order a ~~modified carbohydrate~~Consistent Carbohydrate diet, providing consistent-carbohydrate (45-60 grams) meals for patients with Type 2 diabetes or a Peds 2 Carb Count diet for patients with Type 1 diabetes.

XI. Perioperative hyperglycemia management

- A. Blood glucose will be monitored and controlled at the time of surgery.
- B. For elective surgery, preoperative HbA1c will reflect good diabetes control.
- C. Nursing staff will check BG in all patients with diagnosis of diabetes and will notify anesthesiologist, attending surgeon and Diabetes Management Team if glucose is >180mg/dL.
- D. Patients with diagnosis of diabetes will have BG rechecked hourly in Preoperative Unit and in the OR and Post-Anesthesia Care Unit (PACU).
- E. Patients with hyperglycemia will receive appropriate corrective insulin therapy, typically SQ insulin for short, minor cases (< 1 hour) and IV insulin drip for longer, major cases (>1 hour).
- F. Anesthesia and surgery staff will consider canceling elective cases when the BG is excessively high. Elective surgical cases should be rescheduled or delayed until hyperglycemia responds to corrective doses of insulin. See administrative policy #100.202
- G. Post-operative management of hyperglycemia for NPO patients includes IV insulin drip, basal SQ insulin, or insulin pump for basal insulin coverage.
- H. Post-operative management of hyperglycemia for PO patients includes IV insulin drip with meal bolus, basal/bolus SQ insulin, or insulin pump for basal and bolus insulin coverage.

XII. Patient discharge

- A. Transition from hospital to home
 - 1. Patients previously well-controlled may resume pre-hospital diabetes medications, as long as no contraindications exist.
 - 2. Discharge medication plan for patients with suboptimal control prior to admission will be discussed with outpatient diabetes specialist, with consideration for an intensified diabetes medication regimen, barring history of treatment non-adherence.
 - 3. Initiation of insulin administration, when clinically appropriate, shall begin at least one day before discharge to allow assessment of efficacy and safety, and to provide patient/parent/guardian education.
- B. Diabetes self-management and nutrition education shall be provided to patients with diabetes and/or parents/guardians of patients with diabetes, particularly patients who are not optimally controlled.
- C. Providers, nurses, RDs and nurse educators shall provide clear instructions regarding diabetes management, including insulin, prior to discharge.

- D. Follow-up appointment is made prior to discharge. The inpatient pediatric hospitalist team will communicate the diabetes management plan with the outpatient provider at the time of discharge.

Guidelines:

- A. Hyperglycemia is defined as blood glucose over 180 mg/dL.
- B. Hypoglycemia is defined as blood glucose less than 70 mg/dL.
- C. Critical hypoglycemia is defined as blood glucose less than 40 mg/dL.
- D. ~~Modified~~Consistent Carbohydrate Diet consists of 45 – 60 grams of carbohydrates per meal.
- E. Perioperative hyperglycemia management
 - 1. For elective surgery, goal preoperative HbA1c is < 8%
 - 2. Blood glucose goal at time of surgery is < 180 mg/dL
 - 3. Patients with BG > 180 mg/dL will receive appropriate corrective insulin therapy

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American Diabetes Association. Standards of Medical Care in Diabetes 2018. *Diabetes Care* 41: Supplement 1, S144-s151, January 2018.

Assessment and management of hypoglycemia in children and adolescents with diabetes. ISPAD Clinical Practice Consensus Guidelines 2014 Compendium. *Pediatric Diabetes* 15: 180-192, 2014.

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Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	10/6/2022
Nursing Administration	Sherri Block: Interim Chief Nursing Officer	8/7/2022
Diabetes Management	Anthony Walls: MD	8/7/2022
Diabetes Management	Jessica Colborn: Nursing-Diabetes Education	6/1/2022



VENTURA COUNTY HEALTH CARE AGENCY

Origination: 12/1/2014
Last Approved: N/A
Last Revised: 8/8/2022
Next Review: 3 years after approval
Owner: Hugo Ortiz: Diabetes Nurse Educator
Policy Area: Diabetes Management
References:

DM.004 Adult IV Insulin Infusion Policy

POLICY:

- A. Continuous IV insulin infusion is utilized at Ventura County Medical Center (VCMC) and Santa Paula Hospital (SPH) to control hyperglycemia in the acutely ill patient.
- B. VCMC/SPH shall use approved IV insulin software for all continuous IV insulin infusions in ICU-1/ICU-2/ICU-3/OR/PACU/Preop and Emergency Departments, and in Labor and Delivery at VCMC only.
- C. Insulin software will only be initiated with a prescriber's order.
- D. Prescribers will order IV Insulin infusion using one of the IV insulin order-sets for IV insulin software in the electronic health record (EHR). Under special circumstances, such as patient presenting with glucose >1000mg/dL, or a complicated pediatric case, it may be appropriate to run an insulin drip without using the IV insulin software.
- E. Only regular insulin at a standard concentration of 1 unit insulin to 1 mL 0.9% normal saline will be used.
- F. IV insulin infusion will be titrated by Registered Nurses (RN) who have been trained to use the current IV insulin software. The RN will have no more than three (3) patients.
- G. Glucose is monitored per IV insulin software instruction, or prescriber's order. IV insulin software will alert RN of need for glucose check.
- H. Hypoglycemia is defined as glucose <70mg/dL and will be treated per IV insulin software instructions. If IV insulin software downtime occurs, hypoglycemia is treated per VCMC/SPH Adult Hypoglycemia policy #100100.095 Hypoglycemia Management in Adults or policy DM.003 Pediatric Hypoglycemia .095 or Peds Hypoglycemia policy #DM.003.
- I. When IV insulin software downtime occurs: use the paper protocol which is available on each unit in "downtime" binders.
- J. To transition a patient off of IV insulin infusion software, the prescriber will submit an order using the "MED Transition Intravenous to SubQ Insulin (multi-phase order)" in the EHR.

Principles:

- A. The IV insulin software is a glycemic management tool intended to evaluate current and cumulative patient blood glucose values, and based on the aggregate of these measurements, recommends an intravenous dosage of regular insulin to maintain blood glucose levels towards a clinician-determined range.

B. Default settings for the IV insulin software are as follows:

1. Target glucose range: non-pregnant adult 120-180 mg/dL
2. Target glucose range: pregnant woman in labor, 80-120 mg/dL
3. Target glucose range: pregnant woman, not in labor, 100-140 mg/dL
4. Initial multiplier adult: 0.01
5. Maximum time between glucose checks when patient is first placed on IV infusion: 60 minutes
6. Maximum time interval between glucose checks once patient is stable: 120 minutes

PROCEDURE:

- A. Use IV insulin software manufacturer's most current manual and tip sheets for the basic procedure to place a patient on IV insulin infusion and for ongoing management of patient on IV insulin infusion.
- B. With a prescriber order, transition from IV insulin to subcutaneous insulin can begin if glucose values are in goal range for 4 hours, with a stable insulin software multiplier, and if patient's clinical condition is appropriate for SQ insulin.
- C. To transition patient off of IV insulin infusion software, RN will receive an order from a prescriber.
- D. Document Blood glucose values and IV insulin titrations in the EHR.

References:

Diabetes Care 2018;41(Suppl. 1):S144–S151 | <https://doi.org/10.2337/dc18-S014>

"Clinical Guide for GlucoStabilizer," version 3.5. Healthways for Hospitals, 2015.

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All revision dates:

8/8/2022, 3/21/2019, 7/26/2017, 6/1/2016

Attachments

No Attachments

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Step Description	Approver	Date
Medical Staff Committees: Family Medicine & Medicine	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	9/1/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	6/1/2022
Diabetes Management	Jessica Colborn: Nursing-Diabetes Education	6/1/2022
Diabetes Management	Anthony Walls: MD	5/25/2022



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

Origination: 12/1/2014
Last Approved: N/A
Last Revised: 11/22/2022
Next Review: 3 years after approval
Owner: Hugo Ortiz: Diabetes Nurse
 Educator
Policy Area: Diabetes Management
References:

DM.006 Inpatient Use of Patient's Own Insulin Pump

POLICY:

To establish safe and consistent standards of care for patients who choose to continue use of their own continuous subcutaneous insulin infusion ("insulin pump") with or without Continuous Glucose Monitor for diabetes management while a patient at Ventura County Medical Center/Santa Paula Hospital.

PROCEDURE:

I. ~~Definition of Insulin Pump:~~

~~The insulin pump is an external battery-powered device that infuses insulin in a basal and bolus manner. The pump is worn 24 hours a day. The basal rate is the dose of insulin that is delivered continuously by the pump. Once the basal rate is programmed, the pump automatically delivers the prescribed dose 24 hours a day. The bolus dose is the amount of insulin needed for food or to correct a high blood glucose.~~
Definitions:

A. Subcutaneous insulin pump: An insulin pump is an external battery-powered device that infuses insulin (usually rapid-acting insulin) in a basal and bolus manner. The pump is worn 24 hours a day. The basal rate is the dose of insulin that is delivered continuously by the pump. Once the basal rate is programmed, the pump automatically delivers the prescribed dose 24 hours a day. The bolus dose is the amount of insulin needed for prandial coverage or to correct a high blood glucose.

B. Continuous Glucose Monitor (CGM): The CGM is a device that continuously monitors and records interstitial fluid glucose levels. CGM systems use a tiny sensor inserted under the skin to check glucose levels in the interstitial space. The sensor stays in place for several days to 2 weeks (per manufacturer's direction) and then must be replaced. Some CGM devices have a non-disposable transmitter that is connected to the sensor and sends information about glucose levels via radio waves from the sensor to a receiver which may be an insulin pump or a smart phone.

II. ~~Requirements of the patient using an insulin pump in the hospital:~~ **Overview of Patient Using an Insulin Pump in the Hospital:**

- A. Patient must use an insulin pump at home and demonstrate understanding of how to use it. The patient will provide the pump supplies (infusion sets, batteries, reservoirs, and infusion set inserters).^{1,2}
- B. Patient or caregiver must be mentally alert, psychologically sound, and physically able to use the

insulin pump at the time of hospital admission.^{1,2}

- C. Patient does not have contraindications to continuing the insulin pump, such as confusion, sedation, altered level of consciousness, ketoacidosis, recurrent hypoglycemia, critical illness, psychiatric illness including risk for suicide, poorly-controlled diabetes, or patient refusal.^{1,2}
- D. Refills of the patient's insulin pump reservoir with U-100 insulin shall be provided by the Pharmacy Department (see policy PH.68 Medications Brought In From Home). If the patient uses a different concentration of insulin (e.g. U-200, U-500), the Licensed Independent Practitioner (LIP) and/or resident shall consult an insulin pump prescribing physician.

III. Responsibilities of the LIP and/or Resident

- A. It is recommended that the LIP and/or resident ordering continuation of an insulin pump in the hospital consult the hospital Diabetes Champion or the patient's own insulin pump prescriber.
- B. LIP and/or resident must determine that the patient does not have any contraindication to using the pump, as outlined in section II above.
- C. LIP and/or resident must review the forms titled "Patient Insulin Pump Policy Agreement" (see Attachment A) and "Patient Insulin Pump Log Sheet" (see Attachment B) once the patient has completed them.
- D. The LIP and/or resident must place an order to leave the insulin pump in place. The LIP and/or must review and document pump settings in the medical record.
 - a. The LIP and/or resident may consider adjusting insulin pump target to 140-180 mg/dL as outpatients on insulin pumps may have targets of 100-120 mg/dL.^{2,3}
 - b. The LIP and/or resident should consider changing the insulin pump from auto mode to manual mode if indicated.^{Yeh}
- E. The LIP and/or resident will consider discontinuing the pump if the patient's BG is <70 mg/dL or if the BG is >250 mg/dL two consecutive times. The LIP and/or resident must initiate alternate insulin orders if the insulin pump is discontinued.
- F. An insulin pump should NEVER be discontinued without initiation of either subcutaneous or intravenous insulin AT LEAST 30 minutes prior to pump discontinuation. If the pump must be removed or stopped for greater than **one hour** for any reason, the LIP and/or resident must enter orders to remove/stop the pump and initiate alternate insulin administration.
- G. When an insulin pump is removed for surgery, the anesthesiologist will consult the medicine attending on call for SQ insulin orders or start an intravenous insulin infusion during a case that lasts for more than one hour.

IV. Responsibilities of the patient~~Patient on a pump in the hospital~~an Insulin Pump in the Hospital:

- A. Patient must understand and sign the "Patient Insulin Pump Policy Agreement" (see Attachment A).
- B. Mechanical operation of the pump is the responsibility of the patient, including refilling of pump, tubing changes, site care, and rotation.
- C. Patient must change insertion set/site every 48-72 hours and as needed.
- D. Patient will document all basal rates and boluses on the "Patient Insulin Pump Log Sheet" (see Attachment AB).
- E. Disconnection and reconnection of the insulin pump, such as for showering, is the responsibility of the patient.

- F. The patient must disconnect the pump immediately prior to an X-ray, MRI, or CT scan, then reconnect it as soon as the study is complete. If patient uses a Sure-T insertion set, he/she will need to remove the entire insertion set prior to X-ray, CT scan or MRI and then replace insertion set after the study is complete.
- G. Patient must understand and sign "Patient Insulin Pump Policy Agreement" (see Attachment A). Patients with continuous glucose monitors may leave them in place and should alert nurse (RN/LVN) to rapidly decreasing or rising glucose levels or to glucose <70mg/dL or >250mg/dL. If patient wants to leave CGM in place, patient must supply and change CGM sensor per manufacturer's direction or sooner as needed. Patient will allow RN/LVN to monitor glucose with hospital glucometer for any necessary CGM calibrations and for insulin dosing determination. Patient will remove CGM sensor prior to diagnostic tests or procedures if indicated by manufacturer's recommendation. Patient may replace sensor when study/procedure completed if desired.⁴

V. Responsibilities of the ~~nurse~~Nurse

- A. Conduct a visual inspection of the insulin pump to determine that there are no obvious defects such as cracks, or broken or missing dials. The nurse shall notify the LIP and/or resident if there are any defects identified.
- B. Monitor patient's response to the insulin pump therapy by checking point-of-care (POC) blood glucoses with hospital glucometer (108.032 Blood Glucose Testing with the Nova StatStrip® Glucose Meter). POC BG monitoring will be a minimum of ~~qAC~~four times daily as ordered by the LIP and/or resident. Nurse must continue to monitor glucose with hospital glucometer per LIP and/or resident order, qHS or q 6 hours as ordered by providereven when patient wears a CGM.⁴
- C. Verify that the patient is documenting on the "Patient Insulin Pump Log Sheet" every shift.
- D. Notify LIP if patient has change in mental status or if patient manages insulin pump inappropriately.
- E. Notify ~~the physician~~LIP if the pump is discontinued for more than 1 hour, if the glucose is <70 mg/dL or >250 mg/dL two consecutive times.
- F. Follow the hypoglycemia policy for adults ~~#100.095 or pediatric policy #DM.003~~(100.095 Hypoglycemia Management in Adults) or for pediatrics (DM.003 Pediatric Hypoglycemia) if blood glucose is <70 mg/dL.
- G. Assess insulin pump insertion site for signs and symptoms of infection and/or of it becoming dislodged each shift.
- H. Assess CGM (if applicable) for signs and symptoms of infection at insertion site and/or of it becoming dislodged each shift.

~~Responsibilities of the provider~~

- A. ~~The provider ordering continuation of an insulin pump in the hospital must notify the Diabetes Management Team. A pump-prescribing physician must be involved with patient management and must be available for consultation.~~
- B. ~~A provider must determine that the patient does not have any contraindication to using the pump, and must review the forms titled "Patient Insulin Pump Policy Agreement" (see Attachment A) and "Patient Insulin Pump Log Sheet" once the patient has completed them.~~
- C. ~~The provider must place an order to leave the insulin pump in place. The provider must review and document pump settings in the medical record.~~
- D. ~~The provider will consider discontinuing the pump if the patient's BG is <70 mg/dL or if the BG is~~

>250 mg/dL two consecutive times. The provider must initiate alternate insulin orders if the insulin pump is discontinued.

- E. An insulin pump should NEVER be discontinued without initiation of either subcutaneous or intravenous insulin AT LEAST 30 minutes prior to pump discontinuation. If the pump must be removed or stopped for greater than **one hour** for any reason, the provider must enter orders to remove/stop the pump and initiate alternate insulin administration.
- F. When an insulin pump is removed for surgery, the anesthesiologist will start an intravenous insulin infusion during a case that lasts for more than one hour.

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- A. American Diabetes Association. Diabetes Care 2018;41(Suppl. 1):S144–S151. <https://doi.org/10.2337/dc18-S014>.
- B. Cook, Curtiss B, et al. Transitioning insulin pump therapy from the outpatient to the inpatient setting: a review of 6 years experience with 253 cases. Journal of Diabetes Science and Technology; vol 6:5, 2012.
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- 1. [Umpierrez, Guillermo & David C Klonoff. Diabetes Technology Update: Use of insulin pumps and continuous glucose monitors in the hospital. https://doi.org/10.2337/dci18-0002. Diabetes Care published ahead of print online June 23,2018.](https://doi.org/10.2337/dci18-0002)
- 2. [Yeh, Tiffany, Michele Yeung, Felicia A Mendelsohn Curanaj. Managing Patients with Insulin Pumps and Continuous Glucose Monitors in the Hospital: to wear or not to wear. Current Diabetes Reports; 21:7; January 15, 2021.](#)
- 3. [American Diabetes Association. Diabetes Care 2021 Jan; 44\(Supplement 1\): S211-S220. https://doi.org/10.2337/dc21-S015. Last Accessed 10/19/2021.](https://doi.org/10.2337/dc21-S015)
- 4. [Wallia, Amisha & Guillermo Umpierrez, et al. Consensus Statement on Inpatient Use of Continuous Glucose Monitoring. Journal of Diabetes Science and Technology, 2017, Vol 11\(5\) 1036-1044.](#)
- 5. [Rotruck, Shannon, et al. Should Continuous Subcutaneous Insulin Infusion \(CSII\) Pumps be used During the Perioperative Period? Development of a Clinical Decision Algorithm. AANA Journal, June 2018 Vol 86:3.](#)

All revision dates:

11/22/2022, 5/15/2019, 3/21/2019, 12/1/2014

Attachments

Attachment A - Patient Insulin Pump Log Sheet and Patient Insulin Pump Policy Agreement

Approval Signatures

Step Description	Approver	Date
Medical Staff Committees: Family Medicine, Medicine & Pediatrics	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	9/19/2022
Nursing Administration	Sherri Block: Interim Chief Nursing Officer	9/15/2022
Diabetes Management	Hugo Ortiz: Diabetes Nurse Educator	9/15/2022
Diabetes Management	Anthony Walls: MD	9/13/2022



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 12/17/2018
Last Approved: N/A
Last Revised: 4/18/2022
Next Review: 3 years after approval
Owner: Sara Pendleton: Medication Safety Officer
Policy Area: Imaging Services
References:

IS.26 Pharmacologic Stress Test

~~POLICY:~~

Policy:

To provide a guideline for the diagnostic use of vasodilators, adenosine and regadenoson (Lexiscan) and dobutamine in evaluating myocardial function in the stress lab.

~~PROCEDURE:~~

~~BACKGROUND:~~

Roles and Responsibilities: see policy IS.32 Nuclear Medicine Department Overview

Pharmacologic Vasodilatory Stress Test:

Background:

Pharmacologic stress test using vasodilator agents is indicated for patients who are unable to complete an exercise stress test.

Adenosine is a direct coronary dilating agent that stimulates all four cardiac adenosine receptors (A₁, A_{2A}, A_{2B}, A₃). It is the activation of A_{2A} receptors that stimulates an increase in myocardial blood flow that mimics exercise. Side effects such as AV block, peripheral vasodilation, and bronchospasms are caused by activation of A₁, A_{2B}, and A₃ receptors, respectively. Even so, the half-life of adenosine is <10 seconds and most side effects resolve in seconds.

Regadenoson (Lexiscan) is another direct coronary dilating agent that has a high affinity for the A_{2A} receptor. In contrast to adenosine, regadenoson's affinity for A₁, A_{2B}, and A₃ is much weaker resulting in less initial incidence of side effects. However, the half-life of regadenoson is 2 to 4 minutes and most side effects resolve in 15 minutes. Headache, a common side effect affecting 29% of patients, ~~typically~~ typically resolves in 30 minutes.¹

Contraindications for the use of pharmacologic vasodilator stress test agents:

- Bronchospastic lung disease, significant airway disease
- 2nd or 3rd degree AV block without a functioning pacemaker
- Sinus node disease (sick sinus syndrome, symptomatic bradycardia)
- SBP<90

- Uncontrolled hypertension (SBP>200 or DBP>110)
- Recent use (<48h) of dipyridamole or dipyridamole-containing medications (Aggrenox).
- Unstable angina, acute coronary syndrome (ACS), or < 4 days after an acute myocardial infarction (MI)
- Known hypersensitivity to adenosine or regadenoson

Roles and Responsibilities: see policy IS.32 Department of Nuclear Medicine Overview

Procedure:[±]

1. Order Placement

- a. Physician Licensed Independent Practitioner (LIP) order for procedure shall be placed using pre-using the approved PowerPlan.
- b. Consent and checklist shall be obtained prior to the procedure by the ordering provider (see Appendix 1) LIP.
- c. Patient informational packet shall be provided to the patient prior to the procedure (see Appendix 2 Attachment A).

2. Patient preparation

- a. Patient shall be nothing by mouth (NPO) for at least four (4) hours prior to the procedure.
- b. An IV line with dual-port Y-connector access shall be placed using a 22 gauge needle then 0.9% sodium chloride (NS) infusing at a keep vein open (KVO) rate of 10 mL/hr.
- c. Baseline electrocardiogram (ECG) and vital signs shall be obtained by the EKG tech/technician.
- d. Resting set of images shall be obtained by the nuclear medicine tech/technician per American Society of Nuclear Cardiology (ASNC) guidelines.

3. Radio-tracer agent and protocols shall be determined per ASNC guidelines.

4. IV administration guidelines for vasodilator pharmacologic stress agents

• Adenosine continuous infusion (90mg/30mL pre-filled syringe)

- Monitoring
 - ECG shall be monitored and recorded every minute during the infusion and shall be documented on the EHR.
 - BP and oxygen saturation shall be monitored during the infusion and then 3-5 minutes after the infusion has ended or until the patient is stable.
- The infusion shall run at 140 mcg/kg/min
 - No max dose but typical upper limit is 125kg.
 - 4 minute duration (0.56 mg/kg total dose)
 - Radio-tracer agent shall be injected at two (2) minutes
 - Adenosine infusion shall continue for at least an additional 2 minutes after radio-tracer agent is injected.
- RN shall administer the infusion using the syringe pump and approved guardrails.

• Regadenoson (Lexiscan) 0.4mg/5mL injection

- Monitoring

- ECG shall be monitored and recorded every minute during the infusion and shall be documented on the EHR.
- BP and oxygen saturation shall be monitored during the infusion and then 3-5 minutes after the infusion has ended or until the patient is stable.
- Pre-medication with albuterol 90 mcg/inh MDI 2 puffs PRN per cardiologist discretion
- RN shall inject regadenoson 0.4mg/5mL as a rapid IV push over 10 seconds
 - Use a peripheral vein using a 22-gauge or larger catheter or needle
 - Flush immediately with 5mL of saline.
 - Administer radio-tracer agent 10-20 seconds after the saline flush using the same catheter as the regadenoson.

a. Adenosine continuous infusion (90 mg/30 mL pre-filled syringe)

i. Monitoring

- ECG shall be monitored and recorded every minute during the infusion and shall be documented on the electronic health record (EHR).
- Blood Pressure (BP) and oxygen saturation shall be monitored during the infusion and then 3-5 minutes after the infusion has ended or until the patient is stable.

ii. The infusion shall run at 140 mcg/kg/min

- No maximum (max) dose but typical upper limit is 125 kg.
- 4 minute duration (0.56 mg/kg total dose)

iii. Radio-tracer agent shall be injected at two (2) minutes

- Adenosine infusion shall continue for at least an additional 2 minutes after radio-tracer agent is injected.
- The nurse (RN) shall administer the infusion using the syringe pump and approved dose error reduction software (e.g., guardrails).

b. Regadenoson (Lexiscan) 0.4 mg/5mL injection

▪ Monitoring

- ECG shall be monitored and recorded every minute during the infusion and shall be documented on the EHR.
- BP and oxygen saturation shall be monitored during the infusion and then 3-5 minutes after the infusion has ended or until the patient is stable.
- Pre-medication with albuterol 90 mcg/inhalation Metered Dose Inhaler (MDI) 2 puffs as needed (PRN) per cardiologist discretion.
- RN shall inject regadenoson 0.4mg/5mL as a rapid IV push over 10 seconds
 - Use a peripheral vein using a 22-gauge or larger catheter or needle
 - Flush immediately with 5 mL of saline.
 - Administer radio-tracer agent 10-20 seconds after the saline flush using the same catheter as the regadenoson.

5. Indications for stopping the adenosine or regadenoson early:

- a. SBP<80 mmHg
 - b. Symptomatic, persistent second or third degree block.
 - c. Significant cardiac arrhythmias
 - d. Wheezing
 - e. Severe chest pain associated with ST depression of 2 mm or greater.
 - f. Signs of poor perfusion (pallor, cyanosis, cold skin)
 - g. Technical problems with monitoring equipment
 - h. Patient's request to stop
6. Reversal of adenosine or regadenoson^{1,3-5}
- a. Due the short half-life of adenosine, most side effects will resolve in < 10 seconds
 - b. Aminophylline 50 mg IV x 1 at least 3 minute after the tracer injection OR
 - c. Caffeine 60mg IV x 1 over 3-5min administered 3 minutes after the radio-tracer is given is a safe and effective alternative to aminophylline
 - d. Oral caffeine (diet soda or coffee) may be helpful for the reversal of mild symptoms excluding GI symptoms
7. Stress imaging shall be performed as per ASNC protocols.

~~Medications: All medications and IV fluids shall be supplied and maintained by the Pharmacy.~~

Dobutamine Stress Test

Background:

A dobutamine stress test is indicated in patients who are unable to complete an exercise stress test and who have a contra-indication that precludes the use of vasodilator agents such as adenosine or regadenoson (see policy IS.26 Pharmacologic Vasodilator Stress Test). Dobutamine is a synthetic catecholamine stress agent that primarily stimulates beta receptors which increases myocardial oxygen demand by increasing myocardial contractility, heart rate, and blood pressure.

Contra-indications for the use of pharmacologic stress test agents

- Unstable angina, acute coronary syndrome (ACS), <4 days after an acute myocardial infarction (MI)
- Hemodynamically significant left ventricular outflow tract obstruction
- Atrial tachyarrhythmias with uncontrolled ventricular response
- Prior history of ventricular tachycardia
- Uncontrolled hypertension (SBP>200 or DBP>110)
- Aortic dissection, aortic aneurysm
- Known hypersensitivity to dobutamine.

Procedure:

1. Order Placement
 - a. Licensed Independent Practitioner (LIP) order for procedure shall be placed using pre-approved powerplans.
 - b. Consent and checklist shall be obtained prior to the procedure by the ordering LIP.

- c. Patient informational packet shall be provided to the patient prior to the procedure (see Attachment A)
2. Patient preparation
 - a. Patient shall be nothing by mouth (NPO) for at least four (4) hours prior to the procedure.
 - b. An IV line with dual-port Y-connector access shall be placed using a 22 gauge needle with 0.9% Sodium Chloride (NS) infusing at Keep Vein Open (KVO) rate of 10 mL/hr.
 - c. Baseline ECG, and BP shall be obtained by the EKG technician.
 - d. Resting set of images shall be obtained by the nuclear medicine tech per American Society of Nuclear Cardiology (ASNC) guidelines.
 3. Radio-tracer agent and protocols shall be determined per ASNC guidelines.
 4. Dobutamine continuous infusion (500 mg/250mL pre-mixed)
 - a. Continuous monitoring of ECG, BP, and PO2 shall occur throughout the infusion and shall be documented on the electronic health record (EHR).
 - b. The infusion shall start at 5 mcg/kg/minute.
 - c. Dose shall be increased to 10, 20, 30 mcg/kg/min at 3 minute intervals up to maximum (max) rate of 40 mcg/kg/min.
 - d. Atropine 0.25mg IV q1 minute up to max of 2 mg may be given at 40 mcg dobutamine for patients who do not achieve target heart rate. Do not administer atropine if contraindicated (e.g., benign prostatic hypertrophy or BPH, glaucoma).
 - e. Radio-tracer, if indicated, shall be injected when 85% or more of a patients age-predicted heart rate is reached.
 - f. Dobutamine infusion shall be continued for 1 minute after the radio-tracer injection.
 - g. Patient shall continue to be monitored until the heartrate returns to baseline levels.
 - h. The Nurse (RN) shall administer the infusion using the infusion pump and approved dose error reduction software (e.g., guardrails).
 5. Indications for stopping the dobutamine infusion early:
 1. Achieving >85% of the age-predicted peak heart rate after maintaining 1 minute following radio-tracer, if indicated.
 2. SBP<80
 3. SBP>230 or DBP>115
 4. Significant cardiac arrhythmias
 5. Severe chest pain associated with ST depression of 2 mm or greater.
 6. Signs of poor perfusion (pallor, cyanosis, cold skin)
 7. Technical problems with monitoring equipment
 8. Patient's request to stop
 6. Reversal of Dobutamine: Give metoprolol 5mg IV x 1 over 1 minute and repeat at LIP discretion.
 7. Imaging
 - o Stress images shall be performed following radio-tracer agent administration as per ASNC

Medications and IV Fluids

Table 1. Medications and ~~IV~~IV fluids for Nuclear Medicine: Stress Lab

Medication	Dose	Comments
Albuterol (Ventolin) MDI	<ul style="list-style-type: none"> • 2 puffs once as needed for wheezing and/or SOB 	<ul style="list-style-type: none"> • Located in Pyxis
Adenosine 90 mg/30mL pre-filled SYR syringe	<ul style="list-style-type: none"> • 140 mcg/kg/min over 4 min • No maximum dose (typical upper weight limit: 125kg) 	<ul style="list-style-type: none"> • Pharmacologic stress test agent • Administer via infusion pump with <u>dose error reduction software (e.g., guardrails)</u> • Obtain from main pharmacy (refrigerated)
Adenosine 6 mg/2mL <u>single dose vial</u> (SDV)	<ul style="list-style-type: none"> • 6 mg IV x1 • If ineffective within 1-2 minutes, may give 12 mg IV x 2 as needed 	<ul style="list-style-type: none"> • Adult cardiac monitoring emergency intervention med • Flush immediately with 20 mL of normal saline • Located in Pyxis
Aminophylline	<ul style="list-style-type: none"> • 50 mg IV x1, MR<u>may repeat</u> up to a max of 250 mg 	<ul style="list-style-type: none"> • Located in Pyxis
Aspirin 325 mg tab (non-EC)	<ul style="list-style-type: none"> • 325mg po x 1 	<ul style="list-style-type: none"> • Located in Pyxis
Atropine 1 mg/10 mL <u>pre-filled syringe</u> (PFS)	<ul style="list-style-type: none"> • 0.25 mg IV q1min<u>minute</u> up to a max of 2 mg to be given at 40 mcg of dobutamine. 	<ul style="list-style-type: none"> • For patients who do not achieve target heart rate with dobutamine alone • C/I in <u>glaucoma and BPH</u><u>Contraindicated in glaucoma and benign prostatic hyperplasia (BPH).</u> • Located in Pyxis
<ul style="list-style-type: none"> • 0.25 mg IV x1 prn up to a max of 2 mg 	<ul style="list-style-type: none"> • Adult cardiac monitoring emergency intervention med • Located in crash cart 	
Caffeine 60 mg/3 mL MDV vial	<ul style="list-style-type: none"> • 60 mg IV x1 over 3-5 minutes 	<ul style="list-style-type: none"> • Located in Pyxis
Dextrose 50% 25 gm/ 50 mL SYR PFS	<ul style="list-style-type: none"> • 25 gm IVP x 1 	<ul style="list-style-type: none"> • Located in Pyxis
Dobutamine 500 mg/250 mL premixed	<ul style="list-style-type: none"> • Initial: 5 mcg/kg/min increasing to 10, 20, 30 mcg/kg/min every 	<ul style="list-style-type: none"> • Administer via smart pump with <u>dose error reduction software (e.g.,</u>

	3 minutes • Max: 40 mcg/kg/min	guardrails) • Located in Pyxis
Famotidine 20 mg/2 mL SDV	• 20-40 mg IV over 2 minutes	• Obtain from main pharmacy (refrigerated)
Furosemide 20 mg/ 2 mL SDV	• 20-40 mg IV (10 mg/min)	• Located in Pyxis
Lorazepam 2 mg/ mL SDV	• 4 mg IVP x 1 over 2-5 minutes	• Located in Pyxis
Metoprolol 5 mg/5 mL SDV	• 5 mg IVP x 1 over 1 minute	• Located in Pyxis
Nitroglycerine 0.4 mg SL tabs Nitroglycerin 0.4 mg sublingual (SL) tabs	• 0.4 mg SL every 5 minutes up to 3 doses	• Located in Pyxis
0.9% Normal Saline (NS)	• NS 100 mL • NS 250 mL	• Located in Pyxis
Regadenoson (Lexiscan) 0.4mg/ 5mL SR syringe	• 0.4 mg rapid IVP over 10 seconds	• Flush immediately after with 5 mL of normal saline • Located in Pyxis

Equipment:

Equipment:

- 12 lead ECG monitoring
- BP monitor
- Infusion syringe pump with dose error reduction software (e.g. guardrails)
- Crash cart with defibrillator
- Treadmill
- Pulse oximeter

REFERENCES:

References:

1. Henzlova, M.J., Duvall, W.L., Einstein, A.J., et al. ASNC imaging guidelines for SPECT nuclear cardiology procedures: Stress, protocols, and tracers. J. Nucl Cardiol (2016) 23:606-39.
2. Dilsizian, V., Gewirtz H., Paivanas, N., et al. Serious and potentially life threatening complications of cardiac stress testing: Physiological mechanisms and management strategies. J Nucl Cardiol 2015; 22: 1198-213.
3. Doukky, R. Rangel, M.O., Dick R., et al. Attenuation of the side effect profile of regadenoson: a randomized, double blind placebo-controlled study with aminophylline in patients undergoing myocardial perfusion imaging and have severe chronic kidney disease – the ASSUAGE-CKD trial. Int J Cardiovasc

Imaging (2013)29:1029-1037

4. Jolly, F., Thomas, G.S. An alternative to aminophylline to reverse adverse effects during regadenoson myocardial perfusion imaging. J. Nucl. Cardiol. (2017)24:1071
5. Tejani, F.H., Thompson, R.C. Kristy, R. et al. Effect of caffeine on SPECT myocardial perfusion imaging during regadenoson pharmacologic stress: a perspective, randomized multicenter study. Int J Cardiovasc Imaging (2014)30: 979.
6. Lexicomp online, accessed [5/25/20183/24/2022](#).
7. Micromedex online, accessed [5/25/20183/24/2022](#).

All revision dates:

4/18/2022, 12/17/2018

Attachments

Attachment A - Cardiac Stress Test Patient Information

Approval Signatures

Step Description	Approver	Date
Medicine Committee	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	9/27/2022
Cardiology	Cory Nitzel: Cardiology	9/22/2022
Cardiopulmonary Services	Jessica Rodriguez: Manager-Cardiopulmonary Services	9/13/2022
Policy Owner	Sara Pendleton: Medication Safety Officer	5/3/2022



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 12/17/2018
Last Approved: N/A
Last Revised: 3/24/2022
Next Review: 3 years after approval
Owner: Sara Pendleton: Medication Safety Officer
Policy Area: Imaging Services
References:

IS.27 Dobutamine Stress Test

POLICY:

To provide a guideline for the diagnostic use of Dobutamine in evaluating myocardial function in the stress lab.

PROCEDURE:

Background¹:

A dobutamine stress test is indicated in patients who are unable to complete an exercise stress test and who have a contra-indication that precludes the use of vasodilator agents such as adenosine or regadenoson (see policy IS.26 Pharmacologic Vasodilator Stress Test). Dobutamine is a synthetic catecholamine stress agent that primarily stimulates beta receptors which increases myocardial oxygen demand by increasing myocardial contractility, heart rate, and blood pressure.

Contra-indications for the use of pharmacologic stress test agents

- Unstable angina, acute coronary syndrome (ACS), <4 days after an acute myocardial infarction (MI)
- Hemodynamically significant left ventricular outflow tract obstruction
- Atrial tachyarrhythmias with uncontrolled ventricular response
- Prior history of ventricular tachycardia
- Uncontrolled hypertension (SBP>200 or DBP>110)
- Aortic dissection, aortic aneurysm
- Known hypersensitivity to dobutamine.

Roles and Responsibilities: See policy ~~IS.32 Department of Nuclear Medicine Overview~~ IS.32 Nuclear Medicine Department

Overview

Procedure¹:

1. Order Placement
 - a. Physician Licensed Independent Practitioner (LIP) order for procedure shall be placed using pre-approved powerplans.

- b. Consent and checklist shall be obtained prior to the procedure by the ordering provider (see Appendix 1) LIP).
 - c. Patient informational packet shall be provided to the patient prior to the procedure (see Appendix 2 Attachment A)
2. Patient preparation
- a. Patient shall be nothing by mouth (NPO) for at least four (4) hours prior to the procedure.
 - b. An IV line with dual-port Y-connector access shall be placed using a 22 gauge needle with 0.9% Sodium Chloride (NS) infusing at Keep Vein Open (KVO) rate of 10 mL/hr.
 - c. Baseline ECG, and BP shall be obtained by the EKG ~~tech~~ technician.
 - d. Resting set of images shall be obtained by the nuclear medicine tech per American Society of Nuclear Cardiology (ASNC) guidelines.
3. Radio-tracer agent and protocols shall be determined per ASNC guidelines.
4. Dobutamine continuous infusion (500 mg/250mL pre-mixed)
- a. Continuous monitoring of ECG, BP, and PO2 shall occur throughout the infusion and shall be documented on the electronic health record (EHR).
 - b. The infusion shall start at 5 mcg/kg/minute.
 - c. Dose shall be increased to 10, 20, 30 mcg/kg/min at 3 minute intervals up to maximum (max) rate of 40 mcg/kg/min.
 - d. Atropine 0.25mg IV q1~~min~~ minute up to max of 2 mg may be given at 40 mcg dobutamine for patients who do not achieve target heart rate. Do not administer atropine if contraindicated (e.g., benight prostatic hypertrophy or BPH, glaucoma).
 - e. Radio-tracer, if indicated, shall be injected when 85% or more of a patients age-predicted heart rate is reached.
 - f. Dobutamine infusion shall be continued for 1 minute after the radio-tracer injection.
 - g. Patient shall continue to be monitored until the ~~HR~~ heartrate returns to baseline levels.
 - h. The Nurse (RN) shall administer the infusion using the infusion pump and approved dose error reduction software (e.g., guardrails).
5. Indications for stopping the dobutamine infusion early:
- a. Achieving >85% of the age-predicted peak heart rate after maintaining 1 minute following radio-tracer, if indicated.
 - b. SBP<80
 - c. SBP>230 or DBP>115
 - d. Significant cardiac arrhythmias
 - e. Severe chest pain associated with ST depression of 2 mm or greater.
 - f. Signs of poor perfusion (pallor, cyanosis, cold skin)
 - g. Technical problems with monitoring equipment
 - h. Patient's request to stop
6. Reversal of Dobutamine: Give metoprolol 5mg IV x 1 over 1 minute and repeat at ~~physician~~ LIP discretion.

7. Imaging

- Stress images shall be performed following radio-tracer agent administration as per ASNC guidelines.

Medications: All medications and IV fluids shall be supplied and maintained by Pharmacy.

Table 1. Medications and IV/IV fluids for Nuclear Medicine: Stress Lab¹⁻⁴

Medication	Dose	Comments
Albuterol (Ventolin) MDI	<ul style="list-style-type: none"> • 2 puffs once as needed for wheezing and/or SOB 	<ul style="list-style-type: none"> • Located in Pyxis
Adenosine 90 mg/30mL pre-filled SYR	<ul style="list-style-type: none"> • 140 mcg/kg/min over 4 min • No maximum dose (typical upper weight limit: 125kg) 	<ul style="list-style-type: none"> • Pharmacologic stress test agent • Administer via smart pump with <u>dose error reduction software</u> (e.g., guardrails) • Obtain from main pharmacy (refrigerated)
Adenosine 6mg/2mL <u>single dose vial (SDV)</u>	<ul style="list-style-type: none"> • 6 mg IV x1 • If ineffective within 1-2 minutes, may give 12 mg IV x 2 as needed 	<ul style="list-style-type: none"> • Adult cardiac monitoring emergency intervention med • Flush immediately with 20 mL of normal saline • Located in Pyxis
Aminophylline	<ul style="list-style-type: none"> • 50 mg IV x1, MR up to a max of 250 mg 	<ul style="list-style-type: none"> • Located in Pyxis
Aspirin 325mg tab (non-EC)	<ul style="list-style-type: none"> • 325mg po x 1 	<ul style="list-style-type: none"> • Located in Pyxis
Atropine 1mg/10 mL <u>pre-filled syringe (PFS)</u>	<ul style="list-style-type: none"> • 0.25 mg IV q1 min <u>minute</u> up to a max of 2 mg to be given at 40 mcg of dobutamine. 	<ul style="list-style-type: none"> • For patients who do not achieve target heart rate with dobutamine alone • C<u>Contraindicated</u> in glaucoma and BPH • Located in Pyxis
<ul style="list-style-type: none"> • 0.25 mg IV x1 prn up to a max of 2mg 	<ul style="list-style-type: none"> • Adult cardiac monitoring emergency intervention med • Located in crash cart 	
Caffeine 60 mg/3mL <u>MDVial</u>	<ul style="list-style-type: none"> • 60mg IV x1 over 3-5 minutes 	<ul style="list-style-type: none"> • Located in Pyxis
Dextrose 50% 25 gm/ 50mL <u>SYR</u> <u>PFS</u>	<ul style="list-style-type: none"> • 25 gm IVP x 1 	<ul style="list-style-type: none"> • Located in Pyxis
Dobutamine 500 mg/ 250mL premixed	<ul style="list-style-type: none"> • Initial: 5 mcg/kg/min increasing to 10, 20, 30 mcg/kg/min every 3 	<ul style="list-style-type: none"> • Administer via smart pump with <u>dose error reduction software</u>

	minutes • Max: 40 mcg/kg/min	(e.g., guardrails) • Located in Pyxis
Famotidine 20mg/2 mL SDV	• 20-40 mg IV over 2 minutes	• Obtain from main pharmacy (refrigerated)
Furosemide 20mg/2 mL SDV	• 20-40 mg IV (10mg/min)	• Located in Pyxis
Lorazepam 2mg/mL SDV	• 4mg IVP x 1 over 2-5 minutes	• Located in Pyxis
Metoprolol 5mg/5mL SDV	• 5mg IVP x 1 over 1 minute	• Located in Pyxis
<u>Nitroglycerine 0.4 mg SL tabs</u> <u>Nitroglycerin 0.4 mg sublingual (SL) tablets</u>	• 0.4mg SL every 5 minutes up to 3 doses	• Located in Pyxis
<u>0.9% Normal Saline (NS)</u>	• NS 100 mL • NS 250 mL	• Located in Pyxis
Regadenoson` (Lexiscan) 0.4 mg/ 5mL <u>SYR</u> syringe	• 0.4 mg rapid IVP over 10 seconds	• Flush immediately after with 5 mL of normal saline • Located in Pyxis

Equipment:

- 12 lead ECG monitoring
- BP monitor
- Infusion pump with guardrails
- Crash cart with defibrillator
- Treadmill
- Pulse oximeter

REFERENCES:

1. Henzlova, M.J., Duvall, W.L., Einstein, A.J., et al. ASNC imaging guidelines for SPECT nuclear cardiology procedures: Stress, protocols, and tracers. J. Nucl Cardiol (2016) 23:606-39.
2. Dilsizian, V., Gewirtz H., Paivanas, N., et al. Serious and potentially life threatening complications of cardiac stress testing: Physiological mechanisms and management strategies. J Nucl Cardiol 2015; 22: 1198-213
3. Lexicomp online, accessed 5/25/20183/24/2022.
4. Micromedex online, accessed 5/25/20183/24/2022.

All revision dates:

3/24/2022, 12/17/2018

Attachments

Appendix 2 - Cardiac Stress Test.pdf

Approval Signatures

Step Description	Approver	Date
Medicine Committee	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	9/27/2022
Cardiology	Cory Nitzel: Cardiology	9/22/2022
Cardiopulmonary Services	Jessica Rodriguez: Manager-Cardiopulmonary Services	9/19/2022
Policy Owner	Sara Pendleton: Medication Safety Officer	3/24/2022



VENTURA COUNTY HEALTH CARE AGENCY

Origination: 10/1/2007
Last Approved: N/A
Last Revised: 10/11/2022
Next Review: 3 years after approval
Owner: Jessica Rodriguez: Manager-
Cardiopulmonary Services
Policy Area: Respiratory Care
References:

R.13 Assisted Cough (Quad Cough)

POLICY:

To establish a procedure for technique in assisting the patients cough where cough is impaired secondary to neuromuscular disorders such as quadriplegia, Guillain Barre, Muscular Dystrophy, Myasthenia Gravis, etc.

Purpose:

AMC (Assisted Manual Cough), MAC (Manually Assisted Cough) a.k.a Quad Cough will be performed upon a physician order when a patient cannot generate a sufficient cough unless it is needed as a lifesaving technique. Oral-tracheal and or tracheal suctioning will be performed if the patient cannot expectorate and there is evidence of retained secretions are present.

PROCEDURE:

1. GUIDELINES:

Set-up for oral or tracheal suctioning

- A. Check patient orders and confirm
- B. Gather equipment and supplies prior to entering room
 - a. Suction set-up with Yankauer or Suction Catheters (as indicated)
 - b. Stethoscope
 - c. Sputum collection container (if indicated)
 - d. Tissues
 - e. Normal saline (if indicated)
 - f. PPE(Personal Protective Equipment) Gloves, eye protection, gown, N95 or PAPR (as indicated)
- C. Perform proper hand hygiene and don proper PPE
- D. Check 2 patient identifiers
- E. Introduce yourself and explain procedure and the purpose of the procedure to the patient.
- F. Assess the patient for need, as evidenced by weak cough and struggle to raise mobilize secretions, loose secretions on auscultation, congestion and secretions on palpation of chest wall, or even patient request.

- G. ~~Explain the procedure to the patient. Assure that the patient has been NPO for 1 hour or turn off tube feed 30 minutes prior to therapy.~~
- H. Place the patient's head flat on bed or in Trendelenburg position:
 - 1. unless contraindicated
 - 2. position is to enhance the cough effort with gravity
- I. Place hands on upper abdomen below the xiphoid process or on the lateral aspects of the chest wall with fingers resting intercostally.
 - 1. Patients may specify their preferred hand placement.
- J. Have the patient take a few slow, deep breaths prior to applying cough pressure
 - 1. Work on synchronizing cough-effort, timing
 - 2. After the third breath, have the patient cough two or three times in succession without an inspiration between them.
 - 3. At the exact moment the patient coughs, apply pressure to the upper abdomen or lateral chest with the force of the thrust directed towards the diaphragm.
 - 4. It is essential to coordinate the thrust with the patient's cough efforts.
 - 5. Assisted-cough efforts should have the care-giver's weight behind them, but should not cause pain.
- K. When the patient brings secretions up, suction may be needed to help clear the airway and prevent aspiration.
 - 1. Complete the procedure, using short repetitions with intermittent rest periods.
 - 2. Following the procedure, return the patient to a comfortable position.

Contraindications

- A. ~~Patients with unstable spines.~~
- B. ~~Patients with fractured ribs should not have lateral pressure applied.~~
- C. ~~Patients with recent abdominal incisions should not have abdominal pressure applied.~~
- D. ~~Patients with cardiovascular instability.~~

Documentation

Document in EHR (Electronic Health Record)

- A. Physical Assessment
- B. Secretion amount and characteristics
- C. Patient Tolerance
- D. Adverse reaction (if any)

Contraindications

- A. Directed cough is rarely contraindicated. Listed contraindications are relative.
 - 1. Inability to control possible transmission of infection from patients suspected or known to have

pathogens transmittable by droplet nuclei (ex: M tuberculosis).

2. Presence of an elevated intracranial pressure or known intracranial aneurysm.
3. Presence of reduced coronary artery perfusion, such as in acute myocardial infarction.
4. Acute unstable head, neck, spine injury, recent hardware placed to stabilize the spine.
5. Presence of IVC filter (Intra-Vena Cava Filter consult with physician)Patients who are constipated or have bowel obstructions
6. Avoid 1 hour post meals or feedings
7. Manually assisted directed cough with pressure to the epigastrium may be contraindicated in presence of:
 - a. Increased potential for regurgitation/aspiration (e.g., unconscious patient with unprotected airway)
 - b. Acute abdominal pathology, abdominal aortic aneurysm, hiatal hernia or pregnancy (use thoracic cage for pregnancy)
 - c. Recent Abdominal surgery
 - d. Recent feeding tube placement e.g., PEG or J-Tube
 - e. Bleeding diathesis
 - f. Untreated pneumothorax
8. Manually assisted directed cough with pressure to the thoracic cage may be contraindicated in presence of:
 - a. Osteoporosis
 - b. Flail chest
 - c. Hypoxia
 - d. Kyphoscoliosis

References

AARC Clinical Practice Guidelines, "Directed Cough", Respir Care 1993;

Shepard Center <https://www.myshepherdconnection.org/respiratory/assist-cough>

Canadian Alternatives in Noninvasive Ventilation, Affiliated with The Ottawa Hospital and University of Ottawa www.canventottawa.ca Patient Info Manually Assisted Cough (MAC) <http://www.ohri.ca/hivam/documents/MAC%20Patient%20info%20V1.2-1.pdf>

All revision dates:

10/11/2022, 2/1/2010

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medicine Committee	Tracy Chapman: VCMC - Med Staff	pending
Respiratory Care	Jessica Rodriguez: Manager-Cardiopulmonary Services	10/11/2022



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 1/1/2009
Last Approved: N/A
Last Revised: 5/15/2019
Next Review: 3 years after approval
Owner: Jessica Rodriguez: Manager-
Cardiopulmonary Services
Policy Area: Respiratory Care
References:

R.92 Sputum Inductions

POLICY:

When a sputum sample cannot be obtained by nursing staff by means of a patient's own cough effort, Respiratory Care staff shall, with a provider's order, perform a sputum induction to obtain that sample. Sputum inductions are intended to obtain samples for microbiology or pneumocystis (PJP) samples only. There are two basic types of inductions performed by Respiratory Care. Sputum inductions are not done for cytology (see sputum induction operational protocol).

PROCEDURE:

Orders:

There must be a written provider order to induce sputum which must include the intended laboratory microbiology tests to be performed on any obtained sputum and the number of samples to be obtained.

1. Sputum inductions orders are for the number of sputum samples the provider requests. Sputum induction orders shall stay active until all requested samples are obtained or four (4) days, whichever comes first. Except as noted otherwise, sputum may be brought to the Laboratory Department at any time of the day and any day of the week.
 - a. All inductions shall be preceded by the administration of 2.5 mg of nebulized albuterol, unless the ordering provider requests otherwise.
 - b. AFB inductions are ordered x3 and shall be done eight (8) hours apart. The first one shall be performed once the patient is placed in appropriate isolation. It is preferred one sample be the first sputum of the day. Samples are of a series, and it should be noted to be as "1 of 3", "2 of 3," etc.
2. Inductions for pneumocystis jirovecii (PJP) shall also include either confirmation of a diagnosis of HIV/AIDS or pre-disposing risk factors for HIV.
 - a. PJP inductions are generally x3 and may be as little as four (4) hours apart. There are no restrictions on when.
 - b. If multiple PJP inductions are to be done, they should be labeled as "1 of 3," etc. as with the AFB inductions noted above.

Standard Sputum Induction:

The type of induction for most microbiology analysis including for tuberculosis.

Equipment:

- EZPAP hand-held nebulizer.
- Sterile sputum cup and biohazard bag.
- Patient label with notation of time and date added.

Medication:

A bronchodilator shall precede the solution used to induce sputum.

1. **Bronchodilator:** 2.5 mg albuterol in a 3 mL unit dose. Given prior to induction solutions.
2. **Induction Solution:** 4 mL of 10% hypertonic saline. Always preceded by the bronchodilator. If 15 mL vials are used, the excess solution shall be discarded with each induction.

Patient Preparation:

Sit patient upright if possible. The ideal positioning is sitting upright in bed with feet over the side. The Respiratory Therapist shall spend up to 30 minutes in the room with the patient, promoting cough.

Samples Obtained:

1. Any sputum obtained shall be collected in a sterile cup which can be securely sealed.
2. A minimum of 3 mL of sputum shall be collected in order to process.
3. The RT must activate appropriate order and print out Lab slip.
4. The cup shall have a patient sticker attached with time, date, and therapist initials written on it. If this sample is one of a series, it should be noted to be as "1 of 3," "2 of 3," etc.
5. The cup shall be placed in a biohazard zip lock bag. The Lab slip shall be placed in a biohazard bag.
6. Samples must be taken to Laboratory Department and properly checked in and refrigerated.
7. The provider and Respiratory Manager shall be notified if the patient is unable to produce sample.

Pneumocystis Jirovecii (PJP) Inductions:

These are inductions intended to collect samples to diagnose PJP, primarily in immunocompromised patients.

Equipment:

1. EZPAP nebulizer.
2. Sterile sputum cup with label and biohazard bag.

Medication:

1. Bronchodilator: 2.5 mg albuterol in a 3 mL unit dose. Given prior to induction solutions.
2. Induction Solution: Using the EZPAP nebulizer, administer 4 mL of 10% hypertonic saline. If 15 mL vials are used, the excess solution should be discarded with each induction. Always preceded by the bronchodilator.

Patient Preparation:

Prior to induction, nursing staff shall perform thorough oral care, including having the patient brush their teeth.

Set Up:

The EZPAP nebulizer should be used for all medications.

Samples Obtained:

PJP samples may be obtained at any time. The Clinical Lab will conduct analysis only Monday through Friday during regular working hours, but they have arranged for a special handling process that allows for collection at any time including weekends and nights. Lab staff need to be notified that this is a "PJP" specimen so that they can properly preserve the sample.

1. Any sputum obtained should be collected in a sterile cup that can be securely sealed.
2. Once Sputum sample has been obtained, Respiratory Therapist shall print laboratory label and keep it with sample.
3. The cup should have a patient sticker attached with time, date, and therapist initials written on it. If the sample is one of a series, it shall be noted to be as "1 of 3," "2 of 3," etc.
4. The cup shall be placed in a biohazard zip lock bag.
5. The Respiratory Therapist shall personally bring the sample to the Clinical Laboratory and hand it to a Laboratory technician or desk staff and inform them the sample is for a "PJP." This is to ensure that the sample is properly preserved for analysis per Laboratory procedures.

Nasotracheal Suction:

If there is a need to use nasotracheal "deep" suction to obtain a sample, that action shall be proceeded by a specific provider order allowing the procedure. It is not to be done routinely.

- **Patients with Artificial Airways:** Patients that are intubated or who have tracheostomy tubes do not require specific orders to perform suctioning.

DOCUMENTATION:

All inductions shall be documented whether the induction successfully produces sputum or not. Documentation is done with regular therapy with the addition that if multiple inductions are requested notation of sample sequence (1 of 3, etc) should be noted.

- **Billing:** Each induction is billed as a nebulized therapy and as a sputum induction, successful or not.
- **Unsuccessful Induction:** The physician and Respiratory Manager must be notified of unsuccessful induction. The Respiratory Therapist shall document in the electronic health record (EHR) a note of the unsuccessful attempt.

Bronchoscopy:

Once the medical team determines the patient shall be unable to successfully produce an adequate sputum sample, they may consult with the pulmonologist to arrange for a bronchoscopy. Bronchoscopy for rule out TB shall be performed in an preapproved airborne room with proper patient monitoring equipment. The Nursing Supervisor shall be notified to ensure there is a room available and appropriate nursing staff to support the procedure. Sputum collected via bronchoscopy will count as one collected sputum for the series of three (3) needed.

All revision dates:

5/15/2019

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medicine Committee	Tracy Chapman: VCMC - Med Staff	pending
Respiratory Care	Jessica Rodriguez: Manager-Cardiopulmonary Services	9/13/2022



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 11/10/2020
Last Approved: N/A
Last Revised: 8/24/2022
Next Review: 3 years after approval
Owner: Sul Jung: Associate Director of Pharmacy Services
Policy Area: Respiratory Care
References:

R.96 Inhaled Epoprostenol (Flolan)

POLICY

- To establish the standard for safe and effective use of inhaled epoprostenol. Additionally, this Policy and Procedure serves as an educational tool to provide the appropriate indication, administration, management and monitoring of inhaled epoprostenol for physicians, pharmacists, nurses, and respiratory care practitioners.
- Epoprostenol is a synthetic prostacyclin that mimics the actions of natural prostacyclin. Prostacyclin is a substance produced by vascular endothelium that has vasodilating, antiplatelet aggregation and cytoprotective effects.
- Order for epoprostenol should be provided as STAT priority as appropriate. Respiratory care services is responsible for the set up and administration of aerosolized epoprostenol via the Aeroneb Solo System (in the continuous mode) and infusion pump. Infusion pump flow rate is adjusted to deliver prostacyclin solution that will result in a desired aerosolized dose per hour.
- Inhaled epoprostenol will be delivered via nebulization. During continuous nebulization operation, the nebulizer is "ON" continuously and the medication is nebulized on drop by drop basis as it reaches the aerosol generator. The nebulizer will run dry between drops. This does not affect the dosing.

INDICATIONS

- A. Treatment of hypoxic respiratory failure in adults with a PaO₂/FiO₂ ratio of less than 150 and/or has hemodynamic instability that will not tolerate high levels of positive end expiratory pressure (PEEP).
- B. Treatment of pulmonary hypertension.
 1. Pulmonary hypertension (mPAP > 30 mmHg) and/or right ventricular dysfunction (CVP > 15 mmHg), cardiac index (CI) <2.5 L/min/m² and/or hypoxia with marginal hemodynamics/oxygenation despite optimal inotropic/mechanical therapy.

EXCLUSIONS

- A. Severe hemodynamic instability
- B. Patients on mechanical ventilators with high PEEP dependency where breaking the circuit could be detrimental to lung recruitment.

CONTRAINDICATIONS

- A. Allergy or sensitivity to epoprostenol or glycine diluent
- B. Discontinue if patient develops pulmonary edema during dose initiation.

- C. Active pulmonary hemorrhage
- D. Pregnancy
- E. Pediatrics
- F. Neonates
- G. Patients with significant bleeding

POTENTIAL RISKS

A risk associated with epoprostenol nebulized through a ventilator is ventilator failure. Epoprostenol may increase the risk of ventilator valves malfunction. This may result in significant auto-PEEP and hypotension. The ventilator must be protected by two disposable filters to alleviate this risk.

SIDE EFFECTS

- A. Rebound hypoxemia and pulmonary hypertension from abrupt withdrawal
- B. Systematic hypotension
- C. Bleeding (decrease in platelet aggregation)
- D. Nausea/vomiting, hypotension, chest pain, dyspnea, bradycardia, tachycardia, headache, anxiety or dizziness
- E. Facial flushing

ASSESSMENT OF OUTCOME

- A. The desired effect is improved oxygenation as measured by PaO₂, decrease mean pulmonary artery pressure (mPAP), and decrease central venous pressure (CVP).
- B. A 20% increase in PaO₂ is recommended as the minimum response. For pulmonary hypertension, a 20% decrease in mPAP at any point indicated a positive response.
- C. If minimum response is not achieved in 4 hours, physician will be contacted and discontinuation of inhaled epoprostenol should be considered.

PROCEDURE

EQUIPMENTS

- A. Designated infusion syringe pump.
- B. Heated high flow nasal cannula (HHFNC) or ventilator
- C. Four (4) Iso-Gard HEPA Light filters - two (2) filters for initial set up and two (2) as standby
- D. Aeroneb Solo nebulizer cup (keep 1-2 extras at bedside)
- E. Epoprostenol prepared by the pharmacy department in a 50 mL syring
- F. Aeroneb t-piece
- G. Appropriate sticker labels
- H. Cardiopulmonary resuscitation (CPR) bag for adult

RESPONSIBILITIES

Attending Physician

- A. RESTRICTED TO ADULT INTENSIVE CARE UNITS
- B. All orders must be entered by an attending physician via the EHR with specific indication. Indication determines target goal for dose titration.
- C. Epoprostenol medication orders will reflect initial dosing, weaning, or maintenance dosing. Upon cessation of therapy, all active orders must be discontinued via the EHR.
- D. Patient's nurse and respiratory therapist are notified regarding any therapy initiation, request for dose titration, or therapy cessation.
- E. Epoprostenol dosing is based on *ideal body weight* (kg). Round the weight to the nearest 10 kg for dosing. See [Table 1](#).
 - 1. Male: 50 kg + 2.3 kg for each inch over 5 feet
 - 2. Female: 45.5 kg + 2.3 kg for each inch over 5 feet
- F. Order arterial blood gas (ABG) as clinically relevant based on patient's clinical status.

Respiratory Therapist

- A. The RT will call RT supervisor/manager to inform them before starting epoprostenol.
- B. The RT will obtain the necessary parts listed under the EQUIPMENT section.
- C. The RT will obtain and manage dedicated syringe infusion pump.
- D. The RT will assemble Aeronex nebulizer and infusion pump set-up.
 - 1. For non-intubated patient, connect the infusion tubing to the luer lock connector on the Aeronex nebulizer cup that is inline with the circuit on the dry side.
 - 2. For intubated and on ventilator patient, attach nebulizer inline with ventilator set up at the dry side of the heater chamber.
- E. The RT will place labels "Inhaled EPOPROSTENOL" on syringe pump and [IV-tubingAerogen Solo Continuous Nebulization Tube Set](#).
- F. First, prime the tubing, connect the pre-filled syringe with a standard concentration of epoprostenol obtained from pharmacy to the syringe infusion pump.
- G. RT and RN will perform verification double check for 7-rights of medication administration, and both individual will initial/sign-off on pre-filled epoprostenol syringe *and* on the EHR. See Policy [100.025 Medications: Ordering, Administration and Documentation](#), and [PH.70 High Alert Medication](#)
 - 1. Prior to starting the infusion, RT will document the following in the patients EHR:
 - a. Complete ventilator check including plateau pressure, auto-PEEP, airway resistance and compliance as appropriate to ventilator mode.
 - 2. Hemodynamic parameters including heart rate (HR), blood pressure (BP), and Oxygen Saturation and if available, pulmonary artery pressure (PAP).
- H. Set the pump to deliver ordered dose using hospital approved guardrail function and set the "Volume to be infused" on the pump to 10 mL below the medication fill-line. Syring must be protected from light during the entirety of infusion.

I. Epoprostenol syringe change will be based on the rate of administration.

Aerosolized Epoprostenol rate	Minimum syringe change frequency
≤ 5 mL/hr	Every 8 hours
6 – 6.9 mL/hr	Every 7 hours
7 – 7.9 mL/hr	Every 6 hours
≥ 8 mL/hr	Every 5 hours

Aerosolized Epoprostenol rate	Minimum syringe change frequency
≤ 5 mL/hr	Every 8 hours
6 – 6.9 mL/hr	Every 7 hours
7 – 7.9 mL/hr	Every 6 hours
≥ 8 mL/hr	Every 5 hours

- 1. RT must request new syringe from pharmacy at least 1 hour prior to change time.
- 3. Discard the left-over drug into the sharps container appropriate blue co-mingled Pharmaceutical waste bin.
- J. Hand off report will be given at bedside verifying medication, dosage, change of the syringe time, change of the filter time and nebulizer set up and which number of syringe is currently in use.
- K. For patients on mechanical ventilators, RT will change one of the two HEPA disposable ventilator filters in use connected back to back (one closest to the circuit), every 2 hours. Then rotate the next filter in line to the position nearest ventilator circuit and place the new filter behind it.
- L. Filters will be disposed in the regular trash.
- M. Humidity level on the ventilator or HHFNC should be kept at optimal level.
- N. Change epoprostenol tubing every syringe change.
- O. When the drug is discontinued, notify the supervisor/manager.

Nursing

- A. Nursing will be part of the verification double check at patient bedside with RT to ensure 7-rights of medication administration. See Policy 100.025 Medications: Ordering, Administration and Documentation and PH.70 High Alert Medication
- B. During initial dosing, nurse will obtain and record:
 - 1. Hemodynamics (HR, mean arterial pressure (MAP), oxygen (O₂) saturation, and when possible, mPAP, and cardiac output (CO)) at baseline, then every 15 minutes for the first half-hour then every 30 minutes for the second half-hour, then every 1 hour thereafter.
- C. After any change in dose, nurse will obtain and record hemodynamics (HR, MAP, O₂ saturation, and when possible, mPAP, and CO) at baseline, then every 15 minutes for the first half-hour, then every 30 minutes for the second half-hour, then every 1 hour thereafter.

Pharmacy preparation and hand-off

- A. Pharmacy will prepare epoprostenol solution for nebulization (Final concentration = 30,000 ng/mL = 1.5 mg epoprostenol in 50 mL diluent) in a syringe. (ng = nanogram)
 - 1. Pharmacy will protect final compounded preparation in a green/brown, opaque plastic bag to protect from light.

2. The syringe is stable at room temperature for 8 hours and stable in the refrigerator for 48 hours.
 3. Pharmacy will adhere auxillary label "INHALED Epoprostenol" on the syringe label.
- B. Epoprostenol syringes will be kept in the pharmacy at all times and doses will be dispensed from the pharmacy.
 - C. Hand off of the syringe must be done by a pharmacy personnel directly to the RT responsible for changing the syringe at bedside.
 - D. A back-up syringe should be made and kept in the refrigerator in the pharmacy until full discontinuation of therapy.
 - E. RTs to label the syringe infusion pump and the tubing as "INHALED Epoprostenol" at bedside.

DOSING

*****ALL dosing must be done based on ideal body weight rounded to the nearest 10 kg*****

Acute Respiratory Distress Syndrome

- Initiate at a dose of 50 ng/kg/min via continuous nebulization. Doses higher than 50 ng/kg/min has not been studied in ARDS.
- The dose of epoprostenol should be decreased by 10 ng/kg/min every 2 hours as tolerated by the patient when weaning off therapy.

Pulmonary Hypertension, Right Heart Failure Following Pulmonary Embolism, Severe Right Heart Failure

- Inhaled epoprostenol therapy may be considered for patients with refractory hypoxemia and mean pulmonary artery pressure >30 mmHg, PaO₂/FiO₂ <150, or cardiac index less than 2.2 L/min/m².
 - Initiate at a dose of 10 ng/kg/min.
 - The dose of epoprostenol may be titrated up by 10 ng/kg/min every two hours to a maximum of 50 ng/kg/min.

Table 1. Aerosolized Epoprostenol rate in mL/hr based on 1.5 mg/50 mL syringe (30 mcg/mL = 30,000 ng/mL)							
Epoprostenol dose in ng/kg/min	Dosing Ideal Body Weight in kg						
	40 kg	50 kg	60 kg	70 kg	80 kg	90 kg	100 + kg
10	0.8	1	1.2	1.4	1.6	1.8	2
20	1.6	2	2.4	2.8	3.2	3.6	4
30	2.4	3	3.6	4.2	4.8	5.4	6
40	3.2	4	4.8	5.6	6.4	7.2	8
50	4	5	6	7	8	9	10

WEANING

- A. The RT, nurse, and attending physician must evaluate and document on EHR the patient's readiness to wean at least twice daily.
- B. The patient must be weaned in 2 to 4 hour increments.
- C. New order from the attending physician must be entered via EHR prior to each weaning attempt.
- D. "Failure to wean" is defined as:
 1. An increase in mPAP by 20% or decrease in PaO₂ by 20%

2. A return to baseline hemodynamic parameters
3. Patient response should be assessed at 15 and 30 minutes after reducing the dose
4. If dose reduction is successful, continue current dose and readdress need for additional weaning
5. If dose reduction failed, resume previous dose in conjunction with new order placed by attending physician on EHR

DISCONTINUATION

- A. May discontinue therapy once the patient has been weaned successfully to 10 ng/kg/min.
- B. Remove applicable nebulizer from patient breathing circuit.
- C. For intubated patients remove HEPA filter from expiratory limb.
- D. Document discontinuation in patients medical record.

Reference

1. Ammar, Mahmoud A., et al. "Noninferiority of inhaled epoprostenol to inhaled nitric oxide for the treatment of ARDS." *Annals of Pharmacotherapy* 49.10 (2015): 1105-1112.
2. Ammar, Mahmoud A., Madhu Sasidhar, and Simon W. Lam. "Inhaled epoprostenol through noninvasive routes of ventilator support systems." *Annals of Pharmacotherapy* 52.12 (2018): 1173-1181.
3. Buckley, Mitchell S., and Jeremy P. Feldman. "Inhaled epoprostenol for the treatment of pulmonary arterial hypertension in critically ill adults." *Pharmacotherapy: The Journal of Human Pharmacology and Drug Therapy* 30.7 (2010): 728-740.
4. Davis, Stephanie L., et al. "Use and costs of inhaled nitric oxide and inhaled epoprostenol in adult critically ill patients: A quality improvement project." *American Journal of Health-System Pharmacy* 76.18 (2019): 1413-1419.
5. Epoprostenol [Package Insert]. GlaxoSmithKline. 2019

All revision dates:

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Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medicine Committee	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	9/19/2022
Respiratory Care	Jessica Rodriguez: Manager-Cardiopulmonary Services	9/13/2022
Respiratory Care	Sul Jung: Associate Director of Pharmacy Services	8/24/2022



VENTURA COUNTY
HEALTH CARE AGENCY

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Next Review: 3 years after approval
Owner: Kristina Swaim: Clinical Nurse
 Manager, OB
Policy Area: OB Nursing
References:

OB.65 Admission and Ongoing Care of a Well Newborn

POLICY:

To provide standardization of the admitting procedure for well-newborns and define the services of the perinatal registered nurse (RN). Only healthy newborns without potentially life threatening illnesses will be admitted to the Obstetric (OB) Department. A perinatal nurse will be available to provide temporary transitional care to well-newborns in a "Baby Friendly" environment that supports breastfeeding, and to care for healthy, stable newborns whose mothers are currently unable to provide care, for as brief a time as possible. Every effort will be made to reunite mother and newborn as soon as possible. Nursing interventions will be initiated based on individual patient needs. Medically stable newborns will be placed skin-to-skin with their mothers within the first hour of life. If the RN identifies a potential problem with the newborn, the RN will notify the physician or Neonatal Intensive Care Nursery (NICU) team immediately, following the chain of command. The RN will notify the physician if an attending physician has not examined the newborn within 24 hours of birth. At Ventura County Medical Center (VCMC), the Resident will do an initial newborn assessment after delivery.

PROCEDURE:

- A. The perinatal nurse will provide care to healthy stable newborns in the delivery room, Operating Room, and the post-partum room for the purpose of admission. The perinatal nurse will assess newborns at birth. The admission record in the electronic health record (EHR) will be completed within two (2) hours.
 1. In the delivery room, all infants need a minimum of one (1) hour (golden hour) of skin to skin contact with the mother in a "Baby Friendly" environment.
 2. Breastfed infants need to be put to breast during this time.
- B. Other babies that can be under the care of the perinatal nurse (for as brief a time as possible) include:
 1. Infants whose mother is in the main Operating Room or Recovery Room for caesarean section (C-section) or Post-Partum Tubal Ligation.
 2. Infants whose mother is unable to provide care due to her poor physical condition, including active hemorrhage, seizures, or conditions requiring the mother's transfer to cardiac care unit (CCU) or Telemetry. If it is determined that the mother will be unable to provide care for an extended period of time, the newborn will be transferred to the Pediatric or NICU departments.
 3. Infants with hypoglycemia who need monitoring and require supplemental feeding (per policy)

NOBP.14 Hypoglycemia in the Newborn), until determination is made to transfer baby to the NICU.

ADMISSION PROCEDURE:

The perinatal nurse will be available to assist the labor nurse with care of the newborn at time of delivery. The nursery nurse will assist with resuscitation of the newborn when needed, and will notify the NICU if indicated:

1. The perinatal nurse will assist the labor or circulating nurse at the time of delivery.
2. The radiant warmer will be set up and warmed in the room prior to the delivery of the newborn.
3. When the delivery occurs in the Operating Room, the NICU respiratory therapist will be notified of the cesarean section delivery and be available to assist. The perinatal nurse will maintain a sterile field and receive the newborn. The NICU team will be called for any anticipated high risk delivery.
4. Identify with second nurse:
 - a. Name
 - b. Sex
 - c. ID band number
 - d. Time of birth
 - e. Infant's physician
 - f. Maternal Hepatitis B Surface Antigen, group B streptococcus (GBS) status, Rubella status, and blood type
 - g. History of pregnancy and labor
5. Nursing interventions will be initiated based on individual patient needs.
6. If the nurse identifies a potential problem with the newborn, the nurse will immediately notify the physician, following the chain of command (see policy OB.22 OB Physician Consultations).
7. Labor or perinatal nurse will obtain and assign an Apgar at 1 and 5 minutes after birth. If an Apgar is less than 7, additional scores should be assigned every 5 minutes up to 20 minutes.
8. Admission/birth vital signs - Document temperature, heart rate, respiratory rate, skin color, type of respirations, tone, at least once every 30 minutes, until newborn has remained stable for at least two (2) hours. Vital signs may be taken more frequently if needed or at the discretion of the perinatal nurse. If the infant's temperature is ≤ 97.6 , further admission activities are held until infant has been warmed.
9. Perinatal nurse administers medications as ordered (see policy OB.11 Newborn Admission Medications, Antibacterial Eye Prophylaxis and Vitamin K).
10. Infant is weighed and measured.
11. Newborn nursing assessment is completed within two (2) hours of birth. This will be done by the nursery nurse or post-partum nurse as indicated by census and staffing availability.
12. The RN bathes the newborn when medically stable and temperature is above 97.7 degrees F (see policy OB.70 Newborn Bath).
13. The RN ensures that collected cord blood is sent to the laboratory (see policy N.38 Hemolytic Disease of the Newborn).
14. Footprints of infant and souvenir card are prepared, mother's fingerprint is collected prior to transfer to post-partum.

15. Photo ID is taken and printed per policy OB.44 OB Infant Security - Code Pink/Code Purple.
16. Infant is warmed to 98.0 degrees, wrapped in blankets and transferred to post-partum.
17. Complete crib card with pertinent information.
18. Bulb syringe and The *Neonatal Resuscitation Program* (NRP) resuscitation equipment is placed in crib.
19. The RN will transfer the newborn with the mother to the post-partum room when both are stable, providing report to the assigned post- partum RN.
20. A infant security tag will be placed on newborns ankle upon admission to post partum.
21. An adopted or surrendered newborn will be assigned and cared for in the Pediatrics unit.
22. When the nursery nurse is unavailable the admission procedure will be completed according to the nursery nurse flow sheet (see Attachment A).

NEWBORN NURSING ASSESSMENT

A. Preparation:

1. Gather equipment needed:
 - a. Stethoscope
2. Place infant under radiant warmer with good light source.

B. Physical Assessment – Note findings of assessment and examination in newborn's EHR:

1. Reflexes:
 - a. Moro
 - b. Suck
2. Tone/Activity:
 - a. Active, Quiet, Lethargic, Jittery
 - b. Cry: Vigorous, Weak, High Pitched, Difficult to Elicit
 - c. Moves all extremities
 - d. Posture: Normal for gestational age.
3. Head/Neck:
 - a. Anterior Fontanel: Flat, Bulging, Depressed
 - b. Sagittal Suture: Separate, Overriding
 - c. Facial features: Symmetrical, Asymmetrical
 - d. Scalp Molding, Caput Succedaneum, Cephalohematoma
 - e. Scalp intact: Yes, No
4. Eyes:
 - a. Clear, Drainage
5. Ears, Nose, Throat (ENT):
 - a. Ears: Normal, Abnormal
 - b. Nares: Patent Bilaterally, Obstructed, Flaring

- c. Palate: Normal, Abnormal
- 6. Abdomen:
 - a. Soft, Firm, Flat, Distended
 - b. Bowel Sounds: Active, Diminished
- 7. Thorax:
 - a. Symmetrical, Asymmetrical
 - b. Retractions: Yes, No
 - c. Clavicles: Normal, Abnormal
- 8. Lungs:
 - a. Breath Sounds: Equal Bilaterally, Unequal
 - b. Breath Sounds: Audible in all lung fields, Inaudible, Diminished
 - c. Breath Sounds: Clear, Moist, Wheezing, Grunting
 - d. Respiratory Rate
- 9. Heart:
 - a. Sounds: Regular, Irregular, Murmur
 - b. Rate/Beat
 - c. Capillary Filling Time: Trunk, Extremities
 - d. Peripheral Pulse: Normal, Weak
- 10. Extremities:
 - a. Moves extremities, Limited range of motion (ROM), Unable to assess
 - b. Number: Fingers Right, Left, Toes Right, Left
- 11. Umbilicus:
 - a. Number of vessels
- 12. Anus:
 - a. Patent, Imperforate
- 13. Spine:
 - a. Normal, Abnormal
- 14. Skin:
 - a. Color: Pink, Plethoric, Pallor, Jaundice, Central Cyanosis, Nailbeds, Circumoral, Periorbital, Acrocyanosis
 - b. Rash
 - c. Birthmarks
- 15. Genitourinary (GU):
 - a. Normal Male, Female
 - b. Abnormal Male, Female

16. All assessment information will be documented in the electronic health record (EHR).

Ongoing Well Newborn Care

A. Staff RN Responsibilities for Couplet Care Nurse [SC1]

1. Receives report, and checks newborn identification (ID) bands with Labor and Delivery (L&D) RN or Nursery Nurse. Place infant security tag, if not in place.
2. Performs total care for assigned patients (Newborn Admission Notes).
 - a. Completes physical assessment and charts as soon as possible (ASAP) (within two hours). Document ID band number in the EHR.
 - b. Checks Lab results. Check the data of the Newborn Screen form with the parents (see policy NOB.3 Newborn Screening of Infants).
 - c. ~~Educated~~Educates and assists mothers with breastfeeding and/or bottle feeding. Document education provided and plan of care to continue exclusive breastfeeding if no medical indication to supplement with formula.
 - d. Assists mothers with breast pumping as indicated.
 - e. Administers medications as ordered, as per unit policy.
 - f. Provides parental support, information and teaching.
 - g. Collaborates with ancillary personnel to coordinate patient care.
 - h. Interprets data and report pertinent findings.
 - i. Maintains intravenous infusion.
 - j. Provides for appropriate developmental environment.

~~Sets priorities appropriately.~~
3. Completes assigned workload within shifts.
4. Demonstrates ability to handle unexpected changes in the unit or patient activity.
 - a. Assesses change.
 - b. Initiates appropriate actions.
 - c. Notifies appropriate personnel of changes.
5. Seeks assistance when necessary.
6. Documents care using hospital and unit forms.
 - a. EHR charting.
 - b. Appropriate assignment of acuity and documentation in EHR.
 - c. Nursing Kardex for Couplet Care.
 - d. Discharge teaching sheet.
7. Checks charts and ~~takes off~~reviews new orders ~~every two (2) hours~~ throughout the shift.
8. Rounds with physician on assigned patients, when possible.
9. Keeps the resource nurse informed of patient's status as needed.
10. Assists other staff members as assignment allows.

11. Delegates work appropriately to medical office assistant (MOA).
12. Delegates work appropriately to technicians.
13. Participates in quality control.

- a. Glucose meter
- b. Urine multistick

~~Straightens and stocks cribs and patient rooms.~~

~~Straightens out nursing station prior to end of shift.~~

14. Locates resources in the couplet care unit.

- a. Resource RN

~~Perinatal Advisory Council: Leadership, Advocacy, and Consultation (PAC/LAC)
Guidelines~~

- b. Accesses policies in PolicyStat

15. Completes med/chart audits as per unit policy.
16. Participates in continuous improvement/peer review issues in the unit.
17. Reports to oncoming shift.

B. Physical Exam of the Neonate

1. Demonstrates head-to-toe physical assessment on a stable neonate patient every 12 hours. Document ID bands number on Mom and Baby in EHR. Assure Infant Security Tag is in place, and check integrity of skin surrounding bands and tags.
2. Differentiates normal from abnormal findings.
3. Identifies abnormalities requiring immediate follow-up.
4. Completes assessment documentation accurately.
5. The nurse evaluates vital signs as part of the patient assessment (Continuing care: Standard of Care)
 - a. Temperature, pulse and respiration will be taken every six (6) hours. Axillary temperature measurement will be performed. If axillary temperature is above 99°F, rectal temperature should be measured. The RN will notify the physician/neonatal nurse practitioner (NNP) if the vital signs are out of normal limits. Four (4) limb blood pressure may be ordered for infants suspected of a cardiac defect.
6. Feeding: as determined by Newborn Admission Orders
7. Stools and Urine
 - a. Meconium stooling is seen in 90 percent of newborns within the first 24 hours, and most of the rest do so within 36 hours.
 - b. Voiding, although usually occurring shortly after birth, may not occur until the second day.
 - c. The passage of meconium and urine in the minutes immediately after birth or during the next few hours indicates patency of the gastrointestinal and urinary tracts.
 - d. The physician will be notified for failure of the infant to stool or urinate after these times.

C. Discharge from Couplet Care to Home

1. Identifies infant's and mother's progress required for discharge
2. Identifies policy and procedure for discharge
3. Identifies discharge summary and instruction required to complete discharge
4. Identifies correct lab work to be completed prior to discharge
5. Demonstrates completion of discharge teaching checklist
6. Verifies ID band matching baby and mother
7. Demonstrates proper documentation of the discharge process
8. Makes follow-up appointments as ordered by physicians
9. Ensures Newborn Screen done and completed correctly
10. Ensure Hepatitis B vaccine has been given and correctly documented in EHR
11. Ensure Hearing Screen is completed and documented and, if needed, referral made
12. Remove Infant Security Tag Prior to Discharge.

DOCUMENTATION

Normal Newborn Database – Nursing Assessment

Infant Recovery Record – Weight, Length, Vital Signs, Medications

Newborn Screen Form – Demographic data

Name Cards – Attached to Crib

Electronic Health Record – Nursing Care Plan

REFERENCE

The **Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN)**: Perinatal Nursing, 4TH edition, 2013

All revision dates: 10/17/2022, 2/18/2020, 3/21/2019, 6/13/2018, 2/15/2018, 4/1/2016, 11/1/2013, 12/1/2010, 3/1/2006

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Staff Committees: Family Medicine & Pediatrics	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	10/17/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	3/1/2022
Policy Owner	Kristina Swaim: Clinical Nurse Manager, OB	3/1/2022



VENTURA COUNTY HEALTH CARE AGENCY

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Owner: Kristina Swaim: Clinical Nurse
 Manager, OB
Policy Area: Maternal Child Health
References:

MCH.02 Newborn Screening of Infants

POLICY:

To outline responsibilities associated with newborn screening of infants according to California State regulation. A newborn screen specimen will be collected on each newborn prior to discharge (specimen may not be collected at less than 12 hours of birth).

PROCEDURE:

The California Newborn Screening Program screens all newborns for many genetic and congenital disorders.

A. Newborn Screen Scope of Testing

1. Each pregnant woman admitted for delivery will be provided with a copy of the informational material (within the Postpartum Packet) provided by the State of California, titled "Important Information for Parents," prior to collection of the blood specimen. If a woman is unable to read such material, it will be translated or read to her in a language she understands.
2. If a parent(s) or legally appointed guardian(s) objects to the screening indicate in the specimen not obtained section, patient test refusal. The Test Request Form (TRF) must be signed and dated." The form must be included in the patients chart.

B. When to Collect a Specimen

1. Full-Term Infants: Collect sample before discharge from hospital of birth at greater than 12 hours of age and after feeding, if possible, and no later than the sixth day of life. Target collection time is 24-48 hours of age.
2. Full Pre-Term Infants: Collect sample before discharge from hospital of birth at greater than 12 hours of age and after feeding, if possible, and no later than the sixth day of life. Target collection time is 48-24-48 hours of age.
3. Transfused Infants: A specimen must be collected from any untested infant prior to blood transfusion. If sample is collected before transfusion and less than 12 hours of age, a second specimen will be required 24 hours post transfusion.
 - a. If due to emergent status of infant, Newborn Screen was not collected prior to transfusion, obtain initial specimen 24 hours post transfusion.
 - b. Transfused newborns will be identified as such via appropriate documentation on the collection form and reported as such to the Newborn Screening Area Service Center. The Area Service

Center staff will contact the hospitals that collected these specimens to determine the scheduled time and date of specimen repeats.

~~If due to emergent status of infant, Newborn Screen was not collected prior to transfusion, obtain initial specimen 24 hours post transfusion.~~

~~Transfused newborns will be identified as such via appropriate documentation on the collection form and reported as such to the Newborn Screening Area Service Center. The Area Service Center staff will contact the hospitals that collected these specimens to determine the scheduled time and date of specimen repeats.~~

~~*Low Birth Weight/Critically Ill Infants:* Collect specimen at 48 hours of age unless transfusion is imminent (see above). Physicians/Neonatal Nurse Practitioners (NNPs) attending critically ill newborns that require special care may postpone collection of blood specimen until the life threatening emergency/condition is stabilized. However, the Newborn Screen must be collected before 6 days of age.~~

- ~~4. *Transferred Infants:* If **transfer to another hospital** is imminent, collect sample before transfer, if at all possible, as long as infant is at least 12 hours of age. Be sure to inform the receiving hospital of collection status, including whether or not the sample was collected, age at time of collection, transfusion status, etc. A copy of either the collection form or the State of California form titled *The TRF* should indicate "Hospital Report of Newborn Screening Specimen Not Obtained (NBS-NO-85) should be provided sample not obtained" by checking the box, if the newborn screen was not completed by the delivering hospital.~~

~~For infants **received by transfer** on or before six (6) days of age, a blood specimen should be obtained between 48 hours of age and the 6th day of life (for those infants received after 48 hours of life).~~

~~*Newborns born outside a perinatal health facility.* For newborns not born in a perinatal licensed health facility, but **admitted to a perinatal licensed health facility within the first 6 days of age**, a specimen should be obtained at 48 hours of age if possible. If admitted past 48 hours of life and/or based upon critical care needs/stabilization—obtain specimen by the 6th day of life. *Exception: Specimen may be omitted if newborn's physician has evidence that the specimen was previously obtained and records the results of the test in the newborn's medical record.~~

~~For newborns not born in a perinatal licensed health facility but admitted to a perinatal licensed health facility **AFTER** six (6) days of age, but within the first 30 days of age, a blood specimen should be obtained within 48 hours after admission unless the newborn's physician has evidence that the specimen was previously obtained and records the results of the test in the newborn's medical record.~~

~~*Infants who expire prior to collection:* Complete Test Request Form, indicate infant expired under the specimen not obtained section.~~

~~*Newborn Screening for Babies Leaving the Hospital Prior to 12 Hours of Age:* Obtain specimen prior to discharge from hospital and provide parents with lab slip/order for repeat specimen within 72 hours. Provide parents with State of California literature titled "Newborn Screening for Babies Leaving the Hospital Prior to 12 Hours of Age."~~

- C. For infants **received by transfer** on or before six (6) days of age, a blood specimen should be obtained as soon as possible upon arrival at 24-48 hours of life, but not after six (6) days of age.

1. *Newborn's born outside a perinatal health facility.* For newborns not born in a perinatal licensed

- health facility, but admitted to a perinatal licensed health facility within the first 6 days of age, a specimen should be obtained at 24-48 hours of age if possible. If admitted past 48 hours of life and/or based upon critical care needs/stabilization – obtain specimen by the 6th day of life. *Exception: Specimen may be omitted if newborn's physician has evidence that the specimen was previously obtained and records the results of the test in the newborns medical record.
2. For newborn's not born in a perinatal licensed health facility but admitted to a perinatal licensed health facility AFTER six (6) days of age, but within the first 30 days of age, a blood specimen should be obtained within 48 hours after admission unless the newborn's physician has evidence that the specimen was previously obtained and records the results of the test in the newborn's medical record.
3. Infants who expire prior to collection: Complete Test Request Form, indicate infant expired under the specimen not obtained section.
4. Newborn Screening for Babies Leaving the Hospital Prior to 12 Hours of Age: Obtain specimen prior to discharge from hospital and provide parents with lab slip/order for repeat specimen within 72 hours. Provide parents with State of California literature titled "Newborn Screening for Babies Leaving the Hospital Prior to 12 Hours of Age."

GUIDELINES

- A. The Postpartum welcome packet will include the Newborn Screening information.
- B. Upon admission of the infant, Newborn Screen Test Request Form (TRF - State of California form DHS 4409) is completed in its entirety following instructions provided. Please print legibly using all capital letters with one character per box.
- C. Fill in Specimen Collection Card:
 1. Newborn's name;
 2. Birthdate;
 3. Collection data;
 4. Medical record number.
- D. Prior to collection, either the Laboratory staff or licensed nursing staff collecting the specimen will review the forms for comprehensive completion. If any information is missing, nursing will complete the form at this time. In addition, forms are to be verified and matched against newborn's ID band.
- E. Please refer to NICU policy N.21, *Neonatal Heel Sticks* for guidelines in obtaining blood samples from newborns.
- F. Dried Blood Spot (DBS) Collection
 1. Instructions for collecting adequate dried blood spots are on the back of the Newborn Screening Program Specimen Collection Form (NBS-1(T)). Specifics include:
 2. **Avoid touching the specimen collecting area** at any time with gloved or ungloved hands. Oil, lotion, or powder from hands or gloves prevents the blood from spreading evenly and thoroughly. Use unpowdered gloves during collection.
 3. **A new specimen collection form** must be used for each collection. If a mistake occurs during a collection, throw that used form away and use a new form recollecting the specimen.
 4. **Do not use capillary tubes** for collection of blood spot specimen. It can damage the filter paper,

resulting in an inadequate specimen.

5. **Sterilize** the skin, **wipe dry** with a sterile gauze.
6. **Puncture** the heel with a disposable lancet deep enough to reach the skin's primary blood supply, yet shallow enough to prevent heel or bone injury.
7. Allow a **large drop** of blood to accumulate; wipe away with a sterile gauze.
8. **Allow a second drop of blood to accumulate.** Apply to one side of the specimen collection paper until the circle is filled completely when viewed from both sides.
9. **Allow circles to fill by natural flow** until the circle is completely filled when applying a large accumulated drop of blood.
10. **Do not press collection paper against puncture site.**
11. **Do not apply blood to both sides of the paper.**
12. **Avoid** repeated applications of specimen collection card to fill any one circle.
13. **Air-dry blood spots thoroughly at room temperature** (at least 3 hours).
14. **Keep away from heat, lamps, direct sunlight, and humidity.**
15. **Do not refrigerate.**
16. Complete the specimen collection form with date, time and initials.
17. After collecting the blood, pull off both sections of the barcode labels from the specimen collection card. Place one on the original TRF. Place the other on the goldenrod copy of the TRF.
18. Place in biohazard bag for transport only.

DOCUMENTATION

- A. Insert the goldenrod copy in the infant's paper chart.
- B. Document collection of Newborn Screening Specimen in the Electronic Health Record (EHR).
Documentation will include date and time of collection, and TRF number.
- C. Completed Newborn Screen Collection Form is to be walked to Laboratory and form/infant demographics entered as required on the "Newborn Screening Hospital Log Sheet" (e.g., Newborn's Newborns Name, Sex, Medical Record Number, Form ID Number and initials of staff member). Do not use staples or paperclips/paper clips.
- D. Completed Newborn Screening forms are transported daily to the Laboratory by the Labor & Delivery staff.
- E. If any concerns/omissions are noted, Laboratory staff will notify the appropriate nursing unit manager. It will be the responsibility of nursing to complete omitted data entry.

REFERENCES:

California Department of Health – Newborn Screening Program

All revision dates:

10/17/2022, 2/9/2021, 2/1/2014, 3/1/2010, 6/1/2005,
3/1/2004

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	10/17/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	6/8/2022
Policy Owner	Kristina Swaim: Clinical Nurse Manager, OB	6/2/2022



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 1/1/2004
Last Approved: N/A
Last Revised: 11/22/2022
Next Review: 3 years after approval
Owner: Maura Krell: Clinical Nurse
Manager, Pediatrics/PICU
Policy Area: Maternal Child Health
References:

MCH.11 Transfer Criteria of Stable Neonates

POLICY:

To define the transfer criteria for stable infants and neonates residing in the Neonatal Intermediate Care Unit (NICU) to the Pediatrics (PEDS) Unit and to provide guidelines for their care.

Stable neonates from NICU that are greater than 24 hours of age who meet the criteria of pediatric status may be transferred to the PEDS Unit at the discretion of a Neonatologist.

Newborns whose mothers are absent or have been discharged. For example: awaiting adoption or foster care; newborns requiring phototherapy, etc.

PROCEDURE:

NICU

- A. NICU patients with the above criteria will be identified by the Neonatologist, NNP, Clinical Nurse Manager or Resource Nurse, and determined as stable for transfer to the PEDS Unit.
- B. The Neonatologist will remain the attending physician unless arrangements are made to transfer care to the CCS paneled pediatrician/hospitalist.
- C. Newborn screen to be performed prior to transfer to PEDS if not complete at time of transfer.
- D. Parents are to be notified prior to transfer or as soon as possible.
- E. Transfer orders will be written prior to transfer.

~~Patients will be admitted to the following PEDS Rooms: 301 A/B, 302 A/B, and 307, if possible.~~

COUplet CARE NEWBORN

- A. Prior to transfer to PEDS, transfer orders must be written by the physician and state:
 - 1. The name of the attending physician for the newborn
 - 2. The name of the resident
 - 3. The diagnosis
 - 4. The diet /feeding orders
- B. The newborn may be transferred to PEDS after:

1. Successful completion of the transitional period.
2. At least one successful feeding

CARE GUIDELINES

- A. All neonatal patients will be placed on a central cardiac, respiratory and oxygen saturation monitor unless otherwise ordered by physician.
- B. Strict handwashing between patients including a ~~two~~ one (21) minute hand scrub at the beginning of the shift.
- C. Contact isolation precautions, including gown, when appropriate.
- D. Daily weight in grams.
- E. Strict intake and output, unless otherwise ordered.
- F. Vital signs minimum of every three (3) to four (4) hours and/or with feedings.

~~Documentation of nursing care for the transferred newborn will be:~~

- ~~1. Charted on the Pediatric Daily Flow Sheet~~
- ~~2. Entered into Meditech for:~~
 - ~~a. General Nursery Interventions: flow sheet, shift assessment and vital signs~~
 - ~~b. Normal Newborn Plan of Care~~

DISCHARGE

For discharge criteria see discharge policy. All patients who meet established discharge criteria are to be discharged from PEDS. Discharge planning to be arranged and coordinated by the Discharge Planner, NNP and/or attending physician.

REFERENCES:

AWHONN: NOEP 3rd edition, 2015

All revision dates:

11/22/2022, 7/1/2015, 3/1/2010, 4/1/2008, 9/1/2006,
5/1/2004

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	10/17/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	5/30/2022

Step Description	Approver	Date
Policy Owner	Enriqueta Coronado: Clinical Nurse Manager, NICU	5/18/2022
Nursing Administration	Michelle Sayre: Chief Nursing Officer	11/10/2020
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	11/10/2020
Policy Owner	Kristina Swaim: Clinical Nurse Manager, OB	11/10/2020



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 10/1/1988
Last Approved: N/A
Last Revised: 11/22/2022
Next Review: 3 years after approval
Owner: Maura Krell: Clinical Nurse
Manager, Pediatrics/PICU
Policy Area: Maternal Child Health
References:

MCH.15 Thermoregulation of the Neonate

POLICY:

To provide a standard approach for nursing management of the newborn thermal environment.

PROCEDURE:

- A. ~~The nurse~~Staff will assess the neonatal temperature requirements.
- B. Ambient temperature of the ~~nursery~~NICU rooms should be maintained at ~~74-78~~72-76 degrees F.
- C. Members of the health care team will discuss the type of bed a neonate requires. In general, the following is considered:
 - 1. Baby's size and degree of illness.
 - 2. Need for access and/or specialized equipment.
- D. Abdominal skin temperature should be maintained in the range of 36-36.5 degrees C, considering that the larger term neonate functions at the lower end of the temperature range. Axillary temperatures are measured as ordered by the physician/NNP.

EQUIPMENT:

- A. ~~Isolette~~Incubator/Radiant Warmer/Open Crib
- B. Disposable Probe/Reflective Adhesive Cover
- C. Blanket(s)/Clothing/Hat

GUIDELINES:

- A. Delivery Room:
 - 1. Follow Neonatal Resuscitation (AAP/AHA) Program guidelines for thermal protection during resuscitation utilizing radiant warmer.
 - 2. Use hat and pre-warmed blankets to maintain neonatal temperature.
 - 3. Use skin-to-skin care on mother's chest when neonate stabilizes.

Admission to NICU/PEDS:

4. Isolette/Isolette Care:

- a. Pre-warm isolette to expected Neutral Thermal Environmental Temperatures (see Attachment A).
- b. ~~Neonates under 1500 grams should be placed in a~~ All isolettes in the NICU will double wall isolette walled to decrease radiant heat loss.

5. Isolette Temperature should be set by one of two routines:

a. Servo Controlled:

- i. Skin probe is attached to the neonate's abdomen or side. Avoid bony areas, axilla, liver, extremities, or neonate lying on the probe.
- ii. Servo skin setting is set to maintain abdominal skin temperature (approximately 36-36.5 degrees Celsius or 96.8-97.7 degrees Fahrenheit) that produces acceptable axillary temperatures (approximately 36.7-37.2 degrees Celsius or 98-99 degrees Fahrenheit).
- iii. Neonates <1250 grams in isolette should be servo controlled unless otherwise ordered.
- iv. Monitor and record the neonate's axillary temperature, the environmental temperature, and the servo set point temperature under vital sign information.
- v. REMEMBER with servo controlled isolette care – the infant's body temperature will remain constant but the environmental temperature may fluctuate in the presence of sepsis.

b. Air Temperature Controlled:

- i. Neonates >1250 grams should remain stable on air control.
- ii. With air control, the environmental temperature necessary to provide a neutral thermal environment is set and the isolette maintains this temperature.

~~Suggested initial isolette temperature ranges to maintain a normal skin temperature may be found on Attachment A – Neutral Thermal Environmental Temperatures.~~

c. Incubator Weaning:

Readiness to wean from an isolette is individualized to each infant, and at the discretion of the health care team. In general, weaning begins around 1800 grams with stable temperature in a 30 degree Celsius incubator and good weight gain.

- i. Turn isolette temperature down 1-2 degrees and dress baby in shirt and diaper.
- ii. Monitor temperature every 2-3 hours, beginning about one hour after first decrease – add hat and blankets as bed temperature progressively decreases until bed is on lowest setting and baby has a stable axillary temperature. Infant may remain out of isolette if temperature is stable and infant is gaining weight steadily.
- iii. Infant may go to open crib in hat, shirt and two blankets.
- iv. Baby's dress should be varied according to environmental temperature.
- v. Replace under warmer or in isolette as needed, if temperature is low or unstable. When stable, wean again as above.

d. Care of Incubators:

- i. Isolettes must be plugged in at all times.
- ii. Portholes must be closed at all times, except when caring for infant.

- iii. Do not turn off bed if it is overheated. Do not open portholes to cool isolette UNLESS in constant attendance.
- iv. Beds are stripped and wiped clean daily. Disposable mattresses may be cleaned and re-used as long as plastic on mattress is intact. INCUBATOR IS CHANGED BI-WEEKLY.

6. Radiant Warmers:

- a. Neonates under radiant warmers must have the probe secured to the skin and covered with the foil reflector at all times. The infant should have as much skin exposed as possible.
- b. Skin probe is attached over soft tissue area to insure surface contact. Avoid bony areas, axilla, ~~liver,~~ extremities or neonate lying on the probe. ~~Probes are not interchangeable (i.e., Air Shields to Ohio, etc.).~~
- c. Servo Controller:
 - i. Turn switch to Servo control and ensure alarm system functional.
 - ii. Set temperature selector to 36.5 degrees Celsius and adjust as needed by infant.
 - iii. Monitor and record the neonate's axillary temperature, the environmental temperature, and the servo set point temperature under vital sign information on the nursing flow sheet.

~~Use heat shield or plastic blanket over radiant warmer sides as needed to reduce insensible water loss.~~

7. Open Crib:

Term neonate or stable pre-term neonate will be positioned supine only in the open crib unless medically ordered for alternative positions.

~~Use of K-Pads:~~

- ~~a. K-Pads may be helpful in maintaining temperatures in some unstable or very small neonates or during exchange transfusions.~~
- ~~b. K-Pads available from Central Supply. If needed, fill heating unit with distilled water.~~
- ~~c. Cover pad with single blanket only. A sheepskin will reduce the heat available from the K-Pad.~~
- ~~d. Take infant's temperature every 1-2 hours.~~
- ~~e. Observe carefully for erythema or burning of skin.~~

8. Humidity:

- a. Neonates under 30 weeks gestation need additional ambient humidity.
- b. Neonates on respiratory support will receive additional humidity.

~~Use of Plastic Sheets:~~

- ~~a. A plastic blanket may be used to cover the infant to help with thermoregulation.~~
- ~~b. A plastic blanket should only be used with intubated infants.~~

9. Rewarming a Cold Neonate:

- a. Neonates with axillary temperatures less than 97 degrees Fahrenheit (36.1 degrees Celsius) will be re-warmed in an incubator or radiant warmed with servo temperature control. The neonate will be monitored for apnea, hypotension, and seizures.
- b. Axillary temperatures are checked every 30 minutes until stable. Normal axillary temperatures

are 98-99 degrees Fahrenheit or 36.7-37.2 degrees Celsius.

- i. Set the servo skin control setting 0.5 degrees higher than the skin temperature reading and adjust upward to 36-36.8 degrees Celsius as axillary temperature increases.
- ii. The radiant warmer alarm will sound if the infant's skin temperature is more than 0.5 degree different from the servo set temperature.

10. Hyperthermia:

- a. Investigate reason for elevated temperature.
- b. Notify MD/NNP.
- c. Adjust isolette or radiant warmer to expected Neutral Thermal Environmental Temperature (Attachment A).
- d. Replace temperature probe if needed.

DOCUMENTATION:

- A. Nursing flowsheet/Nursing notes – temperature, type of bed.
- B. Nursing notes – changes in thermal treatment and patient response.

REFERENCES:

AWHONN: NOEP, 3rd edition, 2015

AWHONN: Core Curriculum of Neonatal Intensive Care Nursing, 5th edition, 2014

All revision dates:

11/22/2022, 7/1/2015, 3/1/2010, 5/1/2004, 12/1/2001

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Staff Committees: Family Medicine, OB, Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	10/17/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	4/27/2022
Policy Owner	Enriqueta Coronado: Clinical Nurse Manager, NICU	4/27/2022



VENTURA COUNTY
HEALTH CARE AGENCY

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Next Review: 1 year after approval
Owner: Kristina Swaim: Clinical Nurse
Manager, OB
Policy Area: Maternal Child Health
References:

MCH.24 Management of Early Onset Sepsis (EOS) in the Newborn

POLICY

Ventura County Medical Center (VCMC) and Santa Paul Hospital (SPH) established evaluation and treatment guidelines for newborns **35 weeks gestational age** and older at risk for neonatal Early Onset Sepsis (EOS).

DEFINITIONS

- A. Early Onset Sepsis (EOS) — invasive bacterial infection of the blood or cerebrospinal fluid (CSF) of the newborn, that occurs in the first week after birth. Neonatal Early Onset Sepsis occurs in approximately 0.3 to 0.5 cases per 1000 live births in the United States. Neonatal bacterial sepsis is the 6th leading cause of infant mortality in the United States.
- B. Group B Streptococcus (GBS) — a gram positive organism known to colonize the lower gastrointestinal tract of a mother which has the potential to spread and transmit to the fetus.
- C. Intra-amniotic Infection — also known as chorioamnionitis, an infection with resultant inflammation of any combination of the amniotic fluid, placenta, fetus, fetal membranes, or decidua. Symptoms of maternal fever and one or more of the following: maternal leukocytosis, purulent cervical drainage, fetal tachycardia.
- D. Neonatal Sepsis Risk Calculator — a tool that calculates an individual neonate’s risk of developing EOS. It is based on a multivariate analysis of five risk factors for EOS from data on over 600,000 live births with a gestational age greater than (>) 34 weeks, at 14 hospitals in the USA, between 1993- 2007. This model has an advantage over standard algorithms as it takes away the possible subjectivity of the physician in diagnosing intraamniotic infection and instead uses objective measurements including highest maternal temperature as a continuous variable, duration of rupture of membranes (ROM), gestational age, GBS status and intrapartum antibiotics to identify those infants who are at risk. This predictive model has been shown to reduce the number of newborn invasive procedures and the unnecessary exposure to antibiotics without missing those who are infected.

PROCEDURE

A. Screening For EOS

1. Licensed Clinical Practitioner (LCP) and registered nurse (RN) will review maternal history/ intrapartum course to determine maternal and perinatal risk factors predisposing newborns to EOS.

2. Criteria for Screening

- Gestational age <37 weeks
- Maternal intra-partum temperature ≥ 100.4 or chorioamnionitis
- Maternal GBS+ status
- Prolonged rupture of membranes (ROM) ≥ 18
- Consider screening newborns with vital sign or clinical abnormalities in the first 12 hours after birth.

B. Management of EOS for the Newborn-Process

1. Licensed Clinical Practitioner or RN will Calculate the EOS risk within the first 1 hour of life for all newborns ≤ 36 weeks and older with any of the following risk factors listed above in section A2 Criteria for Screening, or if there are any concern for illness including but not limited to;

- Temperature instability (Temperature ≥ 99.4 axillary, ≥ 100.4 Rectal or ≤ 97.5 axillary)
- Respiratory, gastrointestinal, and neurological abnormalities
- **NOTE:** At risk infants should have clinical reassessment performed and documented frequently in the first 4-6 hours of life because classification of clinical status and management recommendations may change.

2. Perform assessment after completion of skin to skin contact with mother and newborn, first feeding and examination of newborn.

3. The Neonatal Sepsis Risk Calculator may be used within the first 12 hours of life if the newborn is exhibiting vital sign or clinical abnormalities. Clinical judgment by the provider will be used to guide management of care.

3. Enter data into the Neonatal Sepsis Risk Calculator

- a. Incidence of EOS: 1/1000 (this number is subject to change)
- b. Gestational Age
- c. Maternal Fever Intrapartum or Intra-amniotic Infection (Chorioamnionitis)
- d. Rupture of membranes
- e. Maternal Group B Streptococcus positive (GBS+) status.
- f. Type and duration of intrapartum antibiotics given before birth.
- g. Signs of clinical illness at birth.

5. Place infant in one (1) of three (3) categories in the Neonatal Sepsis Risk Calculator based on clinical assessment for completion. **See Attachment A for Reference**

- a. Clinical Illness
- b. Equivocal
- c. Well Appearing

6. Vital Signs & Observation Period:

Follow Sepsis Calculator "clinical recommendation" based on risk stratification:

- If recommendation is "no additional care" for infant with any risk factors:
 - Routine well newborn vital signs per institution protocol
 - Observation period 24-48 hours depending on clinical scenario
 - If recommendation is for increased level of monitoring/observation:
 - Vital signs Q4 hoursX24 (following immediate post-partum period)
 - Vital signs per NICU protocol if infant admitted to NICU
 - Observation period of 24-48 hours depending on clinical scenario
6. Ensure the Neonatal Sepsis Risk Calculator information is included in shift report. If unable to complete all fields within the flow sheet, notify Primary Care Provider.

7. Notify provider if:

- a. The clinical recommendation suggested by the Neonatal Sepsis Risk Calculator is to obtain labs and/or initiate antibiotics
 - i. Obtain vital signs every 4 hours for 24 hours.
 - ii. If needing to obtain a blood culture, a minimum of 1ml is needed
 - iii. One blood culture not two will be taken.
 - iv. If antibiotics are to be started, transfer to NICU
- b. The infant has an equivocal exam at greater than or equal to (>) 2 hours of life.
- c. The infant has clinical signs or symptoms of illness
- d. The RN provider has any concerns or questions any time after birth

NICU neonatologist or neonatal nurse practitioner (NNP) will be called to evaluate newborn if admission to NICU should be considered. Otherwise Primary care provider should be notified.

C. Management of EOS for the Newborn-Patient Education

1. Provide consistent education with families throughout the hospital stay, regarding probable length of stay

An observation period of **24-48-hours** is recommended for the following newborns with EOS risk factors listed in section A, Management of EOS for the newborn.

2. Educate parents about the implication of EOS.

Including:

- Plan of care
- Treatments, interventions
- GBS status and perinatal risks to newborn

References:

- ACOG Committee Opinion (2017). Intrapartum Management of Intramniotic Infection. American College of Obstetricians and Gynecologists. August 2017, Number 712.
- Escobar, G.J., Puopolo KM, Wi S, et al. (2014). Stratification of risk of early-onset sepsis in newborns \geq 34 weeks' gestation. Pediatrics, 133:30-6.
- Kersete.M et al. (2016). Application of Sepsis Calculator in Newborns with Suspected Infection. J Matern Fetal Neonatal Med 29(23), 3860-3865.
- Kuzniewicz et al. (2017). Quantitative, Risk-based Approach to the Management of Neonatal Early-Onset Sepsis. JAMA, April. · Puopolo KM, Benitz WE, Zaoutis TE, AAP COMMITTEE ON FETUS AND NEWBORN, AAP COMMITTEE ON INFECTIOUS DISEASES. (2018). Management of Neonates Born at \geq 35 0/7 Weeks' Gestation With Suspected or Proven Early-Onset Bacterial Sepsis. Pediatrics, 142(6):e20182894.
- AWHONN Perinatal Nursing (2021) Fifth Edition. Wolters Kluwer

All revision dates:

8/10/2021

Attachments

Appendix B-Antibiotics.docx

Attachment A - Early Onset Sepsis Newborn Clinical Classification

Approval Signatures

Step Description	Approver	Date
Medical Staff Committees: Family Medicine, OB, Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	10/17/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	7/12/2022
Policy Owner	Kristina Swaim: Clinical Nurse Manager, OB	7/12/2022



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 5/1/1986
 Last Approved: N/A
 Last Revised: 3/29/2022
 Next Review: 3 years after approval
 Owner: Kristina Swaim: Clinical Nurse
 Manager, OB
 Policy Area: Maternal Child Health
 References:

MCH.27 Newborn Admission Medications

POLICY:

To define nursing responsibilities regarding routine newborn admission standards. These standards are intended to prevent neonatal gonococcal/chlamydia ophthalmia, hemorrhagic disease of the newborn and to detect blood incompatibilities.

PROCEDURE:

The following will be administered according to admission orders:

- A. The nurse will initiate Erythromycin or Gentamicin ophthalmic ointment prophylaxis in all neonates within two (2) hours of birth unless the parents sign a refusal form (see Attachment A).
- B. The nurse will inject Vitamin K in all neonates within two (2) hours of birth unless the parents sign a refusal form (see Attachment A).
- C. The nurse will inject Hepatitis B vaccination within two (2) hours of birth according to Policy OB. 43, unless parents sign a refusal form (see Attachment A)
- D. The nurse will initiate a Hemolytic Disease of the Newborn (HDN) work-up on all neonates born to mothers with blood type O, RH -negative or unknown.

EQUIPMENT

- A. Erythromycin Ophthalmic Ointment 0.5% or Gentamicin ophthalmic ointment 0.3%
- B. Vitamin K for injection: 0.5mg for neonates less than 1 kg (or) 1 mg for neonates over 1 kg.
- C. Umbilical cord blood obtained at delivery.

GUIDELINES

- A. Administer 0.4 inch or 1 cm line ribbon Erythromycin Ophthalmic Ointment 0.5% or 0.5 cm ribbon Gentamicin 0.3% ophthalmic ointment bilaterally into the lower lid of eye for every newborn. Administration can be delayed for visual bonding with the parents or the physician's exam up to three hours from birth.
 1. ~~If the parents refuse to allow the nurse to administer the ointment, a physician must be notified immediately. Parents must sign the "Refusal to Allow Treatment of Vitamin K Preparation and/or Prophylactic Efficient Agent to the Eyes of an Infant and/or Hepatitis B Immunization" form (see~~

~~Attachment A).~~

~~2. In the event of fused eyelids apply topically to the junction of the eyelids.~~

~~a. In the event of fused eyelids apply topically to the junction of the eyelids.~~

~~Inject appropriate dose of Vitamin K, Hepatitis B vaccine as ordered, within two (2) hours of birth.~~

B. Inject 1mg dose of Vitamin K intramuscular once

C. inject Hepatitis B post delivery, 0.5ml Intramuscular once

D. If the parents refuse to allow the nurse to administer the ointment, Vitamin K and or Hepatitis B vaccine, a physician must be notified immediately. Parents must sign the "Refusal to Allow Treatment of Vitamin K Preparation and/or Prophylactic-Efficient Agent to the Eyes of an Infant and/or Hepatitis B Immunization" form (see Attachment A)

E. Cord Blood Collection:

1. Supplies:

a. Red and Lavender top tube

b. Vacutainer specimen cup.

2. Procedure performed by physician.

3. Blood is collected from the cord into cup by gravity.

4. The blood is transferred from the specimen cup to the Red and Lavender tubes.

5. If unable to collect with the above method:

a. Use a 10 ml syringe and 18 gauge needle and draw blood from the placental vessel.

b. Insert the blood filled needle into the Red and Lavender tubes.

6. Label each tube with:

a. Mother's hospital label;

b. Time and date;

c. ~~Sex~~Gender of baby;

d. Mark as Cord Blood

e. Identify Mothers Blood Type on hospital label

f. ~~Initial of labeler (using Cerner code).~~Initials of nurse collecting sample (using Cerner ID).

7. The Laboratory will not accept syringes, needles or specimen cups with blood.

8. Order appropriate lab test in electronic health record.

DOCUMENTATION

Admission Assessment – Date, time, and location of administration.

Electronic health record – Order entry.

All revision dates:

3/29/2022, 5/2/2019, 4/1/2016, 12/1/2010, 1/1/2010,
2/1/2005, 12/1/2001

Attachments

A: Refusal to Allow Use of Vitamin K Preparation, Application of Prophylactic-Efficient Agent, and Hepatitis B Immunization

Approval Signatures

Step Description	Approver	Date
Medical Staff Committees: Family Medicine & Pediatrics	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	9/13/2022
Nursing Administration	Sherri Block: Interim Chief Nursing Officer	7/12/2022
Policy Owner	Kristina Swaim: Clinical Nurse Manager, OB	7/12/2022



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 6/1/1989
Last Approved: N/A
Last Revised: 10/17/2022
Next Review: 3 years after approval
Owner: Enriqueta Coronado: Clinical Nurse Manager, NICU
Policy Area: NICU
References:

N.37 Monitoring Neonates in the NICU

POLICY:

To guide the NICU nurse in assessing indicators of neonatal growth and vital signs.

PROCEDURE:

- A. All infants admitted to the NICU are continually monitored for cardiac/respiratory function with alarm systems activated.
- B. Infants with cyanosis, respiratory distress, apnea or altered consciousness/sedation are monitored with a pulse oximeter.
- C. A transcutaneous oxygen/carbon dioxide monitor may additionally be used, usually to monitor CO₂ levels in parallel comparison with blood gas measurement.
- D. The Nurse is responsible for admission measurements including weight, length and head circumference.
- E. A Health Care Team Member will weigh each infant daily.
- F. Medically unstable neonates will be placed on a bed scale, if possible, to obtain daily weights. Unless order written to refrain from obtaining daily weight on a stable infant.
- G. Neonates hospitalized for longer than one (1) week will have head circumferences (OFC) and lengths measured weekly.

GUIDELINES FOR MONITORING NEONATAL VITAL SIGNS AND MEASUREMENTS

The nurse evaluates and records vital signs as part of the patient assessment. Heart rate and respiration may be alternately recorded from the monitor on critically ill infants to avoid disturbing them more often than every two hours. The nurse will do all temperatures axillary unless a medical order specifies rectal. The nurse will notify the physician/NNP if the vital signs are out of ordered limits. Four limb Blood Pressures may be ordered for infants suspected of a cardiac defect.

A. Placement of Cardiac Respiratory Monitor:

- 1. Cleanse chest as needed.
- 2. Apply chest leads above the nipple on the lateral aspect of the chest and ground lead on exterior thigh or abdomen.

3. Connect the lead wires to the cable and turn on the monitor.
 4. Set alarm parameters:
 - a. Heart rate:
 - i. Premature: 100 – 200
 - ii. Term: 85 – 200
 - b. Respiratory rate: 15 – 100
 - c. Apnea: 15 second delay
 5. Change electrode sites as needed. If electrode dislodges, moisten with water and reapply.
- B. Temperature – normal 97.9° - 99°F. (36.6°-37.2°C.)
1. Infant should have personal thermometer at bedside.
 2. Place the tip securely in axilla, ensuring that skin surfaces come together.
 3. Hold stable until audible beeping. Remove gently and return to case. Clean tip with alcohol when soiled.
- C. Heart Rate (Pulse) – normal 120-180 for preterm, 80-160 for term.
1. Place stethoscope on left mid sternal border on the anterior chest.
 2. With infant quiet, count heart rate for 30 seconds.
 3. Note rhythm and presence of murmurs.
 4. Listen for the Point of Maximal Impulse (PMI) over the anterior chest. Listen to the back for murmurs.
- D. Respiration – normal 40-60.
1. Watch or palpate the rise and fall of abdomen and chest, count for 60 seconds.
 2. Note periodic breathing, nasal flaring, or retractions. (Normal, Moderate, Severe.)
 3. Auscultate breath sounds bilaterally: anterior, posterior, in axillas, upper and lower.
- E. Blood Pressure – normal dependent on birth weight and post-natal age.
1. Select the widest cuff that can be placed around 2/3 length of the limb without touching the joints. The width of the cuff is approximately two thirds the length of the upper arm, the thigh or the calf. Never select an extremity that has an arterial line, compromised circulation or injury. Limbs with peripheral IV's to be used if no other limb is suitable.
 2. Secure cuff around limb and connect to monitor. Calm infant as much as possible. Push ON button, then START button to automatically inflate cuff. The machine senses oscillations in the pulse to determine systolic, diastolic and mean blood pressures. The reading will automatically display the numbers.
 3. If the monitor displays error or the reading is significantly different than expected, the Nurse will recheck cuff size and placement, stabilize the limb, wait 60 seconds and repeat the BP.
 4. Remove the cuff after each reading. Cuff may be left on up to four hours if Blood Pressure is checked every one or two hours. Monitor distal limb for signs of constriction.
- F. Oxygen saturation monitoring:
1. Wipe site of secretions

2. Apply neonatal oxisensor probe to opposite sides of an artery in tissue that can be transilluminated
 - a. Select area of good perfusion: foot, toe, hand, finger, and wrist.
 - b. Follow manufacturer's instructions regarding probe placement.
 - c. Connect oxisensor to the cable and turn on the monitor.
3. The accuracy of the reading is determined with a pulsatile beat and when the oximeter pulse rate matches the apical pulse.
4. Alarm limits are set according to the ordered range for desired oxygen saturation.
5. Monitor perfusion of extremity distal to the probe.
6. In presence of bright light, cover oxisensor with opaque material.
7. Change probe site daily or as necessary.

G. Transcutaneous monitoring:

1. Set-up, maintenance, and site change is conducted according to Respiratory Therapy policies and procedures.
2. The nurse monitors oxygen and carbon dioxide levels, notifying physician/NNP of changes.
3. Assist the Respiratory Therapist in changing probe at least every 4 hours. Temperature range of the probe ranges between 42° and 44° C. Heat of the probe causes skin redness.
4. Notify the physician/NNP of skin breakdown or excoriation.

H. NICU Admission – Vital Sign Frequency

1. Temperature, Pulse and Respirations upon admission.
2. Repeat in 15 minutes.
3. Repeat every 30 minutes if unstable or
4. Every hour if stable x2.
5. Blood pressure within 30 minutes of admission,
6. Blood pressure every 30 minutes, twice if unstable.

I. Continuing Care / General Newborn – Vital Sign Frequency

1. ~~Stable Infant~~Intermediate Status – Temperature, Pulse ~~and~~ Respirations every ~~3-4~~3 hours with feedings. Blood Pressure every ~~2-6-12~~ hours as ordered. Acuity 1:3
2. ~~Intermediate Status~~Critical Stable Infant – Temperature, Pulse ~~and~~, Respirations ~~with~~, and Blood Pressure every ~~3-4~~2 hours ~~with feedings~~. Acuity 1:2
3. ~~Critical Stable~~Unstable Infant – Temperature, Pulse ~~and~~, Respirations ~~every 2 hours with~~, and Blood Pressure ~~every 4 hours~~ at least hourly. Acuity 1:1.
~~Critical Unstable Infant – Temperature, Pulse and Respirations/Blood Pressure at least hourly.~~

J. Measurements:

1. The nurse is responsible for admission measurements including weight, length and head circumference.
2. A Health Care Team Member will weigh each baby daily.
3. Medically unstable neonates will be placed on a bed scale, if possible, to obtain daily weights.

4. Neonates hospitalized for longer than one (1) week will have head circumferences (OFC) and lengths measured weekly on Sunday evenings.
5. Warm scale with a blanket or heat lamp as needed. Plug in and zero scale.
6. Place nude infant on scale with as much equipment above surface as possible. Note weight when reading is stable and return neonate to bed.
7. Bed scale is zeroed with equipment on and neonate lifted off the mattress. The neonate is then placed on mattress and the weight noted.
8. Length is measured with the neonate supine and leg fully extended to achieve crown-heel measurement.
9. Head circumference is measured from just above the eyebrows ~~to~~ and around the prominence of the occiput.
10. Abdominal girth is measured with a tape measure around the neonates abdomen at the level of the umbilicus.

EQUIPMENT

- A. Digital thermometer
- B. Neonatal stethoscope
- C. Clock with second hand
- D. BP Monitor with appropriate size cuff
- E. Baby scale
- F. ~~Heat lamp (indicated for neonates under 1.8kg or new admits)~~ Stadiometer/length board
- G. Blanket
- H. Tape measure; single use, non-stretch
- I. Cardiac-respiratory monitor
- J. Transcutaneous oxygen-carbon dioxide monitor.

DOCUMENTATION

- A. ~~Nursing flowsheet~~
- B. ~~Meditech interventions: NICU Equipment/Safety Check~~
- C. ~~Respiratory flowsheet~~
- A. All assessments and patient care notes are documented in patient's EHR.

REFERENCES:

1. NANN: Policies and Procedures
~~Pac-Lac: Neonatal Guidelines of Care, 1998~~
~~Perinatal Guidelines, 2004~~

All revision dates:

10/17/2022, 6/1/2013, 3/1/2010, 12/1/2004, 4/1/
2002, 4/1/1992

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	10/17/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	5/30/2022
NICU	Enriqueta Coronado: Clinical Nurse Manager, NICU	5/18/2022



VENTURA COUNTY
HEALTH CARE AGENCY

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Last Revised: 10/17/2022
Next Review: 3 years after approval
Owner: Enriqueta Coronado: Clinical Nurse Manager, NICU
Policy Area: NICU
References:

N.46 Neonatal Preoperative and Postoperative Surgical Care

POLICY:

To outline preoperative and postoperative surgical care of the neonate in the NICU.

PROCEDURE:

The Registered Nurse (RN) physically prepares the neonate for surgery. The physician explains the procedure to the parents/guardian. A "Consent for Surgery" form is signed by the parent/guardian prior to the procedure except in an emergency and the family is unavailable.

The following procedures may be performed in the NICU: Chest tube insertion, laser eye, PDA ligation, and central nervous system cutdown. Circumcision is performed in the designated area of the Maternal Infant Unit. See related policies and procedures. Other surgeries are undertaken in the Operating Room.

A. Preoperative

1. Verify signed consent on the chart.
2. Lab work and diagnostic studies completed. Results on chart.
3. *If ordered*, unit of PRBC's on hold in Blood Bank.
4. Maintain IV access for surgeries other than circumcision.
5. Record vital signs, blood glucose, accurate Intake and Output in the chart, bring chart with addressograph plate to the Operating Room.
6. Neonate is accompanied to the Operating Room by the RN and other health care team member as necessary providing thermal and airway support.

B. Intraoperative

1. The RN stays with the patient and assists with care of NICU equipment, as necessary.

C. Postoperative

1. ~~See related guidelines for specific procedures.~~
2. ~~Neonate is assessed for pain and intervention taken.~~

Postoperative

1. See related guidelines for specific procedures.

2. Vital signs every 15 minutes X4, every 30 minutes X2, every hour until stable. Then every 2 hours.
3. Monitor for signs of pneumothorax, perfusion changes, and change in ventilatory needs.
4. Assist with Chest x-ray, labs, and other procedures as required.
5. Parents may visit when infant is stabilized.
6. Assess for pain, offering comfort measures/medication.
7. Cleanse skin of any remaining povidone iodine solution.
8. Monitor surgical dressing and site for drainage, hemorrhage.

DOCUMENTATION

- A. Nursing Flowsheet—Intake and output, vital signs, Laboratory work document in the Electronic Health Record (EHR).
- B. Nursing notes—Procedures and patient tolerance, nursing interventions document in EHR.
- C. MAR—Medications, IV/IA fluids: time, route in the EHR.
- D. Surgical Consent, Anesthesia record – file in chart

REFERENCES:

AWHONN: NOEP, 3rd edition, 2015

All revision dates:

10/17/2022, 7/1/2015, 2/1/2010, 2/1/2002

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	10/17/2022
Nursing Administration	Sherrri Block: Associate Chief Nursing Officer	5/30/2022
NICU	Enriqueta Coronado: Clinical Nurse Manager, NICU	5/18/2022



VENTURA COUNTY
HEALTH CARE AGENCY

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Next Review: 3 years after approval
Owner: Enriqueta Coronado: Clinical Nurse Manager, NICU
Policy Area: NICU
References:

N.62 Neonatal Injection Administration

POLICY:

To describe appropriate technique for administration of injectable medication in neonates and infants.

PROCEDURE:

A. Standard precautions. Follow the ~~five~~seven Rights of Medication administration.

1. **Subcutaneous (SQ) site selection:**

a. Adequate amounts of subcutaneous fat that can be separated from muscle:

i. Low birth weight babies:

1. The back between the shoulder blades.
2. The back of the upper arm.

ii. Infants:

1. The upper arm.
2. The thigh.

2. **Intramuscular (IM):**

a. The patient should be evaluated for adequacy of muscle mass and developmental needs before choosing an injection site. Approved injection sites for intramuscular injections in infants are the vastus lateralis or the rectus femoris muscles in the thigh.

EQUIPMENT

A. 1ml syringe

B. Needle Size Recommendations:

- ~~a. Subcutaneous administration of medicines: use 3/8 inch, 27 gauge needle.~~
 - ~~b. IM injection for pre-term infants less than 1.5kg: use 1/2 inch needle.~~
 - ~~c. IM injection for pre-term newborn: use 5/8 inch long needle.~~
 - ~~d. IM injection for infants > 2 months use 1 inch (25-27g) needle.~~
1. Subcutaneous administration of medicines: use 3/8 inch, 27 gauge needle.

2. IM injection for pre term infants less than 1.5kg: use 1/2 inch needle (25 - 27g).
3. IM injection for pre term – newborn: use 5/8 inch long needle (25 - 27g).
4. IM injection for infants > 2 months: use 1 inch (25 - 27g) needle.

C. Medication

D. Alcohol prep pad.

GUIDELINES

~~Double check dose with second RN or LVN.~~

~~Identify site which should be located a minimum of 2 cm from previous injection. See attached diagrams and photographs.~~

~~Prep site with alcohol.~~

1. ~~**Sub-q**—Lift skin fold with finger and thumb. Insert needle at 30° angle into skin fold. Release skin fold. Inject contents without aspiration. Wait 5 seconds after completion of injection to withdraw needle.~~
2. ~~**IM**—Grasp muscle between thumb and forefinger while stabilizing extremity. Inject at 45-90° angle. Aspirate slightly, if blood appears, withdraw needle and restart procedure. Maximum volume is 1 ml for >1500 grams and 0.5 ml for < 1500 grams. Simultaneous injection by two nurses may be used for volumes greater than 1 ml.~~

~~Use gauze if needed to stop bleeding.~~

DOCUMENTATION

~~MAR—Medication, dose, time, and site.~~

~~Nursing Notes—Patient complications.~~

GUIDELINES

- A. Double check dose with second registered nurse (RN) or licensed vocational nurse (LVN).
- B. Identify site which should be located a minimum of 2 cm from previous injection. See attached diagrams and photographs.
- C. Prep site with alcohol.
 1. **SQ** – Lift skin fold with finger and thumb. Insert needle at 30° angle into skin fold. Release skin fold. Inject contents without aspiration. Wait 5 seconds after completion of injection to withdraw needle.
 2. **IM** – Grasp muscle between thumb and forefinger while stabilizing extremity. Inject at 45-90° angle. Aspirate slightly, if blood appears, withdraw needle and restart procedure. Maximum volume is 1 ml for >1500 grams and 0.5 ml for < 1500 grams. Simultaneous injection by two nurses may be used for volumes greater than 1 ml.
- D. Use gauze if needed to stop bleeding.
- E. If bandaid applied, remove bandaid at 12 hours or sooner.
- F. DOCUMENTATION
 1. Medication Administration Record – Medication, dose, time, and site.

2. Nursing Notes – Patient complications.

REFERENCES:

AWHONN: NOEP Core curriculum for neonatal intensive care nursing, 3rd 5th edition, 2015.

Hensel, D., Morson, G., and Preuss, E. (2013) Best Practices in Newborn Injections: Maternal Child Nursing Vol 38(3); p.163-167.

All revision dates:

10/17/2022, 7/1/2015, 3/1/2010, 10/1/2004, 10/1/2001, 8/1/1999

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	10/17/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	4/27/2022
NICU	Enriqueta Coronado: Clinical Nurse Manager, NICU	4/27/2022



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

Origination: 1/1/2005
Last Approved: N/A
Last Revised: 3/21/2019
Next Review: 3 years after approval
Owner: Maura Krell: Clinical Nurse
Manager, Pediatrics/PICU
Policy Area: PEDS/PICU
References:

P.09 Pediatrics Discharge Planning

POLICY:

To ensure comprehensive discharge planning for Pediatrics patients. Discharge planning is a collaborative, systematic process that utilizes a multidisciplinary approach to ensure patient outcomes in a timely, supportive and cost effective manner.

PROCEDURE:

Discharge planning includes the following components for patients in Pediatrics:

- A. Expected length of stay shall be predicted when possible and discussed with parents.
- B. Immunization status shall be reviewed and patient's immunizations updated when appropriate.
- C. Follow-up appointments with the primary care provider, specialist, and community resources shall be made and communicated to parents/caregiver.
- D. Parent training/teaching.
- E. Faxed discharge summary shall be sent to primary care provider at discharge.
- F. Printed home care instructions shall be provided for the parents.
- G. Referrals shall be made, when indicated, based on parent and/or patient needs to home health agencies and community agencies. This includes, but is not limited to:
 - 1. Public Health Nursing (PHN)
 - 2. Home Health Agencies
 - 3. Durable Medical Equipment (DME) Vendors
 - 4. Tri Counties Regional Center (TCRC) / Early Start
 - 5. Out-of-home care facilities
 - 6. Hospice Services
 - 7. Support Groups / Rainbow Connection
 - 8. California Children's Services (CCS)
 - 9. Special Care Centers (SCC)
 - 10. Medical Therapy Units (MTU)

11. Developmental Clinic

- H. A multidisciplinary team will assist with developing a discharge plan. Team members may include, but are not limited to:
1. Members of the medical staff including attending physicians, residents and sub-specialists
 2. Nursing staff members including discharge planner
 3. Physical/Occupational Therapy
 4. Social Services
 5. Respiratory Care practitioners
 6. Clinical Diabetic Educators
 7. Dietitian
 8. Pharmacist
 9. Patient Advocate
 10. Play Therapist
- I. Each member of the multidisciplinary team has varied roles in the discharge process. All members of the team will attend daily rounds and collaborate with other members of the team. Other specific duties include:
1. Medical staff
 - a. Coordinate the multidisciplinary process.
 - b. Plan for discharge needs.
 - c. Provide the discharge summary and/or discharge encounter form to the primary care provider, sub-specialists, MTU and SCC.
 - d. Communicate and coordinate care with the primary care provider, out-of-home care facilities, and special care centers via telephone and/or mail and/or fax.
 - e. Physician communication occurs primarily via the hospital electronic computer documentation system which is accessible to the MTU, or via telephone and/or mail and/or fax.
 - f. Communicates with family and significant others regarding plan of care.
 2. Nursing staff
 - a. Coordinate and ensure appropriate follow-up of care in collaboration with the other team members.
 - b. Provide the link between the patient/family and other team members.
 - c. Coordinate parent/family education regarding discharge issues.
 3. Discharge Planner
 - a. Identifies patients eligible to participate in CCS MTU program and provides discharge summary via telephone and /or mail and/or fax.
 - b. Assists with identifying patients with CCS eligible conditions and refers to utilization review, High Risk Infant Follow-up (HRIF), MTU or need for developmental clinic for follow-up.
 - c. Communicates and coordinates care with CCS, MTU, DME vendors and Home Health Agencies via telephone and/or mail and/or fax.

- d. Primary responsibility is to coordinate discharge planning efforts by all team members, specifically for those patients identified as "high risk" and those with CCS eligible medical conditions.

4. Social Services

The medical social worker, in conjunction with the discharge planner and other members of the treatment team, determines the extent of the patients needs and coordinates specific social services including, but not limited to:

- a. Responds to requests for consultation from medical and nursing staff.
- b. Performs crisis intervention.
- c. Coordinates and collaborates patient care needs with home health and community agencies.
- d. Performs assessments and follows through with case management through the hospitalization and discharge process.
- e. Identifies needs for transportation, housing, employment and other relevant behavioral health education resources. Assists patients with the placement of these resources.
- f. Assists with the coordination of patient/family multidisciplinary team conferences.

5. Dietitian

- a. Screens all patients on a daily basis based on diagnosis for timing of nutritional screening.
- b. Receives orders for consultation from Medical Staff or Nursing Staff.

6. Physical/Occupational Therapy

- a. Responds to requests for consultation from medical staff.
- b. Performs evaluations and treatment according to patients needs.
- c. Performs developmental assessment and assesses the need for referral to TCRC and/or the school district for continuous services and Individual Education Plan (IEP).
- d. Performs gait/transfer training and home equipment consultation.
- e. Makes recommendations for ongoing therapy in collaboration with CCS nurse case manager and MTU rehabilitation manager at time of discharge, including type of DME needs and outpatient therapy services.
- f. Assists with identifying patients with CCS eligible conditions and refers to utilization review, HRIF, MTU or need for developmental clinic for follow-up.

7. Clinical Nurse Specialist

- a. Consults and provides resources to nursing staff regarding complex discharge needs.
- b. Assists with identifying discharge planning needs.

J. Patient/parent/guardian education is a major focus of discharge planning activities for all patients. Parent/guardian will receive information regarding, but not limited to, the following topics:

1. Current illness
2. Medications
3. Diet
4. Activity, for example: positioning and home exercise program instructions

5. Equipment
 6. Home care
 7. Community resources
- K. Information that is culturally and linguistically appropriate may be provided in various formats:
1. Written material/pamphlets
 2. Video
 3. Demonstration/return demonstration
- L. This information shall be documented in the Electronic Health Record (EHR):
1. Multidisciplinary Patient and Family Education Teaching Record
 2. Discharge Encounter Form.
- M. Patient will be discharged based upon the following discharge criteria:
1. Return to a pattern of physiologic and hemodynamic stability, as evidenced by stable cardiorespiratory function.
 2. Maintenance of optimal weight with demonstration of stable weight gain.
 3. The psychological coping ability of the patient and/or family has been validated as being adequate and appropriate.
 4. The home environment is ready for patient discharge in terms of the availability of the required care assistance equipment and supplies.
 5. The patient and/or family verbalizes and demonstrates readiness to perform self care measures.

GUIDELINES:

The initial assessment for discharge planning needs is conducted during the nursing admission assessment. Each discipline will assess needs for after care as part of their ongoing assessment and reassessment processes. Discharge planning needs will be based on the plan of patient care.

Daily patient rounds will include discussion of discharge plan and needs including:

- A. Discharge criteria
- B. Referrals
- C. Follow up appointments
- D. Home Health Care Services
- E. Durable Medical Equipment Vendors
- F. Social Service, Dietary, Physical Therapy or Occupational Therapy Consultation

Pediatric Multidisciplinary Discharge Rounds will occur biweekly after daily patient rounds.

- G. Based on this assessment, patients who require complex discharge planning needs are referred to the Discharge Planner by nursing or medical staff, which will arrange services/care to meet those needs. Discharge planning care coordinator is a staff nurse responsible for coordinating care of pediatric patients from admission until discharge. A multidisciplinary approach shall provide for patient-family involvement and assist in appropriate use of patient care resources. Examples of patient's needs that would require

more complex discharge planning include, but are not limited to need for:

1. Long term placement
 2. Home health services
 3. Community agency referral
 4. Community mental health
 5. Durable medical equipment not provided by Ventura County Medical Center for use after discharge
 6. Transfer to a tertiary center or rehabilitation center including arrangements for transportation
 7. Specialty medical appointments for CCS eligible conditions; referral to Special Care Center
- H. Additionally, an automatic referral for Discharge Planner for focused discharged planning is made for "high risk" patients:
1. Adolescent (age 14-21) high risk patients include:
 - a. Those with immunosuppressive diseases
 - b. Those who are homeless
 - c. Those that live alone
 - d. Those with potential IV therapy at home
 - e. Suspected cases of abuse, neglect
 - f. Suicide attempts
 2. Pediatric (0-13 years) high risk patients include:
 - a. Those that may require spica cast application
 - b. Anticipated long-term absence from school
 - c. Those with potential IV therapy or oxygen at home
 - d. Suspected cases of abuse, neglect
 - e. Residents of out-of-home care facilities
 - f. Those requiring tube feeds or parenteral nutrition
- I. Nursing will review discharge instructions with caretaker and provide copy of Discharge Instructions/ Teaching instructions. Discharge instructions shall have no medical terminology or abbreviations. Instructions will include any specific recommendations made by members of the healthcare team, such as nutritionist, occupational or physical therapists or social workers.
- J. All pertinent discharge education or referral information shall be documented in the EHR.

All revision dates:

3/21/2019, 3/1/2016, 5/1/2011, 1/1/2007, 12/1/2005,
5/1/2005

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	10/17/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	3/22/2022
Pediatrics	Maura Krell: Clinical Nurse Manager, Pediatrics/PICU	3/22/2022
Pediatrics	Andrei Bobrow: MD	3/21/2022



VENTURA COUNTY HEALTH CARE AGENCY

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Last Revised: 10/17/2022
Next Review: 3 years after approval
Owner: Maura Krell: Clinical Nurse
 Manager, Pediatrics/PICU
Policy Area: PEDS/PICU
References:

P.15 Psychosocial Needs of the Pediatric Patient

POLICY:

To provide guidelines for the ~~healthcare~~health care team to assess and assist in the planning, organizing and directing of providing the developmental and therapeutic playneeds of pediatric patients. The programs initiated will assist to improve the ~~physical, mental and social well-being~~psychosocial needs of the hospitalized pediatric patient.

PROCEDURE:

PROCEDURE:

- A. Children generally respond to an empathetic, but confident approach by a health care professional who does the following:
 1. Assesses any previous experience using information from the family and observations of the child's physical affect and behavior. The child's affect can include such things as being listless, cranky, nervous, clingy, tearful or trusting, relaxed, alert and active. The young child responds strongly to the affect of the adults dealing with him/her. When the adult is nervous the child is likely to be clingy, ~~untrusting~~distrustful and tearful.
 2. Works at the child's level and addresses them directly. This is important even when the child is young. Most children are able to respond to someone who talks to them. Even when the response is a negative one, such as pulling away from contact. This gives clear messages about the need for developing the child's trust through playful means in order to be able to work with the child.
 3. ~~Acknowledges the child's feelings. For very young children, the parent, particularly the mother, is the primary source of comfort and security. Therefore, staff needs to constantly acknowledge the importance of the parent for the child.~~Acknowledges the child's feelings. All feelings, even negative feelings, should be validated. Following validation of feelings, medical staff should correct any misconception that the child may have. Preschool and school aged children are the population of pediatric patients to have the most misconceptions of hospitalizations and/or hospital experiences.
 4. Explains ~~(and preferably demonstrates)~~to to the parents what will happen using accurate, sensory descriptions of what the child will see, hear and feel, then proceeds with confidence, e.g. "Your child will feel some pressure on their foot," rather than "It won't hurt," for an IV insertion following correct use of EMLA cream. Children will be listening to all explanations therefore the use of developmentally appropriate language is required for all descriptions and explanations.

5. ~~Provide~~Practicing family centered care to provide support for parents to make~~in making~~ decisions about the care of their child, e.g., the way their child is managed for procedures such as ~~that the child responds better to being swaddled when having an~~l with comfort holds and/or with the use of distraction methods.~~V. placed, or to being cuddled by mom while it happens.~~

B. Play and Infants~~Developmental Needs of the Pediatric Patient:~~

1. ~~Infants~~Children experience the world through their senses. They process these experiences through play, eventually developing a mental framework for understanding and predicting outcomes. While the ~~infant~~child is in hospital, it is important to provide a stimulating environment for play. This environment ~~includes such things as mobiles, music boxes, rattles, etc., but must always include exposure to other humans.~~ Infants~~Children~~ need to be held, talked to and played with. ~~They need to have the noises they hear explained in a simple fashion so that they are better able to predict the new environment~~This is equally important if the child is intubated, sedated, paralyzed and/or cognitively impaired. ~~g. "Here comes the cart with the lunches. Let's look and see."~~
2. ~~Parents may need support to continue their normal playful relationship with their infant in hospital. For infants under one year of age, adults should provide stimulation such as music, comfort in the form of cuddling when parents are not present or are not able and appropriate support while they play. This may be in the form of a rug and support pillows so that the child can enjoy toys on the floor, or appropriate props so that the child can reach toys in the crib. Infants greatly enjoy a gentle game with an adult, but may also enjoy the opportunity to look out of the window and have the scene described by an adult. Interactive toys such as rattles, pop-up toys, and mobiles that the child can bat or grasp work well for infants.~~Parents may need support to continue their normal playful relationship with their infant in hospital, sometimes with the help of distraction tools. To build trust and respect with the pediatric patient, medical professionals can interact with the patient through a playful relationship.

C. Acknowledge Feelings:

~~Young infants~~Children have the capacity to perceive anxiety in their ~~caregiving~~care giving parent. This can cause them to react more strongly when the parent is distressed or anxious. Staff should be aware of providing as much information and support as possible for parents with ~~young children in hospital in order to assist~~ infants in hospital in order to assist ~~infants to cope with the experience.~~

Provide Age-Appropriate Distraction:

~~Infants may cope better with the experience of being in hospital if they are provided with adequate stimulation and distraction. The attention of infants may be engaged by an adult or other children as they enjoy playful interactions from an early age. Some of the more appropriate play resources for infants include: bubbles, activity frames, mobiles, noise makers, music, pop-up books, toys, finger puppets. Infants provide cues about what they find interesting. Look for stretching and movement of the limbs to denote excitement and interest.~~

Oxygen Prongs and Nasogastric Tubes:

~~When applying these interventions (inserting tubes, naso-gastric feeds, attaching to oxygen) provide distraction in the form of talking, cuddling and soothing for infants.~~

~~The infant may feel more secure if they are tightly swaddled. Visual distraction or noise makers may be more appropriate than toys that require input from the child. Use should also be made, in consultation~~

with the parent, of the usual pacifier used at home when giving nasogastric feeds. Consider providing other forms of comfort, e.g. the child's cuddly blanket, soft toy, etc.

Suctioning:

This can be a disturbing and distressing experience for the infant. Staff should inform the infant of what is about to happen in a confident, friendly manner. In consultation with the parent, the infant may be happier to be held when being suctioned or to have physical contact with the parent.

Feeding and the Suck/Swallow Reflex:

The suck/swallow reflex present at birth is usually inhibited by about 2 months of age and is replaced with a voluntary swallowing pattern. Be sure the child is provided with frequent opportunities to drink even when they are not giving cues to indicate hunger or thirst. A relaxed, consistent feeding routine may facilitate swallowing in a smooth suck/swallow, breath sequence. Relaxation may be induced by soft music, a relaxed, unharried caregiver, smiling and talking to the infant.

Positioning of the child is important to prevent choking. Touching the infant's lips and gentle stroking of the infant's lower jaw and neck facilitate swallowing.

D. Provide Age Appropriate Distraction:

Children may cope better with the experience of being in hospital if they are provided with adequate developmentally appropriate stimulation and distraction. Appropriate distraction tools for infants may include mobiles, teething toys, and/or noise machines. Distraction tools for toddlers may include bubbles, five (5) to ten (10) piece puzzles, and/or books, for pre school tools may include baby dolls, action figure, coloring and/or playdough, for school age tools may include building activities such as legos, board games and/or small hand held games and for teenagers, tools may include music, iPads, and/or video games.

REFERENCES:

~~Wong's Nursing Care of Infants and Children. 9th edition, 2011.~~

All revision dates:

10/17/2022, 3/21/2019, 5/1/2011, 6/1/2008

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	10/17/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	5/24/2022

Step Description	Approver	Date
Pediatrics	Andrei Bobrow: MD	5/24/2022
Pediatrics	Maura Krell: Clinical Nurse Manager, Pediatrics/PICU	4/6/2022



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

Origination: 2/1/2012
Last Approved: N/A
Last Revised: 5/2/2019
Next Review: 3 years after approval
Owner: Maura Krell: Clinical Nurse
Manager, Pediatrics/PICU
Policy Area: PEDS/PICU
References:

P.24 Transportation of PICU Patients within the Hospital

POLICY:

To provide safe intrahospital transport of critically ill Pediatric Intensive Care Unit (PICU) patients at Ventura County Medical Center (VCMC).

PROCEDURE:

Definitions and Abbreviations:

- A. Post-Anesthesia Care Unit - PACU
- B. Intrahospital transport – transport of a PICU patient outside the emergency department, operating room, or PICU
- C. Critical Care Nurse – a staff RN in the emergency department, PACU, or PICU
- D. Licensed Provider – RN, RT, or physician
- E. Unstable Airway – endotracheal tube, laryngeal mask airway, non-mature tracheostomy, obstructed airway requiring advanced support
- F. RSI - Rapid sequence intubation

Guidelines/Policy Statement

- A. At a minimum, the intrahospital transport of critically ill PICU patients requires the presence of the following:
 - 1. A critical care nurse
 - 2. A second licensed provider
- B. The intrahospital transport of critically ill PICU patients with an unstable airway or hemodynamic instability requires the presence of the following:
 - 1. Emergency Department physician or anesthesiologist or pediatric intensivist
 - 2. Critical care nurse
 - 3. Respiratory therapist

- C. Critically ill or pediatric patients undergoing deep sedation shall be transported on a portable monitor with the following measured parameters:
1. EKG (continuous)
 2. Cardiac rate and rhythm (continuous)
 3. Non-invasive Blood Pressure (intermittent)
 4. Pulse Oximetry (continuous)
 5. Respiratory Rate (continuous)
 6. End-tidal CO₂ (for intubated patients)
- D. At a minimum, the intrahospital transport of critically ill or pediatric patients undergoing deep sedation shall include the following supplies and equipment:
1. Manual ventilation device with appropriate size mask
 2. Portable oxygen source
 3. Monitor (above)
 4. RSI kit
 5. Airway kit
- E. Prior to departure, the intrahospital transport team shall verify the following:
1. Presence of required staff
 2. Presence and functionality of supplies and equipment for transport
 3. Monitor is functional with alarms set and audible
 4. The patient's destination is ready to receive the patient
 5. Pre-procedure checklist shall be reviewed
- F. Prior to transfer of patient care, effective hand-off communication shall occur by the following staff:
1. Critical care RN and PICU RN by telephone prior to transport and at the patient bedside
 2. Transferring physician and PICU physician by telephone prior to transport and at the patient bedside
- G. The intrahospital transport team shall maintain infection control precautions for communicable diseases throughout the hospital.

All revision dates:

5/2/2019, 3/1/2016, 2/1/2014

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending

Step Description	Approver	Date
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	10/17/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	4/21/2022
Pediatric Intensive Care Unit	Maura Krell: Clinical Nurse Manager, Pediatrics/PICU	4/1/2022
Pediatric Intensive Care Unit	Jesse Wyatt: MD	3/22/2022



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

Origination: 1/1/1999
Last Approved: N/A
Last Revised: 10/11/2022
Next Review: 3 years after approval
Owner: Jessica Rodriguez: Manager-
Cardiopulmonary Services
Policy Area: Respiratory-NICU/PICU
References:

R.NP.11 Respiratory Plan of Care in the NICU

POLICY:

To provide guidelines for Respiratory Therapists for the respiratory management of infants in the Neonatal Intensive Care Unit (NICU) per California Children's Services requirements.

PROCEDURE:

1. The Neonatal Respiratory Therapist will be responsible for the respiratory management of the infants in the NICU as ordered by ~~the physician/NNP~~ a licensed independent practitioner (LIP). The therapists will be responsible for adjusting all ventilator parameters to maintain blood gas and acid-base status within an acceptable range for that patient as established by the ~~physician/NNP~~ LIP.
2. All respiratory procedures/changes must be accompanied by a ~~physician/NNP~~ LIP order. ~~Physician/NNP~~ LIP orders for ventilatory support will include mode of ventilation, maximum Positive Inspiratory Pressure (PIP), respiratory rate, Positive End Expiratory Pressure or Continuous Airway Pressure (PEEP/CPAP), inspiratory time and Fraction of inspired oxygen (FiO₂). All blood gases must have an order.
3. The respiratory therapists will be required to report each blood gas to the ~~physician/NNP/LIP or Registered RN~~ when. When critical values are obtained and discuss proposed changes in ventilator settings or oxygen procedures. Communication is important to a team effort and a team effort affords the patient's best possible care. Therefore, it is important that the therapist discuss a care plan for each patient with the ~~physician/NNP~~ LIP and nurse to arrive at the most rational therapeutic approach and keep the ~~physician~~ LIP and nurse informed of any major changes in ventilator/patient status. Also, the therapists should work closely with the nursing staff regarding schedule for feeding, CPT, suctioning, bagging and blood gases, etc. The ~~physician/NNP~~ LIP still bears the responsibility for the patient including ventilatory care. If there are any problems or questions, the ~~physician/NNP~~ LIP should be contacted.
4. The respiratory therapists will be responsible for all ventilator and blood gas documentation using the Electronic Health Record. Patient/ventilator monitoring will have goal of documentation every two hours. Infants receiving supplemental oxygen therapy will be monitored and findings documented every two hours. Documentation will include the respiratory rate, heart rate, modality, SpO₂ and FiO₂. There may be times when the respiratory therapist is not immediately available to make the appropriate ventilator or other parameter changes. If the ~~physician, NNPLIP~~ or RN completes these changes they will be responsible to document these changes in the Electronic Health Record and notify the respiratory therapist as soon as possible. Monitoring in the Intermediate Nursery should be at a minimum of every four hours.

All revision dates:

10/11/2022, 11/1/2013, 3/1/2010, 1/1/2009, 4/1/
2008, 3/1/2007, 1/1/2006, 2/1/2004, 5/1/2001

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Respiratory Care	Jessica Rodriguez: Manager-Cardiopulmonary Services	10/11/2022



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 4/1/2013
Last Approved: N/A
Last Revised: 11/14/2022
Next Review: 3 years after approval
Owner: Marites Cull: Director-Surgical Services
Policy Area: Surgical Services
References:

S.42 Scheduling of Emergent and Urgent Surgical Cases

POLICY:

There will be a safe and effective, consistent and fair method of prioritizing emergent and urgent surgical cases and assimilating them into the existing OR schedule.

PROCEDURE:

A. All surgical cases are categorized preoperatively into three (3) categories:

1. Elective: Can be performed anytime
2. Urgent: Should be performed between 0 hours – 3 days
3. Emergent: Should be performed between 0-24 hours, and can be subcategorized as follows:
 - a. Emergent: 0-1 hours
 - b. Emergent: 1-4 hours
 - c. Emergent: 4-24 hours
 - i. Emergency surgery is defined as surgery necessary to help prevent an emergency medical condition from worsening.
 - a. Emergency medical condition means a medical condition manifesting itself by acute symptoms of sufficient severity, including severe pain, which in the absence of immediate medical attention could reasonably be expected to result in any of the following:
 - i. Placing the patient's health in serious jeopardy.
 - ii. Serious impairment of bodily functions.
 - iii. Serious dysfunction to any bodily organ or part
 - ii. There will be an effective, consistent method of communicating emergency scheduling needs to the operating room, anesthesiology standby staff and physicians

B. Elective cases are booked through the routine OR schedule. Non-urgent add-on cases will be accommodated on a case by case basis. ~~Generally non~~Non-urgent add-on cases will be added to the regular OR hours of 07:30 – 15:00.

- C. Urgent cases are booked as add-ons to the existing OR schedule, and will be performed in the order in which the case is added to the schedule.
- D. Emergent cases will be performed according to acuity based on the surgeon's estimation of the patient's condition, and may require urgent or elective cases to be bumped.
 - 1. When an emergency case must pre-empt the surgery schedule, the time slot to be used will be determined by the Anesthesia-In-Charge (AIC) team leader or OR Clinical Nurse Manager in such a way that it will be the least disruptive to the schedule, following these guidelines:
 - a. If there is only one OR available and the room is needed, that OR must be held or bumped regardless of circumstances.
 - b. If there is more than one OR available, then the OR with the least acute schedule should be placed on immediate hold while the bumping of cases is discussed.
 - c. All potentially affected surgeons should then be notified by the bumping surgeon and given the opportunity to discuss and prioritize their case/schedule.
 - d. If no consensus is reached after discussion amongst the involved surgeons, or if a surgeon is unreachable:
 - 1. Contact the Chair of Surgery. If Chair of Surgery is unavailable,
 - 2. Contact the on-call Medical Director
 - 3. All surgeons who feel they were unfairly bumped may retrospectively request review of the decision by Surgery Committee.
 - 2. If one OR is on hold and another room becomes available, guideline #C and #D should be completed again to determine if the on-hold room should change.
 - 3. Children <6 years of age at 11:00 a.m. become Emergent 1-4 hour cases regardless of the type of surgery for which they were scheduled.
 - 4. At 11:00 a.m., complex surgical, oncological and neurosurgical cases become Emergent 1-4 hour cases.

E. Activating the standby (on-call) OR team

- 1. Overlapping or otherwise concomitant emergencies on the P.M. or night shift, weekends or holidays will be discussed by the involved surgeons, ~~the anesthesiologist~~ AIC and the hospital Nursing Supervisor. The decision to activate an additional operating room team will be a group-based decision
 - a. Factors to consider when activating the standby team include:
 - i. Acuity of pending cases
 - ii. Potential for other cases to require urgent or emergent surgery (presence of a woman undergoing a trial of labor after c-section [TOLAC], etc)
 - iii. The recent utilization of the standby team
 - iv. Consideration for the number of times a single surgeon has been "bumped" by more urgent cases
 - b. If no consensus is reached after discussion amongst the involved surgeons, or if a surgeon is unreachable:
 - i. Contact the Chair of Surgery.

- ii. If Chair of Surgery is unavailable, contact the on-call Medical Director
- 2. Emergency cases to be performed when operating room personnel are on standby should be arranged using the following protocol:
 - a. The physician notifies the Hospital Nursing Supervisor via page, supplying patient information and anticipated surgical procedure.
 - b. The resident or attending physician notifies the on-call anesthesiologist.
 - c. The hospital Nursing Supervisor coordinates a starting time then calls the standby nursing staff and notifies any in-house nursing staff

All revision dates:

11/14/2022, 6/8/2021, 4/1/2013

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/14/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/14/2022
Surgical Services	Javier Romero: Medical Director, Surgery	11/14/2022
Surgical Services	Marites Cull: Director-Surgical Services	11/14/2022



**VENTURA COUNTY
HEALTH CARE AGENCY**

Origination: 10/1/1984
Last Approved: N/A
Last Revised: 10/17/2022
Next Review: 3 years after approval
Owner: Marites Cull: Director-Surgical Services
Policy Area: Surgical Services
References:

S.71 Visitors in the PACU

POLICY:

To state the visiting policy in the PACU.

Purpose:

To maintain a safe, controlled environment while offering patients and families the benefits of visitation in the PACU setting.

PROCEDURE:

- ~~A. As a general rule, visitors are discouraged in the PACU.~~
- ~~B. PACU patients who are highly anxious will be allowed to have visitors to promote patient's well-being. Visitors will be permitted to the PACU in accordance with the VCMC/SPH visitor policy, which states no children under age 13 years. Visitors must have no evidence of fever, cough, rash, or symptoms of infectious disease. If symptoms are present, the visitor will not be allowed to visit the PACU.~~
- ~~C. Parents or guardians of a pediatric patient may be allowed to stay with a child whose physical well-being may depend on their presence.~~
- ~~D. Immediate members of a critically ill patient's family may be allowed to visit for a short time.~~
- ~~E. The companion of a mental health patient may be allowed in the PACU with the patient.~~
- A. Visitation in the PACU has shown to increase patient and family satisfaction, decreased anxiety and contributes to greater opportunity for post-operative education, therefore as a general rule visitation in the PACU is supported.
- B. Visitors will be permitted to the PACU in accordance with the health care facility visitor policy 100.011 Hospital Visiting Hours and Regulations.
- C. Visitors must have no evidence of fever, cough, rash, or symptoms of infectious disease. If symptoms are present, the visitor will not be allowed to enter the PACU.
- D. In order to maintain a safe and beneficial experience, visitors should be educated before entering the PACU.
- E. Privacy of all patients must be maintained.
- F. Visitation should take place during a time that is appropriate for the patient, visitor and clinical staff.

G. Due to the unique setting in the PACU, visitation will be considered on an individual basis with approval from the primary nurse caring for the patient.

DOCUMENTATION:

A. Document the presence of family members or other patient visitors in the electronic health record.

All revision dates: 10/17/2022, 12/1/2013, 12/1/1998, 8/1/1995, 12/1/1992

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Surgery Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	10/19/2022
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	10/19/2022
Surgical Services	Javier Romero: Medical Director, Surgery	10/19/2022
Surgical Services	Marites Cull: Director-Surgical Services	10/13/2022

Current Status: Pending

PolicyStat ID: 12617949



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

Origination: 12/1/1989
Last Approved: N/A
Last Revised: 1/23/2020
Next Review: 3 years after approval
Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.03 Against Medical Advice (AMA)

POLICY:

To provide information to Emergency Department (ED) staff to facilitate discharge of a patient who has not been deemed medically clear for discharge.

PROCEDURE:

- A. The "Against Medical Advice" (AMA) form must be completed when a patient demands to leave after a medical screening exam has been completed, but a physician has not written a discharge order.
- B. The "Patient Medical Screening Examination Refusal Form" will be completed when a patient refuses a primary medical screening examination by a physician.
- C. The ED nurse, in conjunction with the ED physician, is responsible for completion of the appropriate documentation and/or intervention.
- D. Before the patient leaves the hospital, an explanation shall be given to him/her concerning the risk involved.
- E. Whether the patient will sign the form or not, a copy will be provided to the patient (or parent or guardian) for signature in the presence of two witnesses.
- F. If the patient refuses to sign the form, indicate so in the space provided for the patient's signature. Include date, time, explanation, and the nurse's signature.
- G. The signature of a witness will complete the form.
- H. Charting will be completed in the patient's Electronic Health Record (EHR) and the AMA form should be placed in the patient's chart with a label to be scanned into the patient's EHR.

All revision dates: 1/23/2020, 12/1/2013, 9/1/2011, 7/1/2009, 12/1/1998, 6/1/1995, 12/1/1994, 12/1/1993, 12/1/1992, 10/1/1991

Attachments

No Attachments

Approval Signatures

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Emergency Department Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/18/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/18/2022
Policy Owner	Kathie Jones: Interim Clinical Nurse Manager, Emergency Services	11/18/2022

Current Status: Pending

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V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

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Last Approved: N/A
Last Revised: 12/1/2013
Next Review: 3 years after approval
Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.06 Discharge from the Emergency Department

POLICY:

To provide guidelines and establish policy regarding information or instructions that must be provided to each patient upon discharge from the Emergency Department (ED).

PROCEDURE:

- A. Each patient will receive verbal and written instructions upon discharge from the ED, to include but not limited to:
 - 1. Date of Visit
 - 2. Diagnosis
 - 3. Medications or prescriptions, if applicable
 - 4. Follow-up
 - 5. Precautions
 - 6. Name of provider
- B. Each patient will have updated vital signs before discharge.
- C. The patient or patient's legal representative (i.e., parent of a minor child) will sign for receipt of instructions and receive a copy of same. The original shall become a part of the patient's medical record, label and scan into the Electronic Health Record (EHR).
- D. In the event the patient, due to illness or disability, is unable to comprehend the instructions, the instructions may be issued to an accompanying responsible adult.
- E. Verbal instructions may be given, if a signature cannot be obtained.

All revision dates:

12/1/2013, 3/1/2011, 7/1/2006, 12/1/2004, 11/1/2001, 1/1/1995, 10/1/1992, 10/1/1989

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Emergency Department Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/18/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/18/2022
Policy Owner	Kathie Jones: Interim Clinical Nurse Manager, Emergency Services	11/18/2022



VENTURA COUNTY
HEALTH CARE AGENCY

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Last Approved: N/A
Last Revised: 1/28/2020
Next Review: 3 years after approval
Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.13 Helicopter Safety

POLICY:

To facilitate the safe departure and landing of helicopters on the Ventura County Medical Center (VCMC) helipad in the emergent transport of patients and equipment when conventional ambulance services would create a time delay critical to patient survival.

PROCEDURE:

EQUIPMENT NEEDED:

- A. Stripped down transport gurney (no mattress, no sheets).
- B. VCMC only: elevator key.

Weight Limits: The weight limitations for helicopter landings on the roof of Ventura County Medical Center is indicated in red numerals on a white background as a number **16** to indicate thousands of pounds, i.e., **16 thousand pounds**.

A. Arriving flights with patients:

1. Notify paging operator by calling **76666** (VCMC) or **8666** (SPH) if patient is a code yellow. When calling, specify, "code yellow, Tier I or II, helicopter, estimated time of arrival (ETA) ____." If patient is not a trauma, specify, "helicopter, ETA ____."
2. Appropriate licensed Emergency Department (ED) staff (if possible, transport staff) and Maintenance and Security, as assigned, will assist. Staff should remove any loose clothing, eye glasses, name badges, etc.
3. Transport gurney will be without a mattress or linens.
4. VCMC only: air conditioning fans will be turned off ten (10) minutes before arrival of helicopter or immediately if ETA is less than ten (10) minutes.
5. VCMC only: elevator key to the helipad is kept on the key ring in the ED.
6. Staff will only approach the helicopter after the pilot gives the signal to approach.
 - a. Be aware of rotating rotors and blades.
 - b. Be prepared to encounter forceful air movements.

B. Departing flights (with patients):

1. Notify Paging of helicopter departure.
2. Air conditioning fans should be turned off.
3. Patient will be loaded onto helicopter transport gurney.
4. Fans will remain off if departure is planned for 20 minutes or less from arrival time.
5. If fans are turned back on, flight team will notify ED Charge Nurse when they expect to leave so that fans can be turned back off. Fans can be turned back on five (5) minutes after take-off.
6. Elevator key to the helipad is kept on the key ring in the ED.
7. Transport or other hospital staff will accompany helicopter crew and patient to the helipad.
8. VCMC only: after helicopter departs, turn fans back on.

C. Departing flights (without patients):

1. Maintenance or Security will escort flight team to roof and ensure that air conditioning fans are turned back on.

The Pediatric Intensive Care Unit (PICU) will be notified of all helicopter arrivals and departures. Patients and visitors will be removed from the playground before helicopter arrivals and departures. Facilities Maintenance will be responsible for the clearing of the playground.

DOCUMENTATION:

Patient's Electronic Health Record (EHR) to reflect means of arrival.

All revision dates: 1/28/2020, 11/16/2016, 12/1/2013, 3/1/2011, 6/1/2006, 12/1/2004, 11/1/2001, 1/1/1995, 10/1/1992

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Emergency Department Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/18/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/18/2022
Policy Owner	Kathie Jones: Interim Clinical Nurse Manager, Emergency Services	11/18/2022

Current Status: Pending

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V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

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Last Revised: 1/28/2020
Next Review: 3 years after approval
Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.14 Admitted Patients/Holding Patients in the Emergency Department

POLICY:

To provide Ventura County Medical Center (VCMC)/Santa Paula Hospital (SPH) Emergency Department (ED) staff with information on holding patients in the department when there are no available beds in the hospital.

PROCEDURE :

- A. In the event of all Intensive Care Unit, Definitive Observation Unit, Telemetry, or Medical/Surgical beds being full, it may be necessary to hold patients in the ED while they are awaiting admission.
- B. When admission/transfer orders are complete, the Admitting Department will admit patients into a virtual bed in Cerner to facilitate ancillary orders.
- C. Physician's orders and all patient care treatments will be initiated and performed as necessary.
- D. The Clinical Nurse Manager or House Supervisor will be notified of ED holds.
- E. The Charge Nurse will maintain communication with the House Supervisor. The patient will be transported to an inpatient room as soon as a bed is available. The ED Charge Nurse will then notify Admitting.
- F. The Charge Nurse will request extra staffing from the House Supervisor as needed for holds.
- G. The actual time the patient leaves the ED shall be documented in the patient's electronic health record.
- H. Patients that are being held in the ED for greater than three (3) hours shall have all pending orders initiated.

All revision dates:

1/28/2020, 11/1/2016, 12/1/2013, 4/1/2011, 10/1/2010, 5/1/2006, 12/1/2004, 11/1/2004, 1/1/1995, 10/1/1992

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Emergency Department Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/18/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/18/2022
Policy Owner	Kathie Jones: Interim Clinical Nurse Manager, Emergency Services	11/18/2022



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 12/1/1989
Last Approved: N/A
Last Revised: 1/23/2020
Next Review: 3 years after approval
Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.15 Health Care Agency (HCA) Employee Industrial Injuries

POLICY:

To establish guidelines to follow in the Emergency Department when completing paperwork and treating an HCA employee industrial injury.

PROCEDURE:

A. Instructions for employee:

1. Reports injury/illness to manager/supervisor
2. Receives Employee's Claim for Workman's Compensation Benefits form #RM 135/DWC from manager.
 - a. Employee completes section 1 through 8. The employee's manager/supervisor completes section 9-18.
 - b. The goldenrod copy of the form goes to the employee.
3. Patient is referred to the Emergency Department (ED) for URGENT medical treatment or to any Ventura County authorized Medical Panel Provider for NON-URGENT treatment.
4. If the patient is treated in the ED, the next business day they shall follow up with a Ventura County authorized Medical Panel Provider.

B. Instructions for the Manager/Supervisor/House Supervisor:

1. Manager/supervisor is notified of injury
 - a. If an injury warrants emergency care after hours or on the weekend, the House Supervisor on duty must be informed **immediately** and will be responsible for the same duties as the manager/supervisor.
2. Manager/supervisor meets with the employee and supplies the Employee's Claim for Workers' Compensation Benefits form as stated above.
 - a. The employee completes section 1 through 8. The manager/supervisor completes section 9-18.
 - b. After completion, the goldenrod copy of the form goes to the employee.
3. The employee/patient is referred to the ED for URGENT medical treatment or to any Ventura County

authorized Medical Panel Provider for NON-URGENT treatment.

4. Manager/supervisor also completes the Employer's Report of Occupational Injury or Illness form #RM75-9/04. (Note: The Employer's Report of Occupational Injury or Illness Involving Bloodborne Pathogens and Infectious Agents (red form) is for exposures **only**).
5. The manager/supervisor sends the following forms via brown mail or scan to the Health Care Agency Human Resources Department:
 - a. Employer's Claim for Workers' Compensation Benefits
 - b. Employer's Report of Occupational Injury or Illness

C. Instructions for ED Admitting Clerk:

1. The Admitting Clerk will supply the Doctor's First Report of Occupational Injury or Illness form #VCMC 390-220 to the injured employee.
 - a. The employee completes sections 1-17 and returns the form to the Admitting Clerk.
2. The Admitting Clerk will then attached two (2) forms to the ED record with label to be scanned:
 - a. Doctor's First Report of Occupational Injury or Illness, partially completed by the patient.
 - b. Physician's Notice of Return to Work or Temporary Medical Restriction's form # RM505.

D. Instructions for ED Physician:

1. Patient is treated.
2. Patient is referred to any County of Ventura authorized Medical Panel provider for follow up care within 24 hours, or if on the weekend, the next business day.
3. ED physician completes the Doctor's First Report of Injury or Illness form, section 18-26, including signature and license number.
4. ED Physician completes the Physician's Notice of Return to Work or Temporary Medical Restrictions form. The goldenrod copy of the form is given to the patient to give to their supervisor.
5. Both completed forms, Doctor's First Report of Injury or Illness and Physician's Notice of Return to Work or Temporary Medical Restrictions, are labeled to be scanned into the patient's Electronic Health Record (EHR) and given to the ED clerk.

E. Instructions for ED Clerk:

1. ED clerk gathers all ED records and forwards them to the Clerical Supervisor for processing.

F. Instructions for ED Clerical Supervisor:

1. Clerical Supervisor receives the ED record along with the two (2) completed forms, Doctor's First Report of Injury or Illness and Physician's Notice of Return to Work or Temporary Medical Restrictions.
2. The Doctor's First Report of Injury or Illness and Physician's Notice of Return to Work or Temporary Medical Restrictions forms are faxed to the Health Care Agency Human Resources Department at 1 (805) 677-5188.
3. The Clerical Supervisor distributes the forms accordingly:
 - a. The pink copy stays with the original ED record.
 - b. The goldenrod copy is filed in the Clerical Supervisor's office.

c. The white and canary copies are forwarded via brown mail to the Insurance Department.

All revision dates:

1/23/2020, 11/1/2016, 12/1/2013, 5/1/2011, 5/1/
2006, 2/1/2005, 11/1/2001, 1/1/1995, 10/1/1992

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Emergency Department Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/18/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/18/2022
Policy Owner	Kathie Jones: Interim Clinical Nurse Manager, Emergency Services	11/18/2022



**VENTURA COUNTY
HEALTH CARE AGENCY**

Origination: 12/1/1989
Last Approved: N/A
Last Revised: 1/28/2020
Next Review: 3 years after approval
Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.19 Organization of the Emergency Department

POLICY:

To define the organization and chain of command in the Ventura County Medical Center (VCMC)/Santa Paula Hospital (SPH) Emergency Department (ED).

PROCEDURE:

It is the responsibility of the Division of Emergency Medicine Services to give emergency care to any person who presents himself to the ED. This care is to be provided without regard to the person's financial eligibility. When injured or acutely ill persons present themselves for treatment, the Admitting Clerk will immediately refer them to the Resource RN or Triage RN. All patients coming to the ED must be seen by a physician, or Advanced Practice Provider, for a medical screening examination prior to referral to another medical facility. The American Hospital Association's Bill of Rights will be adhered to.

The VCMC ED shall be classified as a Level II facility as defined by The Joint Commission of Hospital Accreditation Manual. VCMC and SPH ED's are both classified as a "basic emergency room" as defined by Title 22, California Administrative Code. There shall be at least one physician experienced in emergency care on duty twenty-four hours a day. Specialty consultations will be available within approximately twenty minutes by members of the Medical Staff. Laboratory services shall provide arterial blood gases and pH determinations, coagulation studies, microbiological studies, toxicological and microbiology studies, blood typing, cross-matching capability and blood storage facilities. Diagnostic radiological services shall be available with portable and fixed equipment. Ultrasound and nuclear scanning will be available. Operating suites will be available with thermal control equipment, electrocardiograph, oscilloscope, defibrillator and mechanical ventilator and temperature monitoring equipment. Obstetrical care, ICU/CCU, general medicine and surgical units and mental health facilities will be available.

The ED will:

- maintain working relationships with other area hospital ED's in Ventura County
- assist and instruct Emergency Medical Technicians (EMTs) and Emergency Medical Technician Paramedic (EMT-Ps),
- assist with the Public Health Department in patient education,
- provide assistance to law enforcement agencies at their request,
- work with the Ventura County Health Care Agency through the Pre-Hospital Care Committee in planning and participating in disaster drills, ambulance policies and other matters of concern in emergency medical care.

Direction for the ED shall be provided by the ED Clinical Nurse Manager and a full time Director of Emergency Medicine Services, contracted by Hospital Administration. The Director of Emergency Medicine Services shall be a member of the Department of Emergency Medicine Committee. The Department of Emergency Medicine Committee shall assist the Director. The Committee is responsible for drafting, maintaining and approving all procedures governing and concerning the ED. All staff involved in the ED will carry out these policies.

There will be a clearly visible sign posted for public thoroughfares directing all vehicles and pedestrians to the ED, which will state "BASIC EMERGENCY MEDICAL SERVICE, PHYSICIAN ON DUTY."

The degree of evaluation and treatment rendered for any patient who presents themselves or is brought to the ED shall be the responsibility of a physician. The priority with which persons seeking ED care will be seen by a physician may be determined by specially trained staff using guidelines established by the ED and approved by the Medical Staff. Rosters designating Medical Staff members on duty or on call for primary coverage and specialty consultation shall be posted in the ED.

The ED Manual, ED policies and procedures, and Administrative Manual/policies and procedures will guide emergency patient care given in the ED.

All revision dates: 1/28/2020, 4/1/2011, 12/1/2004, 1/1/1995, 10/1/1992, 12/1/1989

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Emergency Department Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/18/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/18/2022
Policy Owner	Kathie Jones: Interim Clinical Nurse Manager, Emergency Services	11/18/2022

Current Status: Pending

PolicyStat ID: 12686612



**VENTURA COUNTY
HEALTH CARE AGENCY**

Origination: 12/1/1989
Last Approved: N/A
Last Revised: 1/29/2020
Next Review: 3 years after approval
Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.21 Guidelines for Ventura County Medical Center as a Base Hospital

POLICY:

To establish guidelines for Ventura County Medical Center (VCMC) as a base hospital.

PROCEDURE:

- A. Guidelines for ambulance policy will be developed by the Ventura County Health Care Agency (VCHCA) through the Pre-Hospital Services Committee. Such guidelines will be approved by the Board of Supervisors. The VCMC Pre-Hospital Care Coordinator and Base Hospital Medical Director will participate in these procedures as a member of the Pre-Hospital Services Committee or as requested by the Administration of Emergency Medical Services (EMS) Agency.
- B. According to EMS policy #410, VCMC is a Paramedic Base Hospital as designated and approved by the Ventura County Health Care Agency. Copies of the Ventura County EMS Policy and Procedure Manual are available on the County of Ventura Emergency Medical Services website. The function of the base hospital will be based on these policies and procedures.
- C. Continuous performance Improvement surveys will be conducted to include, but not be limited to, field care audit and review, endotracheal intubation, base communication problems and cardiac tracing studies. Additional short-term surveys will be conducted and will be initiated by the Pre-Hospital Care Coordinator (PCC) as situation or need dictates.
- D. Items such as back boards, special collars, splints, etc., left with the patient in the Emergency Department (ED) will be secured for a return pick-up.
- E. A copy of the ambulance record of the patient will be available to the Base Hospital within 24 hours and will be filed with the patient's chart according to EMS policy #1000.

All revision dates:

1/29/2020, 6/1/2011, 12/1/2004, 11/1/2001, 12/1/1998, 1/1/1995, 10/1/1992, 12/1/1989

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Emergency Department Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/18/2022
Nursing Administration	Sherry Block: Associate Chief Nursing Executive, VCMC & SPH	11/18/2022
Policy Owner	Kathie Jones: Interim Clinical Nurse Manager, Emergency Services	11/18/2022

Current Status: Pending

PolicyStat ID: 12617940



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 12/1/1989
Last Approved: N/A
Last Revised: 11/1/2016
Next Review: 3 years after approval
Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.30 Mandatory Reporting in the Emergency Department

POLICY:

To outline the legal requirements for mandatory reporting of incidents by Ventura County Medical Center/ Santa Paula Hospital Emergency Department (ED) staff to the appropriate authorities.

PROCEDURE:

The law requires that certain types of incidents be reported by ED staff to the appropriate agencies in a timely fashion.

Law Enforcement Agencies

- Gunshot wounds
- Stabbing
- Assault
- Child Abuse
- Elder & Dependent Adult Abuse
- Sexual Assault
- Domestic Violence

Animal Control

All animal bites (by telephone or in writing by completion of the appropriate form) Suspected Rabies

Communicable Diseases listed by the California Department of Public Health

(Title 17, California Code of Regulations (CCR) §2500, §2593, §2641.5-2643.20, and §2800-2812 Reportable Diseases and Conditions)* using the Confidentiality Morbidity Report form (PM110) located on the CDPH website

Department of Motor Vehicles

Seizure disorders

Any episode of loss of consciousness in an adult patient

All revision dates:

11/1/2016, 3/1/2006, 12/1/2004, 12/1/1998

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Emergency Department Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/18/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/18/2022
Policy Owner	Kathie Jones: Interim Clinical Nurse Manager, Emergency Services	11/18/2022

Current Status: Pending

PolicyStat ID: 12686608



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

Origination: 12/1/1989
Last Approved: N/A
Last Revised: 1/28/2020
Next Review: 3 years after approval
Owner: Kathie Jones; Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.33 Mobile Intensive Care Nurse (MICN) Staffing in the Emergency Department

POLICY:

To state the requirements of Mobile Intensive Care Nurse (MICN) coverage in the Emergency Department (ED) at Ventura County Medical Center (VCMC).

PROCEDURE:

As a base station hospital, VCMC will provide 24-hour MICN coverage in the ED.

It is the requirement for all ED Registered Nurses (RNs) working at least part time or more per pay period to obtain within two years of hiring their Ventura County MICN certification (depending on class size and ER staffing needs).

Upon completion of MICN certification, the ED Registered Nurse is expected to keep current with educational requirements and to recertify at appropriate two (2) year intervals.

For further policies and procedures, refer to the Paramedic Policy and Procedure Manual located in the Pre-Hospital Care Coordinator's office, and/or refer to Ventura County Emergency Medical Service (EMS) policies located in the Paramedic Radio Room.

Source:

Ventura County EMS Authority

All revision dates:

1/28/2020, 12/1/2013, 12/1/2004, 1/1/1995, 10/1/1992

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Emergency Department Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/18/2022
Nursing Administration	Sherr Block: Associate Chief Nursing Executive, VCMC & SPH	11/18/2022
Policy Owner	Kathie Jones: Interim Clinical Nurse Manager, Emergency Services	11/18/2022

Current Status: Pending

PolicyStat ID: 12617941



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

Origination: 12/1/1994
Last Approved: N/A
Last Revised: 1/28/2020
Next Review: 3 years after approval
Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.34 Narcotics Administration in the Emergency Department

POLICY:

To ensure public and patient safety when administering narcotics in the Emergency Department (ED) at Ventura County Medical Center/Santa Paula Hospital.

PROCEDURE:

A. ED staff will follow the steps below when administering narcotics:

1. Ensure an active prescriber's order is in the patient's electronic health record (EHR).
2. Verify the patient's identification verbally using 2 patient identifiers, name and birthdate as well as validating their wrist band.
3. Monitor the patient's vital signs (blood pressure, pulse and oxygen saturation) before and after administering narcotic.
4. Follow the seven "rights" of medication administration for the "right" drug/route/dose/patient/indication/frequency and documentation.
5. Patient must remain in the ED for 30 minutes after being medicated to rule out adverse reactions.
6. Patient is not permitted to drive themselves home; they must have someone to accompany/drive them home.
7. Patient can arrange for ride home. This must be done prior to being medicated.
8. Law enforcement to be notified if patient leaves before being discharged or if seen driving self home.
9. If patient has no ride home and must drive self home, patient must remain in the ED for a minimum of four (4) hours after being medicated, and must be assessed prior to discharge.

All revision dates:

1/28/2020, 11/1/2016, 12/1/2004, 11/1/2001, 6/1/1995

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Emergency Department Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/18/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/18/2022
Policy Owner	Kathie Jones: Interim Clinical Nurse Manager, Emergency Services	11/18/2022

Current Status: Pending

PolicyStat ID: 12617943



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

Origination: 12/1/1989
Last Approved: N/A
Last Revised: 1/28/2020
Next Review: 3 years after approval
Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.35 Obstetrical (OB) Admissions from the Emergency Department

POLICY:

To establish guidelines for facilitating admission of obstetrical patients from the Emergency Department (ED) to the OB/Labor & Delivery Department.

PROCEDURE:

All OB patients presenting to the ED will be assessed for complaint and gestational age. Treatment area will be determined by this information.

- A. Patient greeted and assessed
- B. Information gathered
- C. Major complaint
- D. Physician or clinic
- E. Number of previous pregnancies/deliveries
- F. Spontaneous Rupture of Membranss (SROM).
- G. Gestational age determined
 1. < 20 weeks gestational age treated in the ED
 - a. cramps
 - b. lack of movement
 - c. bleeding
 2. > 20 weeks gestational age send to Labor & Delivery for treatment
 - a. SROM - (Spontaneous Rupture of Membrane)
 - b. lack of movement
 - c. problems with pregnancy
 - d. urge to push
 - e. previous C-section

- f. active labor
- g. contractions
- h. bleeding

H. Report called to OB on all patients being sent to Labor & Delivery for treatment

I. Patients transported to Labor & Delivery by wheelchair or gurney unless patient requests to walk

J. Patients escorted by Labor & Delivery staff, ED Staff or transporter

K. Patients with SROM must be transported in a wheelchair

All revision dates: 1/28/2020, 12/1/2013, 11/1/2001, 1/1/1995, 10/1/1992

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Emergency Department Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/18/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/18/2022
Policy Owner	Kathie Jones: Interim Clinical Nurse Manager, Emergency Services	11/18/2022

Current Status: Pending

PolicyStat ID: 12617942



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 12/1/1989
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Last Revised: 1/28/2020
Next Review: 3 years after approval
Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.36 Paramedic Base Hospital Designation

POLICY:

To establish guidelines for the designation of Ventura County Medical Center (VCMC) as a Paramedic Base Hospital.

PROCEDURE:

- A. The guidelines for an ambulance policy will be developed by the Ventura County Health Care Agency (VCHCA) through the Pre-Hospital Services Committee. Such guidelines will be approved by the Board of Supervisors. The VCMC Pre-Hospital Care Coordinator and Base Hospital Medical Director will participate in these procedures as a member of the Pre-Hospital Services Committee or as requested by the Administration of Emergency Medical Services (EMS) Agency.
- B. According to EMS policy 410, VCMC is a Paramedic Base Hospital as designated and approved by the Ventura County Health Care Agency. Copies of the Ventura County EMS Policy and Procedure Manual are available on the County of Ventura Emergency Medical Services website. The function of the base hospital will be based on these policies and procedures.
- C. Continuous Performance Improvement surveys will include, but not be limited to, field care audit and review, endotracheal intubation, base communication problems and cardiac tracing studies. Additional short-term surveys will continue and will be initiated by the Pre-Hospital Care Coordinator as situation or need dictates.
- D. Items left with the patient in the Emergency Department such as back boards, special collars, splints, etc., will be secured for a return pick-up.
- E. A copy of the patient's ambulance record will be available to the Base Hospital within 24 hours and will be filed with the patient's chart according to EMS Policy 1000.

All revision dates:

1/28/2020, 6/1/2011, 12/1/2004, 11/1/2001, 12/1/1998, 1/1/1995, 10/1/1992, 12/1/1989

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Emergency Department Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/18/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/18/2022
Policy Owner	Kathie Jones: Interim Clinical Nurse Manager, Emergency Services	11/18/2022

Current Status: Pending

PolicyStat ID: 12617944



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 12/1/1989
Last Approved: N/A
Last Revised: 1/28/2020
Next Review: 3 years after approval
Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.37 Patient Care Philosophy and Goals of the Emergency Department

POLICY:

To state the patient care philosophy and goals of the Emergency Department (ED) at Ventura County Medical Center (VCMC)/Santa Paula Hospital (SPH).

PROCEDURE :

A. Philosophy:

The Emergency Department is available to any person needing medical attention. Physicians and nurses are on duty 24 hours a day. Members of the staff include specially trained nurses, residents and attending Emergency Department physicians.

Patients are treated as quickly as possible based on acuity and order of arrival at the discretion of the nursing/triage nurse staff. The physical and emotional needs of the patient and family guide all care provided by our staff. The patient and their safety is our first priority. Concerns regarding any changes in policies or protocol or improvement in efficiency are first evaluated by how they benefit our patients and their care. Striving to provide the best possible care is achieved through continuous evaluation and personal growth of each of the Emergency Department staff.

B. Goals:

1. To provide high-quality treatment to all persons presenting to the Emergency Department.
2. VCMC Only: to provide Family Practice Residents with opportunities to learn about providing care to persons requiring Emergency Treatment.
3. VCMC Only: to have Family Practice Residents become competent in providing care to persons requiring emergent Medical/Surgical interventions.
4. To initiate early assessment, identify life-threatening conditions and institute appropriate advanced life support prior to Emergency Department arrival by Emergency Medical Services (EMS) protocols and Mobile Intensive Care Nurse (MICN) assistance.
5. To provide an ongoing method of quality assurance so that deviations from the standards of care can be corrected and the efficiency of newly instituted policies or procedures may be monitored.

All revision dates:

1/28/2020, 12/1/2013, 9/1/2011, 5/1/2009, 5/1/2006,

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Emergency Department Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/18/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/18/2022
Policy Owner	Kathie Jones: Interim Clinical Nurse Manager, Emergency Services	11/18/2022

Current Status: Pending

PolicyStat ID: 12686607



**VENTURA COUNTY
HEALTH CARE AGENCY**

Origination: 5/1/2010
Last Approved: N/A
Last Revised: 5/1/2010
Next Review: 3 years after approval
Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.39 Personal and Professional Relationships of Law Enforcement in the Emergency Department

POLICY:

Public trust demands that Ventura Police Department (VPD) officers stationed in the Emergency Department at Ventura County Medical Center (VCMC) avoid conflicts between their professional responsibilities and their personal relationships, whether they involve other law enforcement officers or hospital staff.

PROCEDURE:

Should a conflict arise between an officer's professional responsibilities and personal relationships, it is the responsibility of the officer involved to immediately notify their supervisor. It is the responsibility of the VPD supervisor to then take appropriate action to eliminate the conflict while protecting the interests of VPD and VCMC.

All revision dates: 5/1/2010

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Emergency Department Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/18/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/18/2022
Policy Owner	Kathie Jones: Interim Clinical Nurse Manager, Emergency Services	11/18/2022

Current Status: Pending

PolicyStat ID: 12617946



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

Origination: 12/1/1989
Last Approved: N/A
Last Revised: 1/23/2020
Next Review: 3 years after approval
Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.40 Rabies, Tetanus and Diphtheria Prophylaxis

POLICY:

To facilitate expedient treatment of patients suffering from rabies exposure or exposure to possible tetanus/diphtheria agents.

PROCEDURE:

RABIES

The following table is reproduced from the recommendations of the Public Health Advisory Committee on Rabies prophylaxis:

SPECIES OF ANIMAL	CONDITION OF ANIMAL AT TIME OF ATTACK	TREATMENT OF EXPOSED HUMAN
Wild:		
skunk	Regard as rabies	Rabies Immune Globulin &
fox		Human Diploid Cell Vaccine*
coyote		
bat		
raccoon		
Domestic:		
dog	Healthy	None+
cat		
	Unknown (escaped)	Rabies Immune Globulin &
		Human Diploid Cell Vaccine
	Rabid or suspected	Rabies Immune Globulin & Human Diploid Cell Vaccine

- + Begin treatment with Rabies Immune Globulin and Human Diploid Cell Vaccine at first sign of rabies in biting dog or cat during ten-day holding period.
- + Fill out Rabies Flow Sheet and give copy to patient.
- * Discontinue vaccine if fluorescent antibody tests of animal killed at time of attack are negative.

NOTE: Rodents and Lagomorphs (mice, rats, rabbits, guinea pigs, squirrels, etc.) do not harbor rabies virus and patients bitten by these animals will not receive rabies immunization.

TETANUS

The following protocol will be used for immunization against tetanus for patients with wounds:

A. Patients previously immunized:

1. Clean wounds
 - a. Primary immunization or booster more than five (5) years prior to injury - give diphtheria-tetanus toxoid, acellular pertussis (Tdap 0.5ml / IM)
 - b. Primary immunization or booster dose less than five (5) years prior to injury - no prophylaxis is needed
 - c. Incomplete primary immunization - initial dose of primary immunization and tetanus immune globulin (Human) (Hypertet)
2. Other wounds - contaminated, extensive with tissue destruction, etc.
 - a. Give booster dose if date of last immunization is > 5 years or unknown
 - b. Consider tetanus immune globulin (human) (Hypertet)

B. Patients not previously immunized or are questionably immunized:

1. Start primary immunization (Tdap)
2. Tetanus immune globulin (human) (Hypertet)

C. Adult diphtheria-tetanus toxoid, acellular pertussis (Tdap) will be used for all patients over the age of six (6), except for those patients who are allergic to the diphtheria toxoid. Those patients will receive tetanus toxoid.

D. All patients receiving tetanus vaccination in the Emergency Department will receive a copy of the "Vaccination Information" Pamphlet.

All revision dates: 1/23/2020, 8/1/2011, 12/1/2004, 11/1/2001, 1/1/1995, 10/1/1992, 12/1/1989

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Emergency	Tracy Chapman: VCMC - Med Staff	pending

Step Description	Approver	Date
Department Committee		
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/18/2022
Nursing Administration	Sherry Block: Associate Chief Nursing Executive, VCMC & SPH	11/18/2022
Policy Owner	Kathie Jones: Interim Clinical Nurse Manager, Emergency Services	11/18/2022

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Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.43 Sudden Infant Death Syndrome (SIDS)

POLICY:

To provide a guide for Emergency Department (ED) staff to use when faced with the arrival of a Sudden Infant Death Syndrome (SIDS) patient and family and to ensure the needs of the family are compassionately and adequately met.

PROCEDURE:

- A. After resuscitative measures have been stopped (or if the decision to declare an infant dead on arrival (DOA) has been made by the physician in charge), SIDS must be considered one of the possible causes of death. Any diagnosis at this point is tentative pending autopsy.
- B. If the case is declined by the Medical Examiner's Office,* support the family and offer them the opportunity to hold their baby under direct supervision of a member of the hospital staff in a quiet, private place for no more than one (1) hour. If the family declines, it may be helpful to obtain a photo of the infant to be given to the deputy coroner and to let a member of the family know it is available to them at a later date, if they choose to obtain it.
- C. Keeping the above point in mind, it is vital to attend to the family members and/or child care providers. Ideally a nurse should stay with the family. This can be an ED nurse, ED social worker or the Nursing Supervisor.
- D. The physician in charge of the resuscitation and the nurse assigned to support the family should ideally inform the family of the expiration of the child together.
- E. Attempt to contact individuals whose presence would be helpful to the family, i.e. clergymen, a neighbor, family. Ask if they desire a baptism and document if it is performed.
- F. The on-call Deputy Coroner should be informed as soon as possible and arrangements made to allow privacy for an interview with family.
- G. Be available to answer questions regarding subsequent procedures such as autopsy and availability of local support groups.

*Please note California Statute 27491.2 - Body shall not be disturbed or moved from the position or place of death without permission of the coroner or coroner's appointed deputy. Any violation of this subdivision is a misdemeanor.

All revision dates:

1/28/2020, 12/1/2013, 11/1/2001, 12/1/1998, 1/1/1995, 10/1/1992

Attachments

No Attachments

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Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/18/2022
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Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.46 Treatment of Jail Inmates/Persons on a Legal Hold

POLICY :

To inform Ventura County Medical Center/Santa Paula Hospital Emergency Department (ED) staff of the manner in which to facilitate treatment of jail patients/persons on legal hold.

PROCEDURE:

- A. Jail patients or any person under a legal hold accompanied by a law enforcement officer, will have priority in treatment whenever possible.
- B. Inmates who are acutely ill and who would normally require inpatient care will be admitted to the hospital. In addition, inmates who require narcotics, intravenous fluids or medications, traction, breathing treatments, oxygen, suctioning, monitoring, hourly vital signs, etc., will be admitted to the hospital and not returned to the jail or jail infirmary. The Sheriff's Office will, when deemed necessary, provide 24-hour security coverage for hospitalized inmates.
- C. The decision to place an inmate in the infirmary is usually made by the jail physician or other jail medical staff.
- D. Inmates who require no treatment or a low level of treatment will be discharged to the jail after medical clearance
- E. All medications will be placed in the custody of the accompanying officer.
- F. The accompanying officer on all jail patients treated in the ED will complete a "Legal Hold Form." A copy will be placed on the face sheet.
- G. A printed copy of the patient's completed EHR will be placed in a sealed envelope and given to accompanying law enforcement officer when the inmate is returned to the jail or jail infirmary. The officer will sign aftercare instructions.

All revision dates:

11/1/2016, 12/1/2013, 5/1/2006, 4/1/2003, 11/1/2001, 1/1/1995, 10/1/1992

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Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.48 Volatile Situations in the Emergency Department

POLICY:

To inform Emergency Department staff of the manner in which to proceed when a volatile situation occurs.

PROCEDURE:

- A. In the event of a volatile situation in the Emergency Department, it is essential that staff and other patients and their family members be protected first.
- B. At no time should staff risk injury to themselves or others by attempting to restrain a violent person.
- C. If a patient or visitor becomes violent, disorderly, threatening and/or uncontrollable:
 1. Notify law enforcement on duty as indicated or call 911.
 2. Notify Hospital Security.
 3. If needed, call Code Gray to obtain assistance from within the hospital – see Safety Manual.
 4. The Patient Advocate may be called upon as needed.

Notify the Clinical Nurse Manager (or designee) of the situation as soon as possible.

DOCUMENTATION/NOTIFICATION

- A. Complete a Notification Form.
- B. Notify the Clinical Nurse Manager (or designee) as soon as possible.
- C. Document objective assessment findings in the patient's chart and the patient's response to interventions.

All revision dates:

11/1/2016, 3/1/2011, 5/1/2006, 1/1/2005, 1/1/1995,
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Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Emergency Services
References:

ER.49 Documentation Standards in the Emergency Department

POLICY:

To establish documentation requirements for Emergency Department (ED) patients at Ventura County Medical Center (VCMC)/Santa Paula Hospital (SPH).

PROCEDURE:

- A. An ED record shall be kept for every patient receiving emergency service in the patient's electronic health record (EHR), which shall be part of the official hospital record. This record shall contain:
1. Adequate patient identification and hospital medical record number, date of birth and consents for treatment. When consents are not available or when unable to obtain, documentation will be made. All the paperwork shall be labeled and scanned into the patient's EHR.
 2. Date and time of patient arrival and discharge from the ED.
 3. Means of arrival and by whom transported.
 4. The patient's chief complaint.
 5. Physician Charting Will Include:
 - a. History of injury or illness including emergency care given prior to arrival
 - b. Physical findings with diagrams of injury, if indicated and vital signs.
 - c. Laboratory and radiographic studies ordered and results.
 - d. Impressions, diagnosis, treatment orders and the results of the treatment.
 - e. Instructions in the language understood by patient for after-care given to the patient or relatives, and appointments in writing for return visits to the ED or to other clinics or physicians. When after-care sheets are given to patients, it shall be noted on the chart, in the patient's EHR.
 - f. Disposition, means and condition of the patient on discharge.
 6. Nurses Charting to include:
 - a. Nursing Assessment to include nursing history (emotional and physical) based on ED "Standards of Care."
 - b. Vital signs to include Blood Pressure, Pulse, Temperature, Respiratory Rate, and level of pain

on admission. Then every four (4) hours or more often as indicated or ordered. Critical patients must be evaluated more frequently, i.e., vital signs every 5 to 15 Min on trauma, chest pain, etc., until patient's status improves. Rectal or axillary temperatures on all pediatric patients under the age of two (2) years depending on chief complaint.

- c. Weight in kg on all patients, naked weight on all children under one (1) year old.
- d. Head circumference on pediatric patients when deemed appropriate by attending physician.
- e. Fetal heart tones (FHTs) on all pregnant patients over 12 weeks gestation.
- f. Allergies, medications currently used and tetanus immunization status.
- g. Medication Reconciliation form on all patients in the ED shall be completed by the RN.
- h. Document patient's level of pain initially and any changes in the level or severity as applicable.
 - i. If medications are administered in the ED, note name, dosage, route of administration, site of administration if parental, time administered and results. Document in the patient's EHR.
 - j. Any change in patient's condition.
- 7. Conclusions and documentation if the patient leaves against medical advice, label against medical advice (AMA) form and have scanned into patient's EHR.
- 8. Patients, patient's relatives, guardians, law enforcement or other responsible person's signature on receipt of discharge instructions.
- 9. Document in EHR if a patient leaves without being seen or leaves before treatment is completed.
- 10. All patient records are confidential. Refer to Administrative policy 100.018.
- 11. Patient authorization to release information for follow up care to his or her physician or health care organization is addressed.

B. Trauma Flow Sheet to be used on all Code Yellow Tier I and Tier II patients.

DOCUMENTATION

As above

REFERENCES:

Title 22, California State requirements
The Joint Commission Standards
Emergency Nurses Association - Standards of Care

All revision dates:

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References:

100.009 Sterilization Regulations, Required Consent and Waiting Periods

POLICY:

State and federal regulations mandate special informed consent requirements for certain reproductive sterilizations. There is no difference under the law between sterilization of male or female patients. Regulations apply to elective sterilization only. Certain additional restrictions and requirements apply when the patient's treatment costs are reimbursed by Medi-Cal or certain other federally funded programs (e.g. Family PACT). Treatment which is not for the purpose of, but results in, sterility is not subject to the special sterilization consent requirements.

STERILIZATIONS PERFORMED AS A NECESSARY INCIDENT TO TREATING AN EMERGENCY CONDITION ARE NOT COVERED BY THE REGULATIONS.

PROCEDURE:

REQUIREMENTS APPLICABLE TO ELECTIVE STERILIZATION

An elective sterilization may be performed only when the following conditions are met:

1. Informed consent for the sterilization procedure has been obtained from the patient.
2. The sterilization consent has been signed by the necessary parties.
3. The required waiting period has been satisfied.

PERSONS WHO MAY GIVE INFORMED CONSENT

To give informed consent for sterilization, the patient must be:

1. Able to understand the content and nature of the informed consent process
2. Not in a condition or mental state in which judgment is significantly altered, including conditions resulting from the influence of alcohol or other substances that affect the individual's state of awareness.
3. Not in labor, and not less than 24 hours postpartum or post-abortion.
4. Not seeking to obtain or obtaining an abortion. This sterilization and abortion procedure may be performed concurrently, but only when consent for the sterilization was not given at the time when an abortion decision or arrangement for an abortion were made or during the abortion procedure.
5. A private patient must be eighteen years of age or older, or under 18 and:

- a. Has entered into a valid marriage, whether or not the marriage is terminated.
- b. Is on active duty with the United States Armed Services;
- c. Is over fifteen years old, lives apart from his or her parents and manages his or her own financial affairs; or
- d. Has received a declaration of emancipation pursuant to Family Code

6. A Medi-Cal or federally funded patient must be 21 years of age or older.

ADDITIONAL CRITERIA FOR MEDI-CAL AND CERTAIN FEDERALLY FUNDED PATIENTS

At the time consent is obtained, or at the time the patient undergoes an elective sterilization, the patient must *not* be:

- 1. A "mentally incompetent individual."
- 2. An "institutionalized individual," that is an individual who is:
 - a. Involuntarily confined or detained, under a civil or criminal statute, in a correctional or rehabilitative facility.
 - b. Confined under a voluntary commitment for the care and treatment of mental illness.

REQUIREMENTS OF INFORMED CONSENT – APPLICABLE TO ALL PATIENTS

A patient has given informed consent if the person who obtained consent for the sterilization procedure:

- 1. Offered to answer any questions that the patient to be sterilized may have concerning the procedure.
- 2. Provided the patient with the appropriate sterilization information/booklet and a copy of the appropriate sterilization consent form (Medi-Cal: pm 330 – Non-Federally Funded: pm 284).
- 3. Orally provided all of the following information to the patient to be sterilized:
 - a. Advise that he/she is free to withhold or withdraw consent to the sterilization procedure without affecting the right to future care or treatment and without loss or withdrawal of any federally funded program benefits to which the individual might be otherwise entitled.
 - b. A full description of available alternative temporary methods of birth control.
 - c. Advise that the procedure is considered to be irreversible.
 - d. A full explanation of the specific procedure to be performed.
 - e. A full description of the discomforts and risks that may accompany or follow the procedure, including explanation of type and possible effects of anesthetic to be used.
 - f. A full description of benefits or advantages to be expected as a result of sterilization.
 - g. Approximate length of hospital stay.
 - h. Approximate length of time for recovery.
 - i. Financial cost to patient.
 - j. Information as to whether procedure is new or established.
 - k. Advice that the sterilization will not be performed for at least 30 days, except under specified circumstances (see "Required Waiting Period" section of this policy).
 - l. Name of physician performing procedure. If another physician is substituted, the patient must be notified, prior to administering pre-anesthesia medication, of the physician's name and the reason for

substitution.

4. The person who obtains the patient's consent must determine that the sterilization was requested without fraud, duress, or undue influence, and that the patient's consent was knowingly and voluntarily given.

PERSONS PARTICIPATING IN THE INFORMED CONSENT

The informed consent discussion and review of the consent form must be conducted by the physician who will perform the sterilization, or by the physician's designee. A designee may be a non-physician but should have special knowledge and training in sterilizations. The operating physician or designee who secures consent must sign the consent as soon as the discussion with the patient is completed. By signing the consent form, the physician or designee certifies that he or she has personally:

1. Advised the patient that no federal benefits may be withheld or withdrawn because of the decision not to be sterilized.
2. Explained orally to the patient the information required for informed consent as contained on the consent form and in the regulations.
3. Determined to the best of his or her knowledge and belief, that the patient appeared mentally competent and knowingly and voluntarily consented to be sterilized.

If person giving consent is not fluent in the languages used on the consent form, an interpreter must be provided. If one is provided, the interpreter must certify, by signing the consent form, that the interpreter:

1. Transmitted the information and advice presented orally to the patient.
2. Read the consent form and explained its contents to the patient.
3. Determined, to the best of the interpreter's knowledge and belief, that the patient understood what the interpreter told the patient.

If person giving consent is blind, deaf or otherwise handicapped, suitable arrangements must be made to ensure that the required information listed above and contained on the consent form is communicated.

In cases where the sterilization of an incompetent patient is permitted, the patient's conservator or another person authorized to consent will necessarily be involved. In addition, the conservator must apply for a court order pursuant to Probate Code.

REQUIRED WAITING PERIOD

The following waiting period requirements apply after the informed consent discussion has been completed and the consent form has been signed by the patient or conservator, the physician or designee who obtained the patient's consent, and the interpreter, if any.

1. Thirty days, but not more than 180 days, must pass after the appropriate sterilization consent form was signed by the patient or conservator.
2. An elective sterilization may be performed less than 30 days after the patient signed the consent form only in the following circumstances:
 - i. A non-federally funded (aka private pay) patient voluntarily requests in writing that the 30-day waiting period be waived to no less than 72 hours.
 - ii. The elective sterilization is performed under one of two emergency circumstances: (1) at the time of emergency abdominal surgery or (2) at the time of premature delivery, and only if:

- The physician certifies that informed consent was given and the sterilization consent form was signed at least 30 days before the intended date of sterilization; or
- The physician certifies that at least 72 hours have passed since informed consent was given and the sterilization consent form was signed; and
- The physician describes the emergency or indicates the prior expected date of delivery on the sterilization consent form.

3. If an interpreter is used, this must be reflected on Consent Form to include name, job classification or relationship to the patient.

4. The operating physician must review the consent process with the patient within 72 hours of the time before preoperative medication is administered and must complete the Consent Form.

A. COPIES OF THE CONSENT FORM

1. Original retained in the patient's medical record.
2. Copy provided to the patient.
3. Attached to the bill for Medi-Cal or certain other federally funded patients.

REPORTING REQUIREMENTS

The hospital must report to the Medical Board of California any physician who performs a sterilization procedure that was not in compliance with the informed consent requirements. A quarterly report on the number and types of sterilizations done at Ventura County Medical Center/Santa Paula Hospital will be submitted by Health Information Management to the State Department of Health containing the following:

1. The total number of such sterilizations performed, including diagnosis and types of procedures employed.
2. The numbers and types of such sterilizations performed by each physician on the medical staff preserving the anonymity of the physician and patient.
3. Such demographic and medical data as required by the State.

All revision dates: 6/13/2019, 5/1/2006, 8/1/2004, 7/1/1990, 10/1/1986

Attachments

No Attachments

Approval Signatures

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Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/9/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	10/22/2022
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	10/17/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	6/8/2022

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VENTURA COUNTY
HEALTH CARE AGENCY

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Owner: Todd Flosi, MD: Associate Chief Medical Officer, VCMC & SPH
Policy Area: Administrative - Patient Care
References:

100.013 Do Not Resuscitate (DNR) Orders

POLICY:

At Ventura County Medical Center/Santa Paula Hospital the placing of a Do Not Resuscitate (DNR) order on a given patient's chart remains compatible with aggressive and optimal curative treatment and should not, in any way, imply that curative or palliative treatment should not be rendered where appropriate. The designation of a patient being "no code" does not make him or her ineligible for admission to critical care areas, and should not, in and of itself, limit application of advanced forms of life sustaining treatment.

A "no code" order is not a prescription for neglect, and even in a dying patient with advanced malignancy or organ system failure, continued surveillance for and palliation of those conditions which might cause unnecessary suffering should be on-going.

PROCEDURE:

GUIDELINES FOR DO NOT RESUSCITATE (DNR) ORDERS

DOCUMENTATION

Do Not Resuscitate orders must be entered and signed in the electronic health record. They cannot be verbally communicated. In addition to a dated and signed order for non-resuscitation, a note written in the progress notes, dated the same day and timed accordingly, should reflect the patient's condition, prognosis, the patient's own wishes, directives and level of competency. The physician's assessment of the appropriateness of the order should be recorded. The consent of those **with legal authority** to consent on the patient's belief, if any, should also be noted. Once a "no code" order has been written, there should be ongoing, re-evaluation of the appropriateness of such an order, and modification made, if indicated.

LIMITED ORDERS FOR RESUSCITATION

Limited Resuscitation, or a partial code, may be appropriate in some circumstances. This should, however, be fully defined, both within the orders and progress notes. For example, one might order intravenous lidocaine or atropine for bradyarrhythmias or non-invasive positive pressure ventilation for respiratory failure.

DECISION MAKING

The decision-making process regarding non-resuscitation orders is often extremely difficult, and only the most general guidelines can be offered. Adult patients who possess decision making capacity have the right to

refuse treatment which might be life-sustaining, and certainly can direct that no resuscitation efforts be made, should cardiopulmonary failure occur. Often, the physician and the patient through an extended dialogue, can arrive at a mutually agreed upon course and discuss, quite frankly, the physician's recommendations and the patient's concern over resuscitation. Patients may, via a living will or advance directives, make their wishes known well in advance of their death. More often, however, because of the nature of the illnesses, physicians must face issues of resuscitation and non-resuscitation during a state of crisis, wherein the patient no longer possesses decision making capacity.

Family and friends of the patient may render opinions on non-resuscitation. A request that everything be done may be inferred by the physician that resuscitation need be attempted. What must be considered here is the family's knowledge of the patient, the illness and a realistic understanding of what recovery is likely to represent, and importantly, the likelihood of a successful resuscitation and the chances of recovery thereafter. While the family may be anticipating return to a sapient life, the physician may well know that, at most, one could expect a continued vegetative and non-comprehending existence. Thus, the full content and meaning of a prognosis must be clearly articulated.

Nurses are an essential ally in the care of the patient and his family. The physician writing a "no code" order should do so with the full involvement of nursing staff, and with clear detailing of subsequent supportive care plans.

PATIENTS WITHOUT DECISION MAKING CAPACITY

When the patient in the hospital setting lacks medical decision-making capacity and the patient has no advance directive or has not made his or her wishes clear, the physician should consult with the patient's family and/or representative(s) about issuing a DNR order. Before a DNR order can be written under such circumstances, the following requirements must be met. Two physicians—one of whom is the attending physician with primary responsibility for the treatment and care of the patient at the time the DNR order is being considered—must concur based on ordinary medical standards with a reasonable degree of medical certainty that (1) the patient's condition is terminal and irreversible, (2) the patient's death is imminent, and/or (3) a DNR order is appropriate based on the patient's condition and the wishes of the patient, family, and/or representative(s).

CONSENT FOR WITHHOLDING OF CARDIOPULMONARY RESUSCITATION

It is not necessary to secure a formal witnessed refusal of resuscitation before a DNR order may be written. Consent here is actually meant to represent an **understanding** between physician and patient as to extent of treatment or intervention.

In the circumstances of a patient who possesses decision making capacity, such an understanding may be achieved after sensitive discussion of the patient's prognosis and thoughtful investigation of his/her insights and feelings.

In the case of a patient who is unable to participate in the decision-making process, it is then the physician's responsibility to take that course of action which, based on generally accepted standards of medical practice, would be **proportionate** in terms of the benefits to be gained versus the human and economic burdens caused. As there is no duty on the part of a physician to render treatment which is futile, the medical indications for cardiopulmonary resuscitation (CPR) should be carefully weight, such that the intervention is not applied simply because the patient was unable to reject it.

Formal consent of the patient's family is not required either to institute CPR or to withhold it. The preferred circumstance would be that the treating physician inform the patient's family, in an understandable manner, of the diagnosis, prognosis and the intended course of care. When this is accomplished with confidence, warmth and sensitivity, there should arise disagreement only in the rarest of circumstances.

GUIDELINES FOR DNR ORDERS WITH THE PEDIATRIC PATIENT

Special considerations or conditions may exist with the pediatric patient. Ventura County Medical Center/ Santa Paula Hospital has accepted Children's Hospital of Los Angeles' policy #2142, *Initiating Order to Forego or Discontinue Advanced Life-Sustaining Treatment* (see attached), as a further expansion of the ethical, medical-legal and care issues associated with such patients.

All revision dates: 7/1/2016, 4/1/2016, 12/1/2009, 5/1/2006, 9/1/1998, 7/1/1998, 12/1/1996, 3/1/1995

Attachments

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Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	7/20/2022
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V E N T U R A C O U N T Y
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Policy Area: Administrative - Patient Care
References:

100.014 Patient Transfer to Ventura County Medical Center and Santa Paula Hospital

POLICY:

Unless extenuating circumstances are documented in the patient's Electronic Health Record (EHR), no patient shall be arbitrarily transferred to another hospital if the hospital where he is initially seen has the means for providing adequate care. The patient shall not be transferred until the receiving hospital or facility has consented to accept the patient, and the patient is considered sufficiently stabilized for transport. Responsibility for the patient during transfer shall be established and all pertinent medical information shall accompany patient being transferred.

PROCEDURE:

It is the policy of Ventura County Medical Center (VCMC) and Santa Paula Hospital (SPH) to accept an appropriate *transfer* of a patient with an unstabilized *emergency medical condition* who requires specialized capabilities or facilities when VCMC/SPH has the *capacity* to treat the individual.

A log shall be maintained which documents inquiries for transfers which shall include names, if known, and conditions of patients, the outcome of the call and the reason if VCMC/SPH refuses to accept the transfer.

All requests for medically emergent transfers shall be handled by the Nursing Supervisor to determine bed availability and capacity. The Nursing Supervisor shall then contact the service line attending to determine appropriateness of the transfer and identify the accepting physician. If the patient is to be seen in the Emergency Department by the accepting physician and not transferred to an inpatient bed, the accepting physician shall call the Emergency Department attending with details and plan. All interfacility patient transfers will be directed through the Pre-Admitting office during regular business hours (8:00 am to 5:00 pm, Monday through Friday).

Emergency Department-to-Emergency Department transfers shall receive an Emergency Department evaluation after the Emergency Department physician has accepted the transfer. Interfacility transfers shall be routed to the assigned inpatient bed.

Patients not being evaluated in the Emergency Department (inpatient-to-inpatient transfers) shall have all documentation with regards to the transfer in his/her medical record.

Acute care patients are considered appropriate for transfer to VCMC/SPH. VCMC shall accept patients for the following services: Intensive Care, Medical/Surgical, Neonatal Intensive Care, high risk OB, Pediatrics and

Santa Paula Hospital patients, based on the patient's clinical condition. Transfers between VCMC and SPH shall be based upon the patient's clinical condition, available staffing levels and resources.

It is expected that the attending physician at the referring facility will, in all instances, obtain approval of the appropriate VCMC receiving physician prior to any transfer.

Questions concerning any transfers in or out of the facility may be directed to the Chief Nursing Officer and/or the Medical Director.

QUALITY MANAGEMENT

Monitoring ***Emergency Medical Treatment and Labor Act (EMTALA)*** compliance is the responsibility of VCMC/SPH Administration, the Medical Staff, Department Heads, Quality Assessment/Performance Improvement and Risk Management. Please refer to details in policy 100.068 Medical Examination and Transfer from Ventura County Medical Center/Santa Paula Hospital.

All revision dates: 3/21/2019, 5/1/2016, 6/1/2006, 11/1/2004, 4/1/2000,
12/1/1998, 4/1/1995, 7/1/1989, 5/1/1986, 4/1/1984

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/9/2022
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	11/14/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	10/19/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	10/19/2022
Policy Owner	Minako Watabe: Chief Medical Officer, VCMC & SPH	10/17/2022



VENTURA COUNTY
HEALTH CARE AGENCY

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Owner: Magdy Asaad: Infection Prevention Manager
Policy Area: Administrative - Patient Care
References:

100.020 Occupational Exposure to Tuberculosis

POLICY:

To ensure the appropriate care and treatment of Ventura County Medical Center, Santa Paula Hospital, ~~Ambulatory Care Clinics and Behavioral Health and Inpatient Psychiatric Unit~~ staff experiencing an occupational exposure to a ~~communicable~~ Tuberculosis disease when such an exposure requires medical evaluation, serology studies or antibiotic prophylaxis.

~~For exposures to blood and body fluids, staff is referred to Administrative policy 106.015, Bloodborne Post-Exposure Evaluation and Follow-up.~~

PROCEDURE:

PROCEDURE:

~~Certain infectious diseases are~~ Tuberculosis disease is known to be of significance in hospital epidemiology and infection control. For this reason, and to ensure a safe environment for both staff and patients, it is important that appropriate follow-up and interventions be given to staff.

~~Examples of such diseases include, but are not limited to, chickenpox (varicella), meningococcal disease, rubella (measles), rubella, mumps, pertussis, scabies and pediculosis.~~

- A. Exposure Determination: The Infection Prevention Practitioner and the Infection Control Nurse ~~and the Infection Control Committee Chairman/Infectious Disease Physician~~ will determine the case definition for the "disease Tuberculosis exposure"/"CONTACT" for the case.
- B. The Clinical Nurse Manager will assist in identifying those staff who have been exposed.
- C. The Infection ~~Control Nurse~~ Prevention Practitioner will submit a list of the exposed staff to:
 - 1. Employee Health ~~Nurse Practitioner, EHS~~ Services.
 - 2. Human Resources/Risk Management,
The Pharmacy Department
- D. The ~~Infection Control~~ Employee Health Nurse and/or the ~~Employee Health Nurse Practitioner~~ will inform the employee of their exposure and the recommended intervention.
- E. The Employee Health Nurse Practitioner/Employee Health Physician will be responsible for informing the employee of their exposure and the recommended intervention and the clinical management of the employee's exposure. ~~The Infection Control Committee Chairman and/or Medical Director of Infection~~

~~Control will advise Employee Health Services of the necessary interventions.~~

F. The Infection Control Committee Chairman and/or Medical Director of Infection Control will advise Employee Health Services of the necessary interventions.

G. The Director of Pharmacy Director/Services or designee may dispense the medication to the employee.

REFERENCES

- A. Centers for Disease Control and Prevention Guidelines, www.cdc.gov
- B. American Journal of Infection Control. 26: 289-354
- C. The Red Book. American Academy of Pediatrics Committee on Infectious Diseases
- D. The Joint Commission Hospital Accreditation Standards

All revision dates:

12/14/2022, 3/1/2014, 5/1/2008

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Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	10/17/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	10/7/2022
Nursing Administration	Sherri Block: Interim Chief Nursing Officer	8/16/2022
Policy Owner	Magdy Asaad: Infection Prevention Manager	8/16/2022



V E N T U R A C O U N T Y
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Owner: Todd Flosi, MD: Associate Chief Medical Officer, VCMC & SPH
Policy Area: Administrative - Patient Care
References:

100.022 Withdrawal of Patient Life Support

POLICY:

The ethical implications of withdrawal of life support has been a concern nationally ¹ and locally, and indeed prompted the formation of the Ventura County Medical Center and Santa Paula Hospital Ethics Committee. Among the duties of the Ethics Committee, when originally formulated, was to provide policy recommendations on such issues as non-resuscitation orders and withdrawal of life support. The former has been addressed in a policy which has been approved by the Medical Staff. Since its inception, the Ethics Committee has dealt with issues of withdrawal of life support and a number of its opinions have been placed in written form in the patients' charts.

The present policy statement is general and is intended to serve only as a broad guideline to help direct the process of problem solving. It will also reflect the ethical thinking of the diverse group of individuals, physicians, and lay people alike, who voluntarily serve the Ethics Committee.

PROCEDURE:

INTRODUCTION

Though each clinical circumstance differs, the Ethics Committee has found it helpful to classify circumstances which tend to amplify or focus specific concerns as follows:

1. Patients who are clinically brain dead.
2. Patients who are irreversibly comatose.
3. Patients who are not comatose, but may vary in their perception of their own illness and may vary in their capacity to participate in any decision making process.

PATIENTS WHO ARE CLINICALLY DEAD

The Ethics Committee has found, in prior discussions on the subject of withdrawal of life support, that a physician has no duty to provide treatment which is futile. Nowhere is it clearer than in the patient who has suffered irreversible cerebral function. The State of California has enacted statutes which reflect the generally held feeling that to prolong somatic survival when the entire brain ceases to function is an act of futility. Clearly the most important issue here is one of accurate diagnosis which can be easily accomplished simply by following standard and recognized guidelines.² Once clinical brain death has been determined by qualified licensed physicians, then all life support should be promptly withdrawn giving proper considerations to the

sentiments and grieving process of the patient's relatives.³

The Ethics Committee would, in principle, support the concept of organ donation. To this end, it would encourage the prompt diagnosis of clinical brain death when that diagnosis can be supported unequivocally. We would encourage also the ongoing cooperation with the Regional Organ Procurement Agency and, while being attentive to the needs of the family, agree with aggressive support of the donor while organ harvesting is pending.

PATIENTS WHO ARE NOT CLINICALLY BRAIN DEAD

In previous deliberations, the Ethics Committee generally has found no impediments to withdrawal of life support where the following general conditions are met:

1. That the prognosis is agreed upon by experienced clinicians and the patient may be considered to be terminal within a reasonably short period or, that intervention, though preserving life, would only serve to prolong an unwanted existence. Additionally, treatment would certainly preserve for the patient an expectation of prolonged suffering or yet more painful demise than would occur should life support be withdrawn presently.
2. That the patient primarily, and his or her family, acting in good faith, share an understanding of the prognosis and of the intended course of management with its consequences.
3. That the patient can be made comfortable, with pain relief and anxiety management and those other symptoms attendant to impending death will be attended to in a humane and caring manner.

To clarify the issues further, implied by the paragraph above, is that withdrawal of life support need not be considered only in the case of patients who are imminently terminal, terminal or irreversibly comatose. Many circumstances arise in the clinical practice of medicine where an opportunity to treat an otherwise fatal illness may only preserve a patient for a worse fate. Though court cases, such as **Quinlan** and **Eichner**, initially concerned patients who were irreversibly comatose, subsequent court cases have served to underscore the notion that patients other than those who are considered irreversibly comatose may be proper subject for concern regarding withdrawal of life support. (See **Bartling et al. vs. Glendale Adventist Medical Center** [163 Cal. App 3d 186].)

Of immediate interest when considering withdrawal of life support is the issue of consent. Just as patients may accept advanced forms of life support, they may refuse it as well. The refusal of life support may bring into conflict the interests of the medical profession and perhaps State interests. The Committee has felt that non-institution of life support measures or withdrawal of life support are commonly synonymous and may be consistent with fundamental ethical principles of medicine, i.e., view of prevention of suffering and the absence of a duty to carry out care which is futile. With respect to State interest, one here is concerned only with the "prevention of irrational self-destruction." It is therefore the responsibility of the treating clinician to look upon issues of consent and of competency as relative matters to be weighed in the light of a specific clinical situation.

CONSENT

A competent patient's decision to forego life support systems is not significantly different from a decision to decline other types of medical care. The right of a competent adult patient to decline to have any medical treatment initiated or continued is well established. The right is founded on the constitutional right to privacy, the common law right to self-determination and the fundamental interest in patient autonomy which recognizes an individual's personal interest in directing the course of his or her own medical care.

In the specific instance of a decision to withdraw or forego life support systems, the competent patient is asserting his right to die a natural death without dependence on medical technology. As with all other medical care decisions, it is desirable that the patient be informed of relevant matters, such as the probable risks and benefits of the use or withdrawal of various life support systems, the nature of the patient's medical condition and prognosis for recovery. Once relevant medical facts are available, it is ultimately the decision of the competent patient to exercise the option. It is more frequently the case that decisions regarding the withholding or withdrawing of life support systems must be made concerning incompetent patients, i.e., patients whose mental functioning is so severely impaired that they are incapable of considering and making decisions regarding their own health care. In such cases, the most reliable reference point is evidence of what their particular patient would have done if in sufficient possession of his faculties to choose for herself/himself. In recent years, certain written vehicles have been used to memorialize, in advance, such desires. Two such forms are the "Durable Power of Attorney for Health Care"⁴ and the so-called "Living Will."

The Living Will has also been used as a means to set forth in writing an individual's wishes concerning the withholding or withdrawal of life support systems⁵. Although this document does not have the legal force of a traditional will, the Living Will has been recognized as evidence of a patient's wishes. The most important aspect of both of these documents from an ethical point of view is their expression of individual choice in advance in a thoughtful and explicit way. The primary function, from an ethical point of view, is to preserve the exercise of individual self-determination for a time when physical circumstances make self-determination impossible. The directive to physicians also serves a similar function when a patient is diagnosed as having a terminal condition⁶.

Reliance on a Living Will or a Durable Power of Attorney is one type of substituted judgment. A decision maker other than the patient is, in effect, substituting his or her judgment for that of the patient. However, in the case of a Living Will or Durable Power of Attorney or some other type of written expression of the patient's wishes, the reliance on the patient's will is greatest.

"Living Will" and "Durable Power of Attorney" represent and reflect a general, though usually not specific, attitude towards life support. It remains the task of those charged with the patient's care to assess the applicability of previously expressed wishes to the present circumstances and not blindly rely upon these vehicles.

In other situations of substituted judgement, there is a greater need to gather facts indicative of the patient's wishes concerning life support systems, such as recollections of family, friends and acquaintances. In the absence of any evidence regarding the patient's wishes, family and friends, in consultation with those providing medical treatment, must attempt to reflect upon all of the circumstances to determine if the continued use of medical technology is proportionate or disproportionate in terms of the benefits to be gained for the patient versus the burdens caused.⁷ Factors to be considered in this balancing test are the reasonable probability of return to cognitive and sapient life as distinguished from the continuance of mere vegetative existence. Underlying this standard, as a basis for substituted judgment, is the perception that even in the absence of an explicit expression, individuals generally recognize that the primary purpose of life support systems is not merely to suspend the act of dying, and prolong biological existence, but should be directed toward healing, enabling a return to a functioning life.

As a practical matter, any decisions to withhold life support systems should reflect, as much as possible, the patient's individual decision. The medical chart should reflect the nature of this evidence and a general description of the process leading to the ultimate decision, such as consultation with family, the treating staff, and other interested parties.

WITHHOLDING/WITHDRAWING LIFE SUPPORT

Special Issues with Regard to Infants and Children: Since an infant has never achieved competence, decision making based on autonomy or substituted judgement are clearly not applicable. However, decisions based on the principle of proportionate versus disproportionate treatment⁸ in terms of benefits to be gained versus the burden caused, should also be applicable when the patient is an infant.

The presence of underlying handicaps (such as retardation) "justify a decision not to provide life-sustaining treatment only when they are so severe that continued existence would not be a net benefit to the infant."⁹

Parents are the most appropriate decision-makers, with those decisions based on information from the infant's physicians regarding diagnosis, prognosis, and available treatment options.¹⁰ If there is conflict between the parents, or if their decision is felt by the infant's physicians or other caretakers to be against the best interests of the infant, the decision should be reviewed by the Medical Ethics Committee. In urgent cases, of course, it is the clinician's responsibility to secure court orders, if necessary, if it is in the child's best interests.

The California child abuse reporting statute (effective January 1, 1985) defined medical neglect as the willful or negligent failure of any person who is responsible for the child to provide adequate medical care, and further states that an informed and appropriate medical decision made by the parent or guardian after consultation with physicians who have examined the child does not constitute neglect.¹¹ Federal child abuse regulations define medical neglect as including withholding of medically indicated treatment (further defined as failure to respond to life threatening conditions by providing treatment which would be likely to be effective in ameliorating or correcting such conditions) except in narrowly defined circumstances which include:

1. The infant is chronically and irreversibly comatose.
2. The provision of such treatment would merely prolong dying.
3. The provision of such treatment would be virtually futile in terms of the survival of the infant and the treatment itself under such circumstances would be inhumane.¹²

CMA GUIDELINES:

The VCMC/SPH Ethics Committee recommends that the following CMA Documents be used as supplemental information: "Do-Not-Resuscitate Decisions," "Documenting Decisions to Forgo Treatment." Due to copyright rules, the CMA document cannot be included here, but it is readily available in the California Physicians legal handbook, Volume 1, 12:19 & 12:20-21. This handbook is located in the Medical Director's Office and the contact number is 652-6062

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Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending

Step Description	Approver	Date
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/9/2022
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	10/3/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	7/20/2022
Nursing Administration	Sherri Block: Interim Chief Nursing Officer	7/20/2022
Policy Owner	Todd Flosi, MD: Chief Medical Officer, VCMC & SPH	7/20/2022



VENTURA COUNTY
HEALTH CARE AGENCY

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Policy Area: Administrative - Patient Care
References:

100.026 Declaration of Brain Death and Apnea Testing

POLICY:

Ventura County Medical Center/Santa Paula Hospital has a policy in place for determination of brain death that is consistent with regulatory mandates and medical-legal-ethical guidelines.

PROCEDURE:

- A. In accordance with state law, patients who have suffered irreversible cessation of entire brain function, despite the presence of spontaneous cardiac activity, are considered dead. **Brain death** is defined as the irreversible loss of the clinical function of the whole brain, including the brainstem. Declaration of brain death then allows withdrawal of artificial means of respiratory and hemodynamic support in addition to allowing organ harvesting for transplantation. The formal process of declaring brain death is usually not necessary for withdrawal of life support from patients whom either irreversible cessation of conscious functioning (vegetative state) is present or continued support is considered futile or known to be against the wishes of the patient and/or family (see Administrative policy 100.022, *Withdrawal of Life Support*, and/or policy 100.050, *Non-Heart Beating Donor*).
- B. Declaration of brain death must be verified and documented independently by two licensed physicians, neither of whom have any relationship to the transplantation centers, and who are members of the medical or resident staff of this hospital. **At** least one of the physicians must hold staff privileges and must be experienced in the process of determining brain death. The time of death should be recorded as the time the second physician documents the brain death.

Declaration of brain death at VCMC requires the following prerequisites:

- C. Known Cause of Coma/Brain Injury:
 - 1. Clinical evidence of an acute CNS catastrophe that is compatible with the clinical diagnosis of brain death.
 - 2. A diagnosis as to the cause of brain injury must be known. Where the cause is not apparent, diagnostic studies should be carried out to establish the nature of the injury before declaration of brain death.
- D. The presence of brain death cannot be declared if one of the following conditions exists:
 - 1. Drugs, severe hypothermia or other metabolic derangements, alone or in association with head

injury. Any or all may cause severe depression of CNS function leading to an incorrect assessment of the degree of brain injury. Hence, the following should be considered in all cases:

- a. Core temperature should be at least 95 degrees Fahrenheit.
 - b. An intoxicated state must be excluded by a reliable history or negative toxicology studies for CNS depressant drugs.
 - c. Hypoperfusion, hypoxemia, hypercarbia or recent use of neuromuscular blocking drugs should also be excluded (i.e., demonstrated absence of neuromuscular blockade).
 - d. Other complicating medical conditions that can confound clinical assessment (e.g., severe electrolyte, acid-base or endocrine disturbance).
- E. In the presence of confounding variables, brain death can still be determined with the aid of ancillary tests. A period of observation of at least 24 hours without clinical neurological change is necessary if the cause of the coma is unknown.
- F. Guidelines for the determination of brain death in adults shall be established by the Medicine and Surgery Committees.
- G. Guidelines for the determination of brain death in infants and children shall be established by the Pediatric Committee.
- H. Guidelines should be reviewed on a regular basis to be sure they comply with the most recent national standards.
- I. In patients one year of age or less, **a pediatric consult must be obtained, and a pediatric neurologist should be involved if available. Detailed neurological examinations should be done at least 24 hours apart by a pediatrician experienced in the neurological examination of the child. A confirmatory test should be performed if deemed appropriate by the pediatric consultant. If an EEG is obtained, it must be coordinated and interpreted by the pediatric neurologist.**

BRAIN DEATH DETERMINATION PROTOCOL

The following protocol will assist the physician in determining brain death. It is necessary to confirm the absence of cranial nerve function, motor response and spontaneous respirations for determination of brain death.

- J. Absence of cranial nerve function:
1. Absent pupillary light reflex (pupils fixed at 4-9 mm and unresponsive to light).
 2. Absent corneal reflex.
 3. Absent oculocephalic reflex -- doll's eyes (no ocular movement with head turning).
 4. Absent gag reflex (no response to suctioning of pharynx, trachea or bronchi).
 5. No swallowing, yawning or blinking.
 6. No oculovestibular reflex - cold calorics (with irrigation of ears with up to 120 mL of ice water).
- K. Coma with complete absence of motor response to central pain stimulation (i.e., intense pain stimuli delivered above the clavicles, excluding spinal reflexes). NOTE: It is common to witness non-purposeful movements and spinal reflexes in brain death.
- L. Absence of spontaneous respirations. Apnea testing can be performed as follows (**an attending physician must be present during apnea testing**):

(The use of an arterial line is suggested to expedite the drawing of ABG's.)

1. Core temperature: 95°F or higher (if possible)
2. Systolic BP: ≥ 90 mmHg
3. PaCO₂: ≥ 40 mmHg (a normal PaCO₂)
4. Arterial pH: 7.35-7.45 (if possible)
5. Preoxygenate with 100% FIO₂ for 20 minutes. Obtain ABG.
6. Disconnect ventilator, give O₂ @ 8-10 LPM by tracheal cannula. Do NOT extubate and do not occlude the tracheal cannula. (Remove nasal prongs from cannula and pass through ETT.)
7. Observe continuously for spontaneous respirations.
8. After 10 minutes, draw ABG. (If the patient becomes unstable before 10 minutes, reconnect the ventilator and immediately draw ABG.)
9. Reconnect the ventilator.
10. Patient is apneic if PaCO₂ is ≥ 60 mmHg or pH ≤ 7.30 or PaCO₂ ≥ 20 mmHg over baseline, and there is no respiratory movement.
11. If hypotension and/or arrhythmia develop, immediately reconnect the ventilator and consider another confirmatory test.

CONFIRMATORY TESTS

Brain death is a clinical diagnosis. If severe facial trauma, pre-existing pupillary abnormalities, toxic levels of various drugs are present, inability to tolerate apnea test, or if the patient has a baseline severe chronic retention of CO₂, other confirmatory testing may be required.

One should consider a Neurology or Neurosurgery Consult.

12. An electroencephalograph may be ordered. No electrocerebral activity present during at least thirty (30) minutes of recording adheres to the minimal technical criteria for EEG recording in suspected brain death. The core body temperature must be above 95°F.
13. A cerebral blood flow study demonstrating no cerebral blood flow.
14. A cerebral angiography demonstrating no cerebral blood flow.

DOCUMENTATION

The declaration of brain death must be documented independently in the medical record by two (2) licensed physicians (one of whom must be a staff physician) and should address the following points. Each licensed physician must sign, date and time the notation.

- M. Time of declaration of brain death
- N. Cause and irreversibility of the condition
- O. Absence of brainstem reflexes
- P. Coma including absence of motor response to pain
- Q. Absence of respiration by PaCO₂ or pH criteria (as per apnea test)

ORGAN PROCUREMENT

The hospital is required to call OneLegacy at (800) 338-6112 before the withdrawal of life support and in a timely manner on all individuals whose death is imminent or who have died. OneLegacy will determine if the patient may be an appropriate candidate for organ procurement. They will assist in patient management and will approach the family if donation is appropriate. A physician is NEVER to initiate a conversation about organ procurement with a family member.

REFERENCES

- A. Hufford, William E., ed. Critical Care Handbook of the Massachusetts General Hospital. Philadelphia, Lippincott Williams and Wilkins, 2009.
- B. OneLegacy Organ Donor Manual. Southern California Transplant Services, 2010.
<http://www.onelegacy.org/site/professionals/library/manual.html>.
- C. Nakagawa TA: Guidelines for the determination of brain death in infants and children: An update of the 1987 Task Force recommendations. Crit Care Med 2011; 39: 2139-2155.

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Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/9/2022
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	10/3/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	7/20/2022
Nursing Administration	Sherri Block: Interim Chief Nursing Officer	7/20/2022
Policy Owner	Todd Flosi, MD: Chief Medical Officer, VCMC & SPH	7/20/2022

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Owner: Kathie Jones: Interim Clinical Nurse Manager, Emergency Services
Policy Area: Administrative - Patient Care
References:

100.033 Blood Alcohol Test Procedures

POLICY:

Ventura County Medical Center (VCMC) and Santa Paula Hospital (SPH) perform phlebotomy for the purpose of obtaining blood alcohol specimens for law enforcement agencies.

PROCEDURE:

The arresting officer assumes all responsibility for advising the individual of his rights to the choice of tests. He or she will also furnish and complete the request form used for the authorization for taking the specimen.

VCMC/SPH staff will assume the responsibility for drawing blood alcohol specimens from persons brought to the hospital when requested in writing by a law enforcement officer. Responsibility for handling and examining the specimen, transporting to the Crime Laboratory, and testifying in court will remain with the Law Enforcement Department.

The arresting officer assumes all responsibility for advising the individual of his/her rights. He or she will also furnish and complete the request forms used for the authorization for taking the specimen.

The "Implied Consent" law is applicable to any person who has a California Driver's License and/or drives a motor vehicle upon a highway. Juveniles are not exempt in those cases where the arresting officer requests a chemical test. Parents of the juvenile do not have the right to refuse the test.

The VCMC/SPH procedures for obtaining blood samples will be as follows:

1. Personnel authorized to obtain blood samples in ranking order of availability at the time of request include:
 - a. Nursing ~~service~~ staff; if not immediately available, then:
 - b. Clinical Lab Scientist or Certified Phlebotomy Technician; if not immediately available, then:
 - c. Physician, ~~if not immediately available~~
2. Personnel are obligated to follow the above sequence of availability and should not refuse to draw blood alcohol specimens for inappropriate reasons.
3. The Ventura County Medical Center/Santa Paula Hospital staff will obtain only blood samples for use in determination of alcohol content. Should a patient request the breath test or urine test, the officer will be responsible for making such arrangements.
4. Prior to obtaining specimens from a patient, the law enforcement officer will present the hospital with a

signed ~~Blood/Urine Alcohol request Form~~ Specimen Request and Consent form (Attachment IA). In addition, a Medical Record of Blood Specimen Drawn ~~Format Request of Law Enforcement Agency form~~ (Attachment IB) will be initiated in triplicate by the law enforcement officer and then completed by the individual responsible for drawing the blood. According to the District Attorney's Office, the use of this form should alleviate the need to testify on the part of the individual obtaining the specimen. One copy of the completed form should be forwarded to Medical Records, one copy to the officer for Law Enforcement Agency files; and one copy should be sent with the specimen. Finally, in what is called a Driving Under the Influence of Drugs (DUID) case ~~(Attachment III)~~, the arresting officer may request an additional 10 mL vacutainer of blood. This additional blood shall be obtained only upon request of the arresting officer.

5. Blood alcohol kits, which are furnished by the Crime Laboratory and stored in the Emergency Department (ED), will be used in obtaining blood specimens. A non-alcohol based cleanser will be used to cleanse the skin.
6. Specimens will be turned over to the officer for handling and transporting to the Crime Laboratory. Hospital personnel are responsible for obtaining specimen **only**.
7. Blood will be drawn after the consent has been signed. Blood may be drawn if the person refuses to sign but does not resist. Blood may be drawn if the person refuses to sign the consent and physically resists if the circumstances require prompt testing, the arresting officer has reasonable cause to believe the arrestee is under the influence, and the test is conducted in a medically approved manner incident to lawful arrest. The patient's consent is not required if there is a court order for the blood samples. A blood sample may be drawn at the request of the attending officer without the patient's consent if the patient is unconscious and has been involved in a motor accident. The ~~ED~~ Emergency Department physician or nurse will draw blood.
8. The cooperation consists of assisting the law enforcement officer in obtaining specimens, so long as it does not offend the conscious of the court. Unconscious or deceased patients are included among these patients from whom specimens may be taken.
9. When individuals responsible for drawing blood specimens are subpoenaed to testify as a witness, the subpoena should include the statement "please be on call". The District Attorney's Office has clarified that this statement requires that individuals remain available by phone or in person during that schedule trial session.

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Attachments

Attachment A: Blood Specimen Request and Consent

Attachment B: Medical Record of Blood Specimen Drawn at Request of Law Enforcement Agency

Approval Signatures

Step Description	Approver	Date
Medical Executive	Tracy Chapman: VCMC - Med Staff	pending

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Committee		
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	12/11/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	12/5/2022
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/18/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/18/2022
Policy Owner	Kathie Jones: Interim Clinical Nurse Manager, Emergency Services	11/18/2022



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

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References:

100.036 Disposition of Foreign Bodies Removed for Legal Evidence

POLICY:

A surgical procedure involving removal of a foreign body from a wound is sometimes a potential police matter. At times, foreign bodies removed from wounds may be regarded as legal evidence. This procedure describes how to handle such foreign bodies removed from a penetrating wound (bullets, knives, arrows, etc.)

OBJECTIVE

1. To provide a direct presentation of legal evidence (Surgery staff to law enforcement).
2. To maintain a proper record of the disposition of specimens to law enforcement, while complying with their need to investigate possible illegal activities.
3. To prevent the necessity of Surgery staff appearing in court to testify regarding the "chain of possession" for evidence.

PROCEDURE :

1. The circulating nurse will obtain the specimen from the surgeon and place it into a dry plastic container or plastic bag. If possible, no metal instrument will come in contact with the specimen (such as bullets) to avoid scratching it.
2. The container will be labeled with the date, time, patient's name, hospital number, name of the physician removing the specimen, and the nurse accepting the specimen.
3. The container will be handed **DIRECTLY** to the law enforcement officer.
4. The form "Release of Specimens or Other Evidence to the Authorities" will be completed, noting the Name and Badge number of the accepting officer, as well is the information stated in #2.
5. The disposition will be documented in the Electronic Health Record (EHR).
6. This form will be filed in the VCMC/SPH Surgery Evidence Book and a copy placed in the patient's chart.
7. When there is no Law Enforcement Officer to accept the specimen, it will be taken **DIRECTLY** to the Pathology Department and given directly to Laboratory staff.
8. The person accepting the specimen will sign the Pathology Slip in the comment section.
9. The disposition will be documented precisely in the EHR, including the name of the receiving person in

Pathology.

10. If law enforcement agency requires the specimen, they should contact Pathology directly to make arrangements for collection.

All revision dates:

5/1/2016, 5/1/2006, 11/1/1998

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/9/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	10/3/2022
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	10/3/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	4/27/2022
Policy Owner	Diana Zenner: Chief Operating Officer, VCMC & SPH	4/26/2022



**VENTURA COUNTY
HEALTH CARE AGENCY**

Origination: 1/1/1976
Effective: Upon Approval
Last Approved: N/A
Last Revised: 7/19/2018
Next Review: 3 years after approval
Owner: Todd Flosi, MD: Associate Chief Medical Officer, VCMC & SPH
Policy Area: Administrative - Patient Care
References:

100.042 Patient Leaves of Absence

POLICY:

Circumstances occasionally arise in which a patient under the care of Ventura County Medical Center (VCMC) and Santa Paula Hospital (SPH) requests "temporary absence" from the hospital complex. The usual reason for leave of absence is either for: (1) a medical procedure to be done at another facility for which a patient chooses to provide his/her own transportation; or (2) patient convenience, such as a death in the family or a court appearance which may not be postponed.

It is the policy of VCMC and SPH that temporary leaves of absence are limited to those which are approved by the patient's physician in conjunction with the Administrator on Duty or Chief Medical Officer, either on the basis that they are medically appropriate or urgent and compelling and not contraindicated, and for which all required documentation is complete.

PROCEDURE:

The patient must understand that he/she is not discharged from the hospital, but instead is temporarily "on leave." A patient should not be permitted to remain away from the hospital overnight without being discharged. If the duration of an absence is unexpectedly extended, the patient should be discharged and the reason for the unexpected extension documented.

TEMPORARY ABSENCE FOR PATIENT'S CONVENIENCE

A "Consent to Temporary Absence Release" form (see Attachment A) should be completed and signed by the patient or legal representative when the patient desires to leave the hospital for a short period of time for his or her own convenience, and authorization to do so has been obtained from the patient's attending physician.

CONSENT FOR PARTICIPATION IN PATIENT OUTING

When the attending physician has authorized the patient's participation in a patient outing, the patient or legal representative will complete and sign a consent that contains the information presented in the "Consent for Participation in Patient Outing."

1. The physician should document permission for the patient to be absent on the physician's order sheet and indicate the approximate number of hours the patient may be gone.
2. The appropriate consent form should be completed and signed by the patient or legal representative and placed in the patient's medical record.

3. Circumstances surrounding the leave must be documented in the medical record.
4. A clear statement of the medical necessity for acute hospital care **on the day of the leave** as well as on days before and after leave must be documented.
5. Patients who are privately insured are to be told to check with their insurance carrier prior to taking a leave to be sure it will not jeopardize their coverage.

Medi-Cal, Medicare and private medical insurance explicitly define acute hospital care. Each requires clear documentation in the record that acute care is required for each and every day of the patient's hospital stay. By definitions, a leave of absence is usually inconsistent with the need for acute hospitalization. If leave is to extend over midnight, the patient must be discharged.

Acute care patients are, therefore, only to be given leaves of absence for the most urgent and compelling reasons, e.g., a death in the family or a court appearance that cannot be postponed. The length of leave is to be as short as possible and not to exceed four (4) hours.

Attachment A – Consent to Temporary Absence Release Form

All revision dates:

7/19/2018, 5/1/2006, 5/1/2004, 10/1/1986, 7/1/1983

Attachments

Attachment A - Consent to Temporary Absence Release - English and Spanish.pdf

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/9/2022
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	10/3/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	7/12/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	10/29/2021
Policy Owner	Todd Flosi, MD: Chief Medical Officer, VCMC & SPH	10/29/2021

Current Status: *Pending*

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V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

Origination: 12/1/1986
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Owner: Sherri Block: Associate Chief
Nursing Executive, VCMC &
SPH
Policy Area: Administrative - Patient Care
References:

100.048 Referral of Potential Organ and Tissue Donors

Policy:

To maintain compliance with the CMS 42 CFR Section 482.45 Conditions of Participation for Hospitals, Senate Bill 2777 and CHSC 7184; Ventura County Medical Center/Santa Paula Hospital (VCMC/SPH) shall facilitate organ and tissue donation by recognition of potential donors and reporting all deaths to the appropriate Organ and Tissue Procurement Organization (OPO) VCMC) and SPH is OneLegacy.

The hospital's written agreement with the OPO will include criteria for referral, definition of "imminent death", definition of "timely notification; address the OPO's responsibility to determine medical suitability for organ donation; provides for timely notification of each death in accordance with the agreement; ensures designated requestor training offered by the OPO has been developed; permits OPO access to hospital's death records according to designated schedule; hospital is not required to credential /privilege members of the organ recovery team; and the interventions the hospital will utilize to maintain potential organ donor patient so organs remain viable.

To ensure timely communication the following processes will be implemented:

- A. All imminent brain deaths and all cardiac deaths must be reported to OneLegacy's 24-hour Donor Referral Line within one (1) hour.
- B. The hospitals shall provide a protocol for identifying potential organ and tissue donors:
 1. Refer all patients meeting clinical triggers including cardiac death within one hour to OneLegacy.
 2. All deaths shall be called in to the OneLegacy referral line (800) 338-6112 within one hour of the patient meeting clinical trigger for referral.
- C. Referrals to OneLegacy must be documented in the patient's Progress Notes, and noted directly in the patient's medical record; the LegacyOne Referral Number becomes part of the permanent record.
- D. OneLegacy is the organ, tissue and eye procurement agency utilized by VCMC/SPH.
- E. The request for donation must be made by a designated requestor. A designated requestor is defined as an individual who has completed a course offered or approved by OneLegacy, and designed in conjunction with the tissue and eye bank community in the methodology of approaching potential donor families and requesting organ and tissue donors. This request for organ donation usually occurs with the knowledge and concurrence of the attending physician.
- F. The hospital will work with OneLegacy to review death records to ensure that potential donors are being

identified correctly, and to educate hospital staff regarding donation practices.

Purpose

In accordance with CMS 42 CFR Section 482.45, Senate Bill 2777 and California Health and Safety Code 7184, requiring general acute care facilities to assist organ and tissue procurement agencies in obtaining needed organ and tissue donors.

A. California Health and Safety Code 7184:

"Each general acute care hospital shall provide a protocol for identifying potential organ and tissue donors. The protocol shall require that any deceased individual's next-of kin or other individual, as set forth in Section 7151, at or near the time of notification of death be asked whether the deceased was an organ donor or if the family is a donor family. If not, the family shall be informed of the option to donate organs and tissue pursuant to Chapter 3.5 (commencing with section 7150) of Part 1 of Division 7."

B. Center for Medicare and Medicaid Services (CMS) 42C.FR Section 482.45:

Medicare Conditions of Participation (COP) : Organ Tissue and Eye Donation, effective August 21, 1998, requires that all deaths be called into the organ procurement agency (OPO) or a third party designated by the OPO; all potential donor families be informed of their option to donate; ensure discretion and sensitivity with all potential donor families; ensure education to hospital staff on donation issues, perform death record reviews, and maintain potential donors while testing and placement of organs, tissues and eyes takes place; maintain written agreements with the OPO and designated Tissues and Eye Bank.

C. United States Uniform Anatomical Gift Act (UAGA), Senate Bill 2777:

Provides clear and precise legal structure for donation and procurement of organs and tissues for transplantation. This act exempts any person who acts in good faith in accord with the UAGA from liability for damages in a civil action or prosecution in any criminal proceeding.

Definitions

A. Brain Death- is *defined* as the complete and irreversible loss of all brain and brainstem (neurological) functions. Brain death is considered to be equivalent to cardiopulmonary death.

B. Imminent Death- ventilated patient with a devastating illness or injury with one or more these triggers;

1. A plan to discontinue mechanical/pharmacological support, Do Not Resuscitate (DNR).
2. Loss of one or more brainstem reflexes: pupils fixed, no cough, no gag, no response to painful stimuli, no spontaneous respirations.

C. Donation after Cardiac Death (DCD)- is defined as the surgical recovery of organs after pronouncement of death based on the cessation of cardio-respiratory function in patients who have not sustained irreversible cessation of all functions of the entire brain, including brain stem (death by neurological criteria), but who have sustained devastating, irreversible neurological injury and whose families have independently, or in conjunction with the patient's attending physician, chosen to withdraw life- sustaining therapy.

D. Designated Reguestor- is defined as an individual who has completed a course offered or approved by the OPO, and designed in conjunction with the tissue and eye bank community in the methodology of approaching potential donor families and requesting organ and tissue donors.

Potential Organ Donor Evaluation

A. OneLegacy will perform an on-site evaluation of the potential donor to determine medical suitability when

appropriate. If the patient is deemed unsuitable then a second call to OneLegacy will be placed within one (1) hour of cardiac death *using the referral number*.

- B. It is the responsibility of the physician(s) of record to inform the family of the grave prognosis and imminent death, actual death or cardiac death.
 - 1. All attempts will be made to have this discussion in the family's primary language.
 - 2. Family members will be given time to understand their relatives death before the opportunity of donation request is offered. (Hospital staff **MUST NOT** mention organ donation).
 - 3. Hospital staff will provide emotional support to the family with consideration to their cultural and religious beliefs and their desires.
- C. Hospital staff will provide supportive medical management to potential organ donors, maintaining organ function for transplantation. Medical management will continue while OneLegacy determines medical suitability. OneLegacy will provide the hospital with management guidelines as a resource.
- D. **Approach and Consent:**
 - 1. The OneLegacy coordinator will assess the family's readiness to be offered the option of organ donation. The family must be given time to accept the hopelessness of the situation and understand the concept of brain death before the donation option is presented.
 - 2. The OneLegacy coordinator will facilitate a collaborative approach process with the hospital staff.
 - 3. The OneLegacy coordinator will inform the available next-of-kin of their option to donate organs and/or tissues. If consent is obtained, the OneLegacy coordinator will conduct a medical/social history review. The family's response and the name of the person who made the request will be documented in the *progress notes* patient's medical record and on the death form.
 - 4. Notification regarding the option to donate or decline to donate is made by an organ procurement representative.
 - 5. A copy of the consent form will be included in the patient's medical record.

Donor Registry

OneLegacy will check the California Donor Registry to determine the patient's wishes to donate.

- A. The OneLegacy coordinator and hospital staff will facilitate the best strategy for talking with the family about organ and/or tissue donation.
- B. The OneLegacy coordinator will inform the family of the donation process for organs and/or tissues. The OneLegacy coordinator will conduct a medical/social history review with the family. The family's response and the name of the person who provided the medical/social history will be documented in the patient's medical record *progress notes*. Approach for tissue donation may be made over the telephone.
- C. A copy of OneLegacy's consent form will be included in the patient's medical record.

Donation Process: Brain Death

- A. Organ donation may take place when brain death has been declared by two physicians, ventilator and cardiovascular support has been maintained, and consent from the family or Donor Registry has been obtained. Organs considered for donation include heart, lung(s) liver, pancreas, kidney(s), and small bowel.
- B. California law requires that two (2) licensed physicians must examine the patient and declare brain death. Both physicians must document separately in the Physician's Progress Notes that the patient is brain

dead and must include the **date and time of each declaration**. The **SECOND** declaration of brain death is the legal time of death. Neither physician may assist in the recovery or transplantation of the donated organs. If a clinical exam is included in the brain death note, the patient cannot be declared brain dead until the results are obtained.

C. Donor Maintenance:

1. OneLegacy will begin medical management of the donor after consent is obtained from Donor Registry or legal next of kin. Ventilator and cardiovascular systems must be maintained until the organs are recovered by the transplant surgical team(s) in the hospital operating room.
2. The OneLegacy's Transplant coordinator will guide the medical management of the donor in accordance with the OneLegacy donor guidelines.
3. The hospital will provide a trained critical care nurse to continue providing 1:1 care to the donor patient throughout the Critical Care Unit stay.
4. The hospital/physician(s) will provide consultations necessary to ensure suitability of the organs. These may include, but may not be limited to, bronchoscopy, echocardiograms, cardiac catheterization, and chest x-rays.
5. The hospital laboratory will provide OneLegacy with STAT laboratory results for those tests that can be completed by the hospital.
6. For laboratory tests not available at the hospital, OneLegacy will provide outside laboratory services.
7. The OneLegacy coordinator will continue to provide and support communication to the donor family throughout the donation process.
8. The OneLegacy coordinator will facilitate communication with all involved parties, i.e., appropriate hospital staff, donor family members, the coroner, tissue bank, and transplant center personnel.

Donation Process: After Cardiac Death

- A. Donation after cardiac death is defined as the surgical recovery of organs after pronouncement of death based on the cessation of cardio-respiratory function.
- B. Organ donation may take place when an individual who has sustained an irrecoverable neurological injury, but does not fulfill the criteria for brain death, to donate organs.

C. Procedure:

1. Potential patients shall be identified **AFTER** the decision has been made by the family, in coordination with the physician, to remove the patient from life-sustaining equipment who has met the following criteria:
 - a. The patient has a non-recoverable illness or severe neurological injury and or other system failure resulting in respiratory dependency such as intracranial hemorrhage, stroke, anoxia, trauma on a ventilator.
 - b. The patient is ventilator dependent.
 - c. The Glasgow coma scale is less than or equal to 5.
 - d. The patient has a Do Not Attempt Resuscitation order.
 - e. The patient does not meet brain death criteria.
 - f. The patients who request discontinuance of life support in anticipation of death.

- g. The family, in conjunction with the medical staff, has decided to withdraw life sustaining measures.
2. Notify the attending physician that referral will be made to the organ procurement agency.
3. It is the opinion of the OneLegacy coordinator and the attending physician that cardiopulmonary arrest will occur within sixty (60) minutes following withdrawal of life support.
4. The OneLegacy coordinator shall obtain the consent form entitled "Consent for Organ Donation after Withdrawal of Artificial Life support," which includes a discussion of the following:
 - a. The family may change their decision about donation at any time up to the time of actual removal of the organs.
 - b. The patient shall be declared dead by the attending physician or his/her designee after the withdrawal of life support and before the removal of organs. There is a potential that the organ recovery may be aborted and the patient may be returned to the nursing unit and allowed to expire.
 - c. During the consent process, OneLegacy will request consent for heparin to be administered before transport to the Operating Room (OR). If consented by the legal next of kin, heparin will be ordered by the physician to be administered before transport to the OR.
5. The hospital/physicians will provide consultations necessary to ensure suitability of the organs. These may include, but not be limited to: bronchoscopy, echocardiograms, cardiac catheterization, and x-rays. Attending physician is to maintain organ viability of potential DCD donor.
6. The hospital will provide OneLegacy with STAT laboratory results for those tests that can be completed by the hospital.
7. For laboratory tests not available at the hospital, OneLegacy will provide outside laboratory services.
8. The OneLegacy coordinator will continue to provide support and communication to the donor family throughout the donation process.
9. The OneLegacy coordinator will facilitate communication with all involved parties, i.e., appropriate hospital staff, donor family members, the coroner, tissue bank, and the transplant center personnel.

Organ Recovery

1. The OneLegacy coordinator will notify the hospital OR as soon as possible after consent is obtained for the potential organ recovery.
2. The hospital will make an OR suite available for the organ/tissue recovery process.
3. The OneLegacy coordinator will schedule the organ recovery with the hospital OR staff.
4. The OneLegacy coordinator will communicate with the transplant centers to facilitate timely arrival of the surgical recovery teams.
5. Hospital OR personnel necessary include: Anesthesiologist to maintain and monitor the donor's intra-operative perfusion and oxygenation until after the aorta is clamped or until released by the recovery surgeons, a circulating nurse and scrub nurse.
6. OneLegacy will continue to facilitate the donation process throughout the organ recovery in the hospital OR.
7. A copy of the entire chart (CD or paper) will be provided to OneLegacy and the Ventura County Medical Examiner's office if a coroner's case.

Procedure for Donation after Cardiac Death (DCD) Patients

1. The OR is notified of the case and the operating time is scheduled.
2. Life support will be discontinued in the OR by the hospital physician. Document the name of the physician who removes the patient from life support, as well as the exact time life support was removed. The physician pronouncing death will **NOT** be associated with the surgical recovery of the organs or tissue. The pronouncing physician must remain in the OR for the entire duration from the moment life support is discontinued through the pronouncement of death.
3. The hospital physician will pronounce the patient dead utilizing the following criteria. The presence of one or more criteria is suitable to pronounce death:
 - a. The patient must be apneic and unresponsive to all stimuli.
 - b. Five (5) minutes of ventricular fibrillation is sustained.
 - c. Five (5) minutes of electrical asystole is sustained.
 - d. Five (5) minutes of pulseless electrical activity is sustained.
4. The attending physician or designee will document the pronouncement of death in the medical record.

Abandoning the Recovery Organs

1. The recovery of organs may be abandoned at the transplant team's discretion if the patient does not sustain cardiopulmonary arrest within a reasonable amount of time (usually one-hour) the patient will be returned to appropriate nursing unit.
2. Upon return to the appropriate nursing unit, comfort measures will be maintained by the attending physician/designee. Obtain orders for continued care.

Hospital Reimbursement

1. All OneLegacy directed charges incurred following declaration consent of brain death and consent obtained for organ recovery should be billed to:

OneLegacy

221 S. Figueroa Street, Ste. 500,
Los Angeles, CA 90012
213-229-5600
213-229-5601 (fax)

Coroner Cases

1. The OneLegacy coordinator will notify the Ventura County Medical Examiner before the removal of any organs and/or tissues if the patient is considered a reportable coroner case.
2. Appropriate documentation, which will include a copy of the chart (CD or paper) and a copy of the donation consent form, will be prepared for the Ventura County Medical Examiner.

Tissue/Eye Donation

- A. After the legal next-of-kin has been notified by the hospital of the patient's biological cardiac death, the hospital will call the Tissue Donation Hotline (800) 338-6112 (OneLegacy Referral Line) within one (1) hour of death and receive referral number.

Neither hospital staff nor physician(s) should approach for donation.

- B. When calling, preliminary patient identification information will be requested so that a Coordinator can call the referring unit for an extended review of the patient's medical status to determine suitability for tissue donation. The following will be obtained:
1. Name, age, race, and sex of patient
 2. Medical record number of patient
 3. Date and time of death
 4. Date and time of admission
 5. Admitting diagnosis and possible cause of death
 6. Name of staff member reporting death
 7. Hospital name, unit name, and phone number
 8. Location of body
- C. If, after the above questions have been answered, and it is determined that the patient does not meet the current criteria for donation, a Death Notification Number (DN#) will be given to the hospital staff for documentation in the patient's chart. The body can then be released to the mortuary chosen by the family.
- D. If the patient is a possible donor, the following information will also be needed:
1. Use of ventilator and date of extubation
 2. WBC count
 3. Temperature
 4. CPR performed and how long
 5. Known past medical history
 6. Legal next-of-kin
 7. Phone number where legal next-of-kin can be reached within two (2) hours.
- E. If after the extended review the patient is deemed a potential tissue donor, the coordinator will request a hold on the body until the legal next-of-kin is contacted and extend the opportunity for tissue donation by the coordinator. If consent is granted, telephone consent will be obtained and recorded by phone. (Telephone Consent will be recorded per protocol; or, if the request was made prior to calling the Organ and Tissue Donation number and hospital staff obtained consent, a copy must be faxed to the coordinator for their approval).
- The body should be held and refrigerated at the hospital until such time as the option has been offered to the legal next-of-kin and the donation has taken place.**
- F. The coordinator will obtain consent from the legal next-of-kin or the Donor Registry for each specific tissue. Tissues that may be recovered include corneas, whole eyes, skin, bone, soft tissue (tendons and ligaments), heart valves, pericardium, saphenous veins, dura mater, and vertebral bodies.

Procurement Recovery Process

1. The recovery of tissues will take place in the hospital operating room (if available), the morgue, or the

autopsy room. The operating room is preferred as the tissue recovery is performed aseptically.

2. No hospital staff is required to assist with tissue recovery. The tissue recovery team will provide all necessary supplies.
3. The tissue recovery team will clean the area when tissue recovery is completed. If the operating room is used, the hospital will be required to do the "terminal cleaning" per the hospitals' protocol. The morgue or autopsy room will be left in a clean condition.
4. The surgical recovery of tissues is done with respect and minimal disfigurement to the donor. Reconstruction will be performed on all tissue donors. Families may have an open casket service if they wish.
5. The hospital will provide a copy of the entire chart (CD or printed) to OneLegacy and for the *coroner* Ventura County Medical Examiner when a coroner's case.

Post Tissue /Eye Donation

1. After completion of the tissue recovery, the coordinator will notify the designated hospital staff that the body is ready for release to the mortuary.
2. Any charges relating to the tissue recovery are billed directly to OneLegacy.
3. No recovery charge will be billed to the legal next-of-kin.

Scope of Responsibility

1. Physician
2. RN
3. One Legacy
4. Administration

Procedure

A. Physician's:

1. Identify the potentially brain dead patient, or patient who meets DCD criteria.
2. Collaborate with OneLegacy to maintain management of the potential donor for the potential donor for maximizing vital organ functions.
3. Inform the family of the patient's grave prognosis. Provide an assessment to the OneLegacy coordinator regarding the family's understanding of brain death/DCD.
4. Document in the physician's progress notes the date and time patient is declared brain dead or meets DCD criteria.
5. Obtain confirmation of brain death by a second physician who shall also document the patient's date and time of brain death (The second declaration is the legal time of death). Neither the physician declaring brain death nor the physician confirming brain death may be a member of a transplant team.
6. Write an order for OneLegacy to begin management of the donor after consent is obtained from the legal next of kin or the Donor Registry.

B. Nursing:

- a. Identify the potentially brain dead patient or patient who meets DCD criteria.

- b. Refer the patient to OneLegacy for evaluation, document the call, and have the patient's chart available for evaluation.
- c. Inform attending physician of potential suitable organ donor patient.
- d. For patients meeting brain death criteria, confirm that the attending or consulting physician has certified in the progress notes that brain death has occurred. (Progress notes must state that the physicians' patient is pronounced brain dead, note must include the date and time, and signed by a licensed physician.)
- e. Verify that a second physician has independently confirmed the determination of brain death and note this in the progress notes, including the date, time and signature.
- f. Document in the medical record, the physician, date, and time of each brain death declaration.
- g. For patients meeting DCD criteria: Document in the medical record the date and time the physician and OneLegacy were notified that the patient met DCD criteria.
- h. Ensure that a copy of signed consent form is in the patient's medical chart. The family will receive a copy of the consent form. Nursing staff may be requested by OneLegacy to participate as witnesses to the consent.
- i. Provide supportive medical management to the potential organ donor to maintain biological function of organs, order, and obtain lab tests, etc., as requested by the OneLegacy coordinator.
- j. Document in the patient's medical record when the patient is transferred to the OR.
- k. Send the coroner's case number and form, and all appropriate documentation to the OR with the patient for coroner's cases
- l. Maintain the donor on ventilator or resuscitation bag and portable cardiac monitoring during transfer to the hospital OR.

C. OneLegacy:

- 1. Respond on-site to a referral in a timely manner whenever possible.
- 2. Establish medical suitability for donation and contact the assigned eye/tissue agency if the patient is also a potential tissue donor.
- 3. Check Donor Registry for patient's registry status.
- 4. Collaborate with the hospital in accordance with all Federal and State laws.
- 5. Obtain consent from the family and coroner, and provide continued family support, as needed.
- 6. Coordinate teams consisting of recovery surgeons and transplant coordinators to remove organs suitable for donation.
- 7. Coordinate the medical management of the patient from the second brain death declaration and after family consent for donation.
- 8. Notify the coroner when recovery is concluded, when applicable.
- 9. Inform the family when donation has been completed, at the family's request.

References:

- 1. The United States Revised Uniform Anatomical Gift Act (UAGS), *Senate Bill 2777*
- 2. CMS 42 C.F.R Section 482.45

3. California Health and Safety Code 7184
4. HASC Consent Manual
5. The Joint Commission Standards TS O1.01.01-02.01.01
6. OneLegacy
7. 100.026 Declaration of Brain Death and Apnea Testing

All revision dates: 9/17/2019, 8/2/2019, 2/1/2013, 5/1/2006, 9/1/2004,
5/1/2000, 9/1/1998, 4/1/1995, 11/1/1989

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/9/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	10/7/2022
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	10/3/2022
Nursing Administration	Sherri Block: Interim Chief Nursing Officer	8/1/2022
Policy Owner	Sherri Block: Interim Chief Nursing Officer	8/1/2022



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 11/1/1992
Effective: Upon Approval
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Last Revised: 5/2/2019
Next Review: 3 years after approval
Owner: Diana Zenner: Chief Operating Officer, VCMC & SPH
Policy Area: Administrative - Patient Care
References:

100.049 Advance Healthcare Directives

POLICY:

To provide information to Ventura County Medical Center/Santa Paula Hospital patients in accordance with "The Patient Self-Determination Act" of their rights under state law to make decisions concerning their medical care, and to communicate patients' wishes to their healthcare team in a timely manner.

DEFINITIONS:

ADVANCE HEALTHCARE DIRECTIVE

1. "A document that authorizes another person to make healthcare decisions for a patient when they are no longer able to make decisions for themselves" and/or
2. Information provided about a patient's desires concerning healthcare decisions.

HEALTHCARE DECISION is defined by the Healthcare Decision Law (Probate Code Section 4617) as a "decision made by a patient or the patient's agent, conservator, or surrogate, regarding the patient's healthcare," which may include:

1. Selection and discharge of healthcare providers and institutions.
2. Approval or disapproval of diagnostic tests, surgical procedures, and programs of medication.
3. Directions to provide, withhold, or withdraw artificial nutrition and hydration and all other forms of healthcare, which may include cardiopulmonary resuscitation.
4. Make a disposition under the Uniform Anatomical Gift Act.
5. Authorize an autopsy.
6. Direct the disposition of remains.
7. Receive and review medical records information, and consent to the disclosure of medical records and information.
8. Consent to HIV testing.

An agent or surrogate may not consent to the following:

1. Commitment to or placement in a mental health treatment facility
2. Convulsive treatment

3. Psychosurgery
4. Elective Sterilization
5. Abortions

INDIVIDUAL HEALTHCARE INSTRUCTION is a patient's written or oral direction concerning a healthcare decision.

CAPACITY is defined as a patient's ability to understand the nature and consequences of proposed healthcare, including its significant benefits, risks, and alternatives, and to make and communicate a healthcare decision.

PROCEDURE:

Upon each admission, all adult inpatients (and emancipated minors) will receive informational material informing them of their right, under state law, to formulate advance directives concerning healthcare decisions. In special circumstances, if a patient is incapacitated at the time of admission, the information will be provided to a family member or surrogate. The patient will be provided with the information when he/she becomes able to understand and to respond to the information.

An adult patient (or an emancipated minor) may give an "individual healthcare instruction." The patient may designate another adult as a surrogate to make healthcare decisions for him or her. If it is a written document it should be placed in the patient's chart and communicated to the healthcare team. However, it is not required that the patient provide this information in writing. The patient may provide this information orally, directly to the primary physician. This information will be documented in the chart by the primary physician and discussed with the healthcare team. The oral designation of an adult surrogate is effective only during the current stay in the hospital. The patient, having capacity, may revoke his or her request of a surrogate at any time in writing or by personally informing the primary physician. The primary physician will promptly document the revocation in the chart. If the patient informs a hospital employee who is not the primary physician of their wish to revoke an advanced directive, the primary physician must be notified immediately.

Social Services will maintain competency in the discussion and completion of advance directive forms, and will assist the patient upon request. If the patient desires to execute an advance directive, Social Services is responsible for assisting the patient in the completion of the forms.

Any advance directive executed by the patient becomes a part of the patient's permanent medical record. It is the joint responsibility of Admitting, Social Services, and Nursing to acquire copies of advance directives and place in the chart, and communicate the patient's wishes to the healthcare team members. The patient will not be discriminated against based upon whether or not an advanced directive has been executed, or the content of the advance directive.

It is recognized that a patient may wish to discuss such issues prior to a hospital admission or at other times. Therefore, Advance Directive Informational brochures will be made available upon the request of the patient in the outpatient clinic areas.

In accordance with California Probate Code (section 4734), a healthcare provider may decline to comply with an individual healthcare instruction or healthcare decision for reasons of conscience. Please refer to Administrative policy 101.009, *Staff Rights*. In the event the patient's physician is uncomfortable with a patient's directive for reasons of conscience, and the directive does not require medically ineffective healthcare or healthcare contrary to generally accepted healthcare standards, he/she must:

1. Discuss with the patient/family promptly.

2. Notify the Medical Director.
3. Request the input of the Ethics Committee, if appropriate.
4. Arrange to transfer the care of the patient to another physician who is willing to comply with the instruction or decision.
5. If necessary assist with arranging for the patient to transfer to another facility.
6. Provide continuing care (including pain management and palliative treatment) to the patient until the transfer arrangements are completed.

According to California Probate Code (sections 4673-4675) there are several components of written advance directives, and limitations in regards to who may be an agent or surrogate (section 4659). If any questions arise, please refer to the CHA Consent Manual located in the Nursing Office or Hospital Administration, or refer to the Medical Director for legal counsel evaluation.

REVOCAION of an advanced directive occurs in the following ways:

1. Unless it is stated otherwise, a power of attorney for healthcare is of unlimited duration. A patient having capacity may revoke the designation of an agent by a signed writing or personally notifying the primary physician.
2. A patient may also revoke all or part of an advance healthcare directive, other than designation of an agent, at any time and in any manner that communicates the intent to revoke.
3. A healthcare provider, agent, conservator, or surrogate who is informed of a revocation of an advance healthcare directive must promptly communicate the fact of the revocation to the supervising healthcare provider (primary physician) and to any healthcare institution where the patient is receiving care.

PROCEDURE:

1. During the admission process, the Admitting staff or Registered Nurse will supply the patient with the Advance Directive Informational brochure and assess the patient's desire for more information, assistance with formulating an advance directive, or existence of an advance directive. This information will be documented during the nurse's assessment and noted in the Electronic Health Record (EHR) under the nursing module.
2. If the patient requests more information or assistance with advance directives, information will be noted in the EHR, which in turn will be sent to Social Services for follow up.
3. If the patient has an Advance Directive, it will be placed in the chart and communicated to the healthcare team as soon as possible.
4. If the patient has an Advance Directive and does not have it with them and family is unable or unaware of its existence, the Admitting Clerk or Registered Nurse will notify Social Services for assistance in locating the written advance directive. The primary physician is responsible for discussing the patient's wishes and documenting them in the medical record.
5. If the patient has an Advance directive and has previously provided it to VCMC/SPH, the Admitting Clerk or Registered Nurse will notify Medical Records for assistance with locating the Advance Directive.
6. If the assessment for Advance Directive cannot be completed due to the condition of the patient, this information will be documented on the chart. The Registered Nurse is responsible for daily assessment of patient condition. If a change in condition enables the patient to respond, the Registered Nurse is responsible for noting this information in the EHR.

REFERENCE:

California Healthcare Association Consent Manual

All revision dates:

5/2/2019, 5/1/2016, 5/1/2010, 5/1/2006, 9/1/2001, 1/1/2001, 8/1/1999, 2/1/1999, 10/1/1998

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/9/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	10/19/2022
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	10/17/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	10/3/2022
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VENTURA COUNTY
HEALTH CARE AGENCY

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Owner: Sherri Block: Associate Chief
Nursing Executive, VCMC &
SPH
Policy Area: Administrative - Patient Care
References:

100.066 Ambulatory Care Clinic Referral Procedure

POLICY:

To assist staff when helping patients who are being discharged from Ventura County Medical Center (VCMC)/Santa Paula Hospital (SPH) and are referred to an outpatient clinic, and to improve the management of patients through the clinic system.

PROCEDURE:

1. Inpatients being discharged from VCMC/SPH with orders to return to an Ambulatory Care clinic will be given a specific appointment time with the clinic indicated on their discharge instructions. The inpatient medical office assistant (MOA) or designee shall call the clinic to schedule the appointment prior to giving the discharge instructions to patient. For appointments needed after clinic hours, the inpatient MOA or designee shall instruct the patient to call the appropriate number the following day. The inpatient staff then documents those instructions on the patient's discharge instruction sheet. Appointments with specific satellite clinics are made by calling that clinic.
2. When the discharging physician feels that laboratory procedures will be helpful to the outpatient clinic physician at the time of the patient's return to the clinic, these procedures will be ordered and recorded in the chart, and the necessary order entered in the electronic health record (EHR). The patient will be instructed to report to the Laboratory for testing prior to their clinic appointment as appropriate whenever possible. Results of the tests will be given to the patient by the physician at the time of his/her clinic appointment. If x-rays are requested, an x-ray order will be entered in the EHR. The patient will be given a Radiology appointment for the work ordered. Patients requiring special laboratory tests (chemistries, gastric contents, etc.) may need a specific appointment date and time. The Laboratory will be contacted to obtain this information.
3. The outpatient clinic will make every attempt to adhere to the appointment schedule as closely as possible. Patients will be informed that they are to call the clinic and cancel their appointment if they are unable to attend on the assigned day. This information will also be included on the appointment slip given to the patient.
4. Informational fact sheets are available in all areas of the hospital in both English and Spanish for distribution to patients utilizing outpatient clinics.
5. Patients seen in the Emergency Department and then referred to a clinic are instructed to call the

appropriate clinic number the following day.

All revision dates:

1/27/2020, 1/1/2017, 5/1/2006, 2/1/1995, 11/1/1989

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Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	11/14/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	11/7/2022
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/2/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/2/2022
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V E N T U R A C O U N T Y
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References:

100.068 Medical Examination and Transfer from Ventura County Medical Center/Santa Paula Hospital

POLICY:

The Emergency Medical Treatment and Labor Act (EMTALA) was enacted by Congress to regulate and restrict the transfer, for economic or other non-medical reasons, all patients presenting for emergency services. The primary focus of EMTALA is to ensure access for all patients to emergency services and prohibiting discrimination in the provision of emergency services. A Medical Screening Examination (MSE) conducted by a physician or Qualified Medical Person (QMP) will be provided to all patients presenting to the Emergency Department at Ventura County Medical Center (VCMC)/Santa Paula Hospital.

PROCEDURE:

- A. An MSE will be offered to any individual presenting for examination or treatment of a medical condition. The examination will be the same appropriate screening examination that would be performed on any individual with similar signs and symptoms, regardless of the individual's ability to pay for medical care.
- B. The MSE or necessary stabilizing treatment shall not be delayed in order to inquire about an individual's method of payment or insurance status. Prior authorizations will not be requested for emergency services until the MSE has been conducted.
- C. The hospital will not transfer any patient with an unstabilized emergency condition (includes a pregnant patient having contractions or a patient with severe pain) unless a physician certifies that the medical benefits reasonably expected from the provision of treatment at the receiving facility outweigh the risks of the transfer.
 - 1. Prior to the transfer, the receiving Hospital and physician have agreed to accept the patient and to provide appropriate medical treatment;
 - 2. The Hospital shall send to the receiving facility all medical records (or copies thereof) available at the time of transfer related to the emergency condition of the patient, including:
 - a. Records related to the patient's emergency condition, observations of signs or symptoms, preliminary diagnosis, treatment provided, results of any tests and vital signs at the time of transfer. Other records (including pending test results or records not available at the time of transfer) must be forwarded as soon as practicable after the transfer.

- b. The patient's informed written consent to transfer or the physician's certification (or copy thereof); and
 - c. The name and address of any on-call physician who has refused or failed to appear within a reasonable time to provide necessary stabilizing treatment.
3. The transfer is effected using proper personnel and equipment, as well as necessary and medically appropriate life support measures.

If a patient who has or may have an emergency medical condition is transferred to another facility for a test with the intention of the patient returning to the Hospital after the test, the Hospital will transfer in accordance with EMTALA standards.

PATIENT REFUSAL OF EMERGENCY SERVICES OR TRANSFER

- A. Under EMTALA, the patient retains the right to refuse necessary stabilizing treatment and further medical examination, as well as a transfer to another facility.
- B. If a patient leaves the hospital before receiving a MSE, either with or without notice to staff, staff should document the circumstances and reasons (if known) for the patient's departure and the time of departure.
- C. If a patient refuses stabilizing treatment after receiving a MSE, the physician or QMP at VCMC/SPH will offer examination and treatment, and inform the patient of the risks and benefits of the examination and treatment and request that the patient sign an *Against Medical Advice* form that he/she has refused further treatment. A summary of the risks of not receiving treatment as described to the patient shall be documented in the medical record.

SIGNAGE

Signs will be posted in lobbies and other appropriate locations where patients may be waiting for treatment or where examination may occur. The signage specifies the rights of individuals to examination and treatment for emergency medical conditions and to indicate participation in the Medi-Cal program. The signs will also state the name, address and telephone for the State Department of Health Services. The signs will be posted in English and Spanish and posted in the Emergency Department and Labor and Delivery.

DOCUMENTATION LOG

Each location that provides MSE's will maintain a central log recording the name of the person who presents for emergency services and whether the person refused treatment, was refused treatment or whether the patient was transferred, admitted and treated, stabilized and transferred or discharged.

ON-CALL RESPONSE

There is a list of on-call physicians maintained in the Emergency Department. These physicians are to provide consultation or treatment necessary to stabilize a patient with an emergency medical condition (see Administrative policy 100.107, *On-Call Coverage*).

MAINTENANCE OF RECORDS

Transfer logs, on-call lists and changes to the on-call list and central logs shall be maintained for five years.

DISPUTES

In the event of any concern over emergency services to a patient, or a dispute with another hospital regarding a patient transfer or a concern about VCMC/SPH's compliance with EMTALA, the Hospital Administrator on duty and the Medical Director are to be notified immediately.

REPORTING

VCMC/SPH will report to HCFA or State Licensing within 72 hours if it concludes that it has received an individual who has been transferred in an unstable emergency condition from another hospital. All hospital staff who believe an EMTALA violation has occurred shall report the violation to the Hospital Administrator on duty and Medical Director.

The hospital shall not retaliate, penalize or take adverse action against any Medical Staff member or employee for reporting violations of EMTALA or State laws to the proper authorities.

DEFINITIONS

Emergency Medical Condition

- A medical condition manifesting itself by acute symptoms of sufficient severity such that the absence of immediate medical attention could reasonably be expected to result in either placing the health of the individual in serious jeopardy, serious impairment of bodily functions, or serious dysfunction of any bodily organ or part; or
- With respect to a pregnant woman who is having contractions, there is inadequate time to effect a safe transfer to another hospital before the delivery or the transfer may pose a threat to the health or safety of the woman or her unborn child.

Medical Screening Exam (MSE)

An MSE is the process required to reach, within reasonable clinical confidence, the point at which it can be determined whether the individual has an emergency medical condition (EMC) or not. An appropriate MSE is dependent on the presenting signs and symptoms and may involve a wide spectrum of actions ranging from a simple process involving only a brief history and examination of the presenting symptoms to a complex process that includes ancillary studies and procedures. Medical includes both physiological and psychological symptoms.

Qualified Medical Person (QMP)

A Qualified Medical Person is a physician, nurse practitioner, physician assistant, and a specialty trained nurse, such as an obstetrics nurse, who performs the examination and communicates the findings to an attending physician to determine if an EMC exists.

Transfer is defined as the movement of an individual outside of a hospital's facility at the direction of any person employed by the hospital, but does not include such movement of an individual who has been declared dead or leaves the facility without permission of any such person.

Labor is defined as the process of childbirth beginning with the latent or early phase of labor and continuing through delivery of the placenta. A woman is in true labor unless the physician certifies that after a reasonable time of observation the woman is in false labor.

Stabilization is defined as follows:

Labor and delivery patients. Stabilization is defined as delivery of the child and the placenta. A woman

having contractions "may not be transferred unless she, or a legally responsible person acting on her behalf, request a transfer or if a physician or other qualified medical personnel, in consultation with a physician, certifies that the benefits to the condition of the woman and/or unborn child outweigh the risks associated with the transfer."

Medical patients. Stabilization is defined as no material deterioration of the condition is likely, within reasonable medical probability, to result for or occur during transfer. A patient is deemed stabilized if the treating physician has determined, within reasonable clinical confidence, that the emergency medical condition has been resolved.

Capacity refers to the ability of the hospital to accommodate the individual requesting examination or treatment of a transfer patient. Capacity encompasses adequacy of staff, beds, equipment and past practices in accommodating additional patients beyond occupancy limits.

Psychiatric Patients

Stable for transfer. A psychiatric patient is considered "stable for transfer" if the patient has been assessed by the treating physician and determined to have no underlying organic basis for the presenting psychiatric symptoms, initial treatment has been provided as indicated, the patient has been treated sufficiently so that he/she is stable for transfer.

Stable for discharge. A psychiatric patient is considered "stable for discharge" if the patient is no longer considered to be a threat to himself/herself or others.

All revision dates:

9/1/2015, 5/1/2006, 4/1/2000

Attachments

No Attachments

Approval Signatures

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Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/9/2022
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	10/3/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	11/22/2021
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	10/29/2021
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Nursing Executive, VCMC &
SPH
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References:

100.077 Newborn Abandonment

POLICY:

In accordance with California State Law (Senate Bill 1368 - Brulte), Ventura County Medical Center (VCMC) and Santa Paula Hospital (SPH) will accept physical custody of newborns up to 72 hours old who are voluntarily surrendered by a parent or other person with legal custody. According to the law "no person or entity that accepts a surrendered child shall be subject to civil, criminal, or administrative liability for accepting the child and caring for the child in the good faith belief that action is required or authorized by the bill, including, but not limited to, instances where the child is older than 72 hours or the person surrendering the child did not have lawful physical custody of the child".

PROCEDURE:

The Emergency Department is the designated department for the parent to surrender their infant. The newborn will be accepted by a Registered Nurse in the Emergency Department. Any VCMC/SPH employee may accept a surrendered infant including a clinic employee. (If an abandoned newborn is found on Hospital grounds or surrendered in a department other than the Emergency Department it will be immediately taken to the Emergency Department).

The Registered Nurse will place a confidential coded identification ankle bracelet on the newborn, and make a "good faith effort" to give the person surrendering the baby a copy of the bracelet, in order to facilitate reclaiming the child. The Registered Nurse or designee will make a "good faith" attempt to have the person surrendering the newborn complete a family medical history questionnaire. However, the person surrendering the infant may decline to complete the questionnaire. The Registered Nurse will be sensitive to the fact that the person may not want to stay and answer questions. If necessary, the medical history questionnaire will be provided with a return stamped envelope that can be completed and returned. The questionnaire shall not require any identifying information about the child or the parent. However, the confidential code must be documented on the form, to allow for matching to the baby.

A Medical Screening exam will be performed in accordance with Administrative policy 100.068. Necessary newborn screening and medical care will be given. The consent of the parent is not required.

Children and Family Services Agency will be contacted as soon as possible. Once the contact is made, the Agency will assume temporary custody of the newborn. The Agency will investigate the circumstances of the case and notify the State Department of Social Services. The Agency will file a petition in juvenile court to declare the infant a dependent of the court.

If the person who surrendered the newborn requests return of the newborn, Children and Family Services must be consulted before returning the child to the parent as requested. This will be reported per Hospital policies and procedures (see Administrative policy 107.050, ER Procedure A.2).

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3/1/2016, 5/1/2006, 1/1/2005

Attachments

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Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	10/3/2022
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	10/3/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	3/21/2022
Policy Owner	Sherri Block: Associate Chief Nursing Officer	3/21/2022



VENTURA COUNTY
HEALTH CARE AGENCY

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Laboratory Services
Policy Area: Administrative - Patient Care
References:

100.085 Tissue Acquisition, Receipt, Storage and Issuance

POLICY:

Whenever a surgical procedure at Ventura County Medical Center (VCMC)/Santa Paula Hospital (SPH) involves the use of tissue, the following procedures must be followed for acquisition, receipt, storage and issuance of tissue. The tissue program may involve areas outside the clinical Laboratory such as the Surgery Department, outpatient areas, and tissue banks. This applies to human and non-human cellular-based transplantable products whether classified by the U.S. Food and Drug Administration (FDA) as a tissue or a medical device. Examples of tissue specimens include, but are not limited to, bone, tendons, cartilage and synthetic tissue (artificially prepared, human and non-human based) and other cellular and tissue-based transplant or implant products.

VCMC/SPH only uses tissue source facilities licensed by the State of California and/or registered as a tissue establishment with the U.S. Food and Drug Administration (FDA).

VCMC/SPH will comply with any changes to state and federal regulations regarding the acquisition, receipt, storage and issuance of tissue.

PROCEDURE:

The following procedures must be adhered to for acquiring, receiving, storing and issuing tissues:

A. ACQUISITION

1. The Surgery Department will assign a responsible person to oversee and coordinate the program regarding the acquisition, receipt, storage and issuance of tissue.
2. Frozen tissues will be ordered on an "as needed" basis prior to each surgical case by the Surgery Buyer or delegate. The Surgery Department maintains a small inventory of freeze-dried tissue.

B. TRANSPORT

1. The transport, handling, storage, and use of tissues will be done according to the written specifications of the tissue bank (issuer) or manufacturer.

C. RECEIPT

1. Frozen tissue is delivered to the Laboratory Department. Room temperature tissue is delivered to the Surgery Department.

- a. Upon receipt, the department will record the tissue arrival in an Implant Tissue Tracking Log sheet that records the product, source/manufacturer, serial/lot number, expiration date, date and time received and from whom, package integrity, storage destination, temperature, person signing in and the date/time to storage.
- b. Attach and secure the original copy of the Implant Tissue Tracking log sheet (Attachment A) to the implant in a clear plastic bag. A copy is kept in a Tissue log book. This copy will be retrieved when the tissue is dispensed or removed from storage/freezer and discarded when the original Implant Tissue Tracking Log is completed.
- c. The receiving department will be responsible for monitoring the tracking and maintaining the integrity and temperature of the tissue until utilized by the Surgery Department.

D. STORAGE

1. All freeze-dried tissue will be stored at controlled temperatures of between 15°C and 30°C. Freeze-dried tissue may not be frozen.
2. All refrigerated tissue will be stored between 1°C and 10°C. At this temperature range, tissue can be stored until the expiration date determined by the tissue source.
3. The tissue storage refrigerator will be armed with an alarm that sounds when set temperatures are not maintained. If the temperature of the refrigerator has failed, the tissue will be immediately sent to be stored in the Laboratory refrigerator that can maintain a temperature between 1°C and 10°C.
4. All frozen tissue will be stored between -40°C and -90°C. At this temperature range, tissue can be stored until the expiration date determined by the tissue source. Tissue can be stored for up to 6 months at -20°C. **The tissue package must be clearly marked with the new expiration date.**
5. The tissue storage freezer will be armed with an alarm that sounds when set temperatures are not maintained. If the temperature of the freezer has failed, the tissue will be immediately sent to be stored in the Laboratory freezer that can maintain a temperature of at least -20°C.
6. If the tissue is stored in a freezer about -40°C range, the new expiration date must be marked on the package and noted in the tissue log. If the tissue has been thawed for more than 2 hours, it must be stored at least 4°C but cannot be refrozen and must be used within 24 hours.
7. Expired or unused tissue/implant is placed in a red bag to be disposed by the Laboratory. Complete Trace Card to send to the source of implant/tissue.
8. The receiving department will have continuous monitoring of the tissue and have functional alarms (frozen tissue only).
9. In the event the primary Laboratory tissue storage freezer malfunctions, then tissue can be stored in the Blood Bank freezer.

E. ISSUANCE

1. The Surgery Department will retrieve the needed tissue immediately before the case and will log the tissue out with the date, time and signature or initials of the person retrieving the tissue.
2. Enter patient's (recipient) name and chart number or place patient's label where indicated.
3. If the tissue is not used within 24 hours, it must be discarded. Discarded tissue will have the discard time noted on the tissue log.
4. Complete processing material preparation when freeze-dried tissues need to be rehydrated or when tissue reconstitution is needed. Document the log number, expiration date of the solution.

5. When retrieving tissue from storage, and more than one (1) of a specific tissue/implant type is present, pull the tissue/implant item with the soonest expiration date.
- F. Any deviation from the policy must be immediately reported to the Clinical Nurse Manager of the Surgery Department, the Chief Nursing Officer or the Laboratory Manager.

RECORD KEEPING

1. The VCMC/SPH Surgery Department will keep records confirming that the tissue suppliers are registered with the U.S. Food and Drug Administration (FDA) and review these records annually by the Clinical Nurse Manager of the Surgery Department or designee.
2. VCMC/SPH strictly follow manufacturer's directions in preparing or processing tissue. The VCMC Surgery Department will keep records of the manufacturer's directions.
3. The VCMC/SPH Surgery Department will keep traceable records of tissue from the donor or source facility to all recipients, or final disposition, including discarding tissue.
4. A copy of the implant record is kept in the log book in the Surgery Department or Surgery storage to permit tracing of any tissue from the donor to all recipients for a minimum of ten (10) years.
5. The Laboratory (frozen tissue) and the Surgery Department (room temperature tissue) will maintain a log book with full documentation of the information in Item D.
6. All records of storage temperatures, procedures, manuals and publications will be retained for a minimum of ten (10) years.
7. All persons involved, dates and times regarding tissue preparation is documented in the OR record and is kept in the patient's chart.
8. All tissue information cards will be completed by the OR staff by the end of the case and returned to the issuing/source facility including discarded tissue.

ADVERSE EVENTS/PATIENT NOTIFICATION

- A. Any contamination of the tissue or any tissue reported by the source facility as contaminated will be sequestered immediately and reported to the Clinical Nurse Manager of the Surgery Department, the Chief Nursing Officer and the Laboratory Manager.
- B. The Medical Director and the Hospital Chief Executive Officer will manage the event investigation and inform recipients of the infection risk.
- C. Recipients of any tissue from a donor with HIV, HTLV I/II, viral Hepatitis or other infectious agents known to be transmitted by tissue are identified and informed of infection risk.

REFERENCES:

- The Joint Commission Standards, TS.03.01.01, TS.03.02.01 and TS.03.03.01
- Food and Drug Administration (FDA)
- California DHS

Note: The Laboratory Medical Director must review and sign all policies related to Tissue Banking.

All revision dates:

7/10/2019, 7/1/2016, 10/1/2010, 6/1/2010, 7/1/2009

Attachments

Implant Tissue Tracking Log: Acquisition, Receipt, Storage, and Issuance

Approval Signatures

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Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/9/2022
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Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	10/3/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	6/11/2022
Policy Owner	Erlinda Roxas: Director Laboratory Services	6/11/2022



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Laboratory Services
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100.089 Point of Care Testing, Waived Tests and Provider-Performed Microscopy (PPM)

POLICY:

A limited number of "bedside" laboratory tests (Point of Care Testing or POCT) have been approved by the Laboratory Director at Ventura County Medical Center/Santa Paula Hospital to be available to clinicians to provide rapid test results in the hospital and to help with treatment decisions in the clinics.

Laboratory procedures that are done at the point of care are performed under the CLIA Laboratory Certificate for Provider-Performed Microscopy Procedures issued by CMS to Ventura County Medical Center/Santa Paula Hospital. Procedures that are approved by the Laboratory Director as Waived Tests or are listed as Provider-Performed Microscopy Procedures (CDC) are the only tests that may be performed at the point of care. Point of care testing sites include bedside and nursing stations in both hospitals, Ambulatory Care clinics, and the Inpatient Psychiatric Unit and clinics.

PROCEDURE:

Overall responsibility for Point of Care Testing lies with the Laboratory Director. The Laboratory Director will designate a Point of Care Testing Coordinator. The Point of Care Testing Coordinator will:

1. Assist in the development of policy and procedures.
2. Review all procedures at least annually.
3. Oversee Quality Control/Quality Assurance.
4. Help educate staff at Point of Care testing sites.
5. Act as a liaison between the VCMC Laboratory and the staff and departments performing Point of Care testing.
6. Validate new tests, new analyzers, and, when required, new reagents.
7. Coordinate, assist, or perform initial competency assessment.
8. Participate at least monthly in departmental reviews of all glucose analyzer testing and of all Inpatient point of care patient tests, quality control and instrument maintenance logs. Ambulatory Care Administration maintains documentation of patient testing, quality control and instrument maintenance logs.
9. Act as a liaison between the POCT sites and the manufacturer should there be analyzer problems or

breakage that cannot be resolved on site by the POCT coordinator.

WAIVED TESTING:

The following waived tests that are performed at Point of Care Testing sites utilize testing instrumentation:

- Blood Glucose by Nova Statstrip method
- Hemoglobin A1c (Glycohemoglobin) by Siemens DCA Vantage
- Hemocue HB201DM for hemoglobin

The following waived tests that are performed at Point of Care Testing sites do not utilize any testing instrumentation:

- Dipstick for urinalysis by Multistix 10SG method (10 test pads per strip)
- Dipstick for urine tests by Labstix method (5 test pads per strip)
- Fecal occult blood by Hemoccult Sensa method
- Fecal occult blood by InSureONE method
- Urine pregnancy test by ICON 25 hCG method
- Streptococcus A Screen by OSOM Ultra Strep A Test method

Physician privileging for non-instrumentation Waived Testing is coordinated through the Medical Staff Office and the physician credentialing process. Other waived tests may be added only after review by the Point of Care Testing Committee and approved by the Laboratory Director.

PROVIDER-PERFORMED MICROSCOPY (PPM):

A physician or mid-level practitioner may perform Provider-Performed Microscopy Procedures (PPM). Mid-level practitioners include licensed Physicians' Assistants and Nurse Practitioners. The primary instrument used is a microscope and the specimen is considered labile.

The following PPM procedures may be performed:

1. Wet mount for presence or absence of bacteria, fungi, parasites and human cellular elements
2. Potassium hydroxide (KOH) preparations
3. Pinworm examination
4. Fern test
5. Post-coital direct, qualitative examination of vaginal or cervical secretions
6. Urine sediment examinations
7. Nasal smears for granulocytes
8. Fecal leukocyte examinations
9. Qualitative semen analysis (presence or absence of sperm and detection of motility)
10. Initial and annual competency assessment for physicians performing PPM is coordinated through the Medical Staff Office and the physician credentialing process. In addition, the physician may perform Amniotest, pH of vaginal secretions.
11. "When a physician performs waived testing that does not involve an instrument, there is no Joint Commission requirement for documentation of competency assessment when the test is a logical part of his or her specialty and the organization has specifically privileged the physician for that test." Through

the medical staff credentialing process, individual physician may be privileged for those specific waived tests appropriate to their scope of practice and no further assessment of skills or documentation of competence would be required. 1

COMPETENCY PROGRAM

- A. The Laboratory Director, or a qualified designee, will orient, train and assess the competency of staff and independent practitioners who perform waived testing.
- i. Clinical Nurse Managers (or those requested by a Clinical Nurse Manager, the Mental Health Clinic Coordinator, or Ambulatory Care Administration) are determined to be the "qualified designee/ superuser" after initial training from the Laboratory Point-of-Care Coordinator.
 - ii. "Qualified designees/superuser" are required to perform annual competencies.
 - iii. Documentation of the initial training and annual competencies of the "qualified designees/ superuser" are kept by the Laboratory Point-of-Care Coordinator.
 - iv. Documentation of the initial training and annual competency of staff members (Clinic Assistants, medical assistants, LVN's, RN's, or Nurse Practitioners) are kept by the Clinical Nurse Manager or qualified designee.
- B. Initial orientation will include the safe use and maintenance of any instrumentation.
- C. Competency is performed initially and annually and includes at least two of the following methods per person per test:
- i. Performance of a test on a blind specimen
 - ii. Periodic observation of routine work by the supervisor or qualified designee
 - iii. Monitoring of each user's quality control performance
 - iv. Use of a written test specific to the testing
- D. **Initial and Annual Competency:**

The "qualified designee" will ensure that all new staff receives instruction of testing devices and operating policies and procedures. Initial and annual competencies will be documented utilizing two (2) methods of competency assessment (see #iii above).

Competency Assessment and Remedial Action:

- In the event that an employee fails to demonstrate satisfactory performance on the competency assessment, the deficiency is to be identified on the competency assessment form. Retraining and reassessment of the employee competency must occur when problems are identified with employee performance. The deficiency will be resolved before the competency assessment is completed. Any deficiency noted for registry or temporary employees will also be reported to their employer.
- Employees who do not pass initial competency evaluation may not perform those functions including patient testing without direct supervision.
- Retraining is provided and competency reassessed and ensured by the section supervisor.
- If the employee does not pass the initial competency during the probation period, the probation period may be extended and further retraining will be provided.
- If the employee still cannot pass the competency after retraining, the Laboratory can exercise

probationary termination.

- If the employee does not pass the annual competency, retraining will be provided. The competency will be repeated within 30-60 days. If the employee still cannot successfully complete the competency, disciplinary actions will be taken as recommended by the Human Resources Department.
- Completed competency assessments are to be filed in the employee's personnel file.

Quality Control:

The supervisor or manager of each Point of Care testing site will review and document each review at least monthly Quality Control and patient test results and also any required instrument maintenance. Each testing site is responsible for the performance and reporting of results for waived test Quality Control and patient tests, for instruments used in testing, and for supplies.

PATIENT RESULTS:

Test results for waived testing are documented in the patient's medical record. Quantitative test results in the patient's medical record for waived testing will include documentation of the reference ranges (normal values) for that test and age specific when appropriate.

IT maintains the network components of the NovaBiomedical "Novanet."

WAIVED TESTING OVERSIGHT:

Point of Care Testing Committee:

- Laboratory Director
- Medical Director
- Nursing Administration Representative
- Ambulatory Care Administration Representative
- Point of Care Coordinator

The Point of Care Testing Committee will meet when necessary to discuss adding any new test or new equipment, to resolve compliance problems, or to delete any test.

The Laboratory Point of Care Coordinator will periodically review and document the review of Point of Care initial and annual competency assessment.

REFERENCES:

The Joint Commission Frequently Asked Questions, "*Physician Competency For Waived and P.P.M.P Testing,*" November 24, 2008.

All revision dates:

11/26/2018, 6/1/2016, 8/1/2012

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/9/2022
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	10/17/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	10/7/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	10/2/2022
Policy Owner	Erlinda Roxas: Director Laboratory Services	10/2/2022

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V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

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Owner: Sherri Block: Associate Chief
Nursing Executive, VCMC &
SPH
Policy Area: Administrative - Patient Care
References:

100.100 Palliative Care Program

POLICY:

The Ventura County Medical Center Palliative Care Program operates as an interdisciplinary team, providing patients and families with comprehensive services throughout the continuum of their illness addressing physical, intellectual, emotional, social and spiritual needs and facilitating patient autonomy, access to information and choice.

PROCEDURE:

- A. To alleviate suffering, improve quality of life and facilitate healing for patients and their families facing chronic, debilitating, serious and / or life-threatening illness.
- B. Focus on physical, social, emotional and spiritual needs of patients and their families to assure comfort, dignity and a better quality of life.
- C. Assist and Support the primary medical team across the care continuum.

Palliative Care is an interdisciplinary, patient and family-centered approach to care that promotes quality of life in the context of serious or life-threatening illness. Palliative care may be complementary to curative or life-prolonging therapies that are being used to meet patient-defined goals of care.

Palliative Care Consultation Team: In addition to each team members' individual role, they each have a role in the education of Hospital staff and the community about palliative care and associated services (i.e., advanced care planning and end of life issues).

1. **Medical Director** : Provides operational and clinical leadership for all palliative care services. Is a member of the palliative care consultation service. Proactively identifies opportunities to improve the patient and family experience of care and improve the efficiency and effectiveness of resources used.
2. **Palliative Care Physician** : Provides consultation services in palliative care, symptom management and supportive care to meet the general medical needs of the patient. Facilitates clarification of patient and family goals of care. Consults with attending and / or primary physician and the interdisciplinary team to establish plan of care.
3. **Palliative Care Nurse Coordinator** : In collaboration with the palliative care physicians and other team members, assists in the coordination and delivery of palliative care and related healthcare services to patient and families. Coordinates the interdisciplinary care conferences/family meetings

with special focus on care goal clarification, pain and symptom management. Collects and maintains all aspects of palliative care data/statistics.

4. **Palliative Care Social Worker** : Provides psychosocial assessments, ongoing psychosocial interventions, bereavement assessment and implementation of bereavement care plan, community education, outreach and referrals. Collaborates with department-specific social workers and case managers to provide continuity of case management and social services.
5. **Palliative Care Chaplain/Spiritual Care Counselor** : Provides spiritual assessment develops and implements the spiritual plan of care emphasizing the integration of experience of pain and/or loss and anticipatory grief with the families own religious and spiritual practices. Works in partnership with local community clergy to provide continuity of care
6. **Psychologist** : Provides an environment to support patient and family expression of psychosocial needs. Listens actively, supports and refers as appropriate. Integrates psychosocial needs to the plan of care.
7. **Other Team Members** : On-call basis (i.e. pharmacist, dietician, physical and occupational therapists).

D. **Hours of Operations** :

Palliative Care consultant services are available Monday to Friday. Hours vary excluding hospital-observed holidays. The Palliative Care Consultation Team will provide consultation to patients throughout Ventura County Medical Center.

E. **Referrals:**

The Palliative Care Program requires a physician referral to provide consultation services. To request a consultation, contact the Palliative Referral line (805) 652-6093, contact Palliative Care team members directly or place an order via Electronic Health Record (EHR).

Additionally, the Palliative Care Team is available to function as an expert resource to nursing and ancillary personnel without a physician's order for education, advanced care planning and for help in assessing the need for a referral.

Guidelines for referral: The Palliative Care Consultation team is available for patients and their families at any stage of their care and treatment. Types of referrals may include, but are not limited to:

1. Presence of a life-limiting illness for symptom control
2. Difficult symptom management (pain, dyspnea, nausea, anxiety)
3. Lack of response to curative therapies/changing goals of care
4. Patient and/or family support
5. Recurrent hospitalizations for the same illness (i.e., heart failure, COPD, liver failure)
6. Patient and/or family request.
7. Spiritual or emotional distress
8. Uncertainty or conflicts in DNR orders
9. Metastatic or locally advanced cancer progressing despite systemic treatments

10. Parkinson's disease with poor functional status or dementia

F. Practice Standards:

The Palliative Care Consultation Team/Service provides patient consultation regarding the goals of treatment and plan of care including, but not limited to:

1. Assessing and managing symptoms and side effects, according to the desires of the patient or surrogate decision maker with special attention to pain control.
2. Provide education to patient and family to promote an understanding of the underlying disease process, treatment choices and as deemed appropriate end of life resources.
3. Based on a comprehensive interdisciplinary assessment of the values, preferences, long and short term goals and needs of the patient and family; formulate, utilize and review a timely plan of care.
4. Spiritual and psychosocial support, integrating the patient's values, religion, cultural beliefs, tradition or rituals and preference for care, including adjunct therapies if patient desires.
5. Assist in and support a comfortable healing environment.
6. Consultation for advance care planning and community resource referral.
7. Assessment and support anticipatory grief needs of patient and families and linkage to community based resources.
8. Coordination with community providers to maintain continuity of care for the palliative care and / or hospice care patient.
9. Provide continuing education to all health professionals on the domains of palliative care and hospice care.

G. Interdisciplinary Meetings

Interdisciplinary Meetings will be set up to meet the needs of the patient and family within the designated Palliative Care Services hours. The interdisciplinary team will meet once weekly and ad hoc.

H. Documentation:

All consultations are documented/charted the same as any other medical consultation in the patient's chart.

All revision dates:

4/1/2016

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/9/2022

Step Description	Approver	Date
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	10/7/2022
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	10/3/2022
Nursing Administration	Sherri Block: Interim Chief Nursing Officer	8/8/2022
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V E N T U R A C O U N T Y
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Owner: Sherri Block: Associate Chief
Nursing Executive, VCMC &
SPH
Policy Area: Administrative - Patient Care
References:

100.101 Electronic Health Record (EHR) Planned Downtime

POLICY:

To prevent interruption of patient care in the event the Electronic Health Record (EHR) is unavailable, and to ensure proper documentation, communication and availability of necessary treatments are provided. Planned downtimes are defined as a scheduled temporary suspension of the EHR operations.

All departments at Ventura County Medical Center/Santa Paula Hospital are required to know what to do in the event of a planned or unplanned EHR disruption.

PROCEDURE:

PLANNED DOWNTIMES

Planned downtimes will be determined by the IT department and scheduled during non-peak hours. An email will be sent to all department managers and informatics analysts with the details of the downtime. In addition, all downtime periods will be announced via network message to all computers with specific details and expected length of downtime. A recorded message will be heard on the Help Desk answering system with specific details and expected length of downtime.

PROCEDURES PRIOR TO PLANNED DOWNTIMES

- A. Each department will prepare unit-specific documentation packets, extra labels and arm bands two (2) hours prior to the scheduled downtime. All Medication Administration Records (MAR's) will be verified by nurses upon receipt of printed MAR's from the Pharmacy Department.
- B. Because the downtime will be scheduled, adequate preparation time should be allowed to have all patient information from the system on paper. Therefore the 724 workstation capabilities should not be required. If any EHR information is required during the planned downtime and not available on the prepared paperwork, the 724 workstations should be accessed.
- C. 724 Workstations: There is at least one 724 workstation on each nursing unit and at each primary ancillary location. This workstation will provide read-only access to patient records, treatments and test results. The information on the workstations will be as recent as up to two (2) minutes prior to the downtime occurrence. Detailed instructions on how to use the 724 application are provided on the desktop of the 724 workstations.

D. If unable to access the 724 workstation, call the Help Desk at 1-805-677-5119.

E. IT Department Responsibilities:

The IT Department shall communicate to department managers and informatics analysts the details of downtime.

1. IT Department to announce downtime details through a network message on all computers.
2. Help Desk to change recorded message on answering system to contain details and estimated length of system downtime.

F. Pharmacy Responsibilities:

1. Pharmacy Department will print MAR's at least 2 hours prior to the planned downtime.
2. Pharmacy Department will sort and distribute the downtime MAR's to the nursing units. This process may take up to 90-120 minutes.

G. Nursing Responsibilities:

1. Nurses will verify the printed downtime MAR's upon receipt with the electronic MAR's using the EHR. This will be performed one (1) hour prior to the planned downtime.
2. The printed downtime MAR shall match the electronic MAR. Any discrepancies shall be resolved by hand-written entries on the printed downtime MAR to match the electronic MAR.
3. Every unit will have a unit-specific notebook with all approved downtime forms to be utilized and scanned into the EHR when operational.

H. Respiratory Therapy Responsibilities:

1. Plan future respiratory treatments required during downtime and assure needed medications are on the nursing units or in the automated dispensing cabinets (ADC) one (1) hour prior to downtime.

I. Provider Responsibilities:

1. Review scheduled studies and identify services that may occur during downtime for potential rescheduling.
2. Identify where labels, pre-printed order forms, progress notes, and medication reconciliation forms are kept in the unit.

J. Diagnostic Department Responsibilities:

1. Print orders and requisitions for upcoming tests scheduled during the planned downtime.
2. Assure all test/procedure results are entered if possible prior to the planned downtime.

K. Laboratory Department Responsibilities:

1. Print orders and requisitions for upcoming tests scheduled during the planned downtime.
2. Assure all test/procedure results are entered if possible prior to the planned downtime.

PROCEDURES DURING PLANNED DOWNTIME

A. Registration Responsibilities:

1. Identify downtime MRN and FIN's to assign.
2. See department-specific policies and procedures for additional details and duties.

B. Provider Responsibilities:

1. Provider paper order forms and/or order sets will be used during downtime.
2. Patient label must be affixed to the front and back of each form used. In the event that patient labels are unavailable, all records require a patient name, date of birth and MRN.

C. Nursing Responsibilities:

1. Medication orders will be faxed to the Pharmacy Department.
 - a. VCMC orders to be faxed to VCMC Pharmacy at 1-805-652-6190.
 - b. Santa Paula Hospital orders:
 1. Between hours of 0800 to 1630, fax to SPH Pharmacy at 1-805-525-7091
 2. Between hours of 1631 to 0759, fax to VCMC Pharmacy at 1-805-652-6190
2. STAT orders will be telephoned to the respective departments (Laboratory, Radiology, Respiratory, Pharmacy) by nurse or medical office assistant.
3. Downtime paper requisitions will be completed and sent to the appropriate ancillary department (Laboratory and Radiology).
4. Call Radiology Department to schedule exam and send patient with paper requisition.

D. Pharmacy Department Responsibilities:

1. Compound and dispense any needed medications from faxed paper order forms following internal Pharmacy Department procedures.

E. Respiratory Therapy Responsibilities:

1. Document administration of all respiratory medications and treatments on paper MAR during downtime.
2. ABG results will be called to the ordering provider.

F. Diagnostic Department Responsibilities:

1. Collect paper order requisitions.
2. Preliminary results will be posted to PACS.

G. Laboratory Department Responsibilities:

1. Collect paper order requisitions
2. Routine results will be noted to paper downtime forms and can be faxed to the ordering provider or respective unit. Critical results will be called to respective unit and STAT results will be faxed.

H. For Other Department Responsibilities:

1. See department-specific policies and procedures for additional details and duties.

PROCEDURES AFTER DOWNTIME: POST-RECOVERY DATA ENTRY

A. General Overview of Post-Recovery Data Entry:

1. All documentation will be back-dated/timed to reflect actual time of task performed.
2. All orders and documentation must be entered into the EHR within 24 hours.
3. Paper copies will be kept in thin charts until time of discharge.

4. Chart will be sent to HIM to be scanned to EHR.

Note: Data must be entered on all patients (including patients discharged/expired during downtime) except for Emergency Department (ED) patients. Patients entering ED during downtime and are discharged during downtime remain on paper.

B. IT Department Responsibilities:

1. IT Department to communicate to nursing supervisor who will notify paging to text or page all clear to Administration and managers that downtime is complete.
2. If downtime duration is longer than anticipated, this shall be communicated to the Nursing Supervisor who will notify paging.

C. Provider Responsibilities:

1. Clinical documentation:
 - a. Problems and diagnoses
 - b. Medication reconciliation

D. Pharmacy Department Responsibilities:

1. Enter all orders for medications, including respiratory treatments and IV solutions from paper orders and order sets received during downtime into the EHR.

E. Nursing Responsibilities:

1. Document medication administrations on electronic MAR for all medications, IV solutions, immunizations, and oral contrasts given during the downtime. Administration by proxy may be used.
2. Document all intake and output totals.
3. Document last set of vital signs.
4. Document smoking status on patients 13 years of age or older.
5. Enter orders for EKG's ordered during downtime.
6. All Patient Care Orders excluding Laboratory, Radiology and medication orders will be entered into the EHR by Nursing or medical office assistant (Laboratory, Radiology and medication orders are entered by their respective departments from paper requisitions).
7. Document "INSERT" and "DISCONTINUE AND INACTIVATE" all invasive lines and devices (peripheral IVs, central lines, Foley catheters, intubation tubes).
8. Enter in admissions/transfers/discharges into EHR.
 - a. Allergies
 - b. Height and weight in metric units
 - c. Home medication list
 - d. All Admission Assessments will remain on paper and will be labeled with a bar code patient label to be scanned into the EHR. Nurses documenting by proxy should indicate so in Nurse Notes.
9. Enter orders for EKG's ordered during downtime.
10. Enter in admissions/transfers/discharges into EHR.

- a. Allergies
- b. Height and weight in metric units
- c. Home medication list
- d. All initial patient evaluations

F. Respiratory Therapy Responsibilities:

- 1. Document medication administrations on electronic MAR for all respiratory medications/treatments given during the downtime.

G. Diagnostic Department Responsibilities:

- 1. Enter all orders from paper requisitions and assigned accession numbers
- 2. Reconcile orders and results within the dictation system and EHR.

H. Laboratory Department Responsibilities:

- 1. Enter all orders from paper requisitions and assigned accession numbers
- 2. Reconcile orders with results into the EHR.

I. Health Information Management (HIM) Responsibilities:

- 1. Medical records to be scanned into the EHR at time of discharge.

Planned Downtime Responsibilities			
Department	Prior to Planned Downtime	During Planned Downtime	After Planned Downtime
IT Department Responsibilities	<ul style="list-style-type: none"> • IT Department to communicate to department managers and informatics analysts the details of downtime. • IT Department to announce downtime details through a network message on all computers. • Help Desk to change recorded message on answering system to contain details and estimated length of system downtime. 	<ul style="list-style-type: none"> • Perform scheduled maintenance 	<ul style="list-style-type: none"> • IT Department to communicate to Nursing Supervisor who will communicate to paging that downtime is complete. • If downtime duration is longer than anticipated, this shall be communicated to the Nursing Supervisor who will notify paging. • Paging will notify Administration and Managers via text or page.
Pharmacy Responsibilities	<ul style="list-style-type: none"> • Pharmacy will print MARs at least 2 	<ul style="list-style-type: none"> • Compound and dispense any needed medications 	<ul style="list-style-type: none"> • Enter all orders for medications,

	<p>hours prior to the planned downtime.</p> <ul style="list-style-type: none"> Pharmacy will sort and distribute the downtime MARs to the nursing units. This process may take up to 90-120 minutes. 	<p>from faxed paper order forms following internal pharmacy department procedures.</p>	<p>including respiratory treatments and IV solutions from paper orders and order sets received during downtime into the EMR.</p>
Nursing Responsibilities	<ul style="list-style-type: none"> Nurses will verify the printed downtime MARs upon receipt with the electronic MARs using the EHR. This will be performed 1 hour prior to the planned downtime. The printed downtime MAR shall match the electronic MAR. Any discrepancies shall be resolved by hand-written entries on the printed downtime MAR to match the electronic MAR. Every unit will have a unit-specific notebook with all approved downtime forms to be utilized and scanned into the EHR when operational. 	<ul style="list-style-type: none"> Medication orders will be faxed to the pharmacy. <ul style="list-style-type: none"> VCMC orders to be faxed to VCMC Pharmacy at 1-805-652-6190. Santa Paula Hospital orders <ul style="list-style-type: none"> Between hours of 0800 to 1630, fax to SPH Pharmacy at 1-805-525-7091 Between hours of 1631 to 0759, fax to VCMC Pharmacy at 1-805-652-6190 Stat orders will be called to the respective departments (Lab, Radiology, Respiratory, Pharmacy) by nurse or MOA. Downtime paper requisitions will be completed and sent to the appropriate ancillary department (Lab and Radiology). 	<ul style="list-style-type: none"> Document medication administrations on electronic MAR for all medications, IV solutions, immunizations, and oral contrasts given during the downtime. Administration by proxy may be used. Document all intake and output totals. Document last set of vital signs. Document smoking status on patients 13 years or older. Enter orders for EKGs ordered during downtime. Enter admissions/transfers/ discharges into EHR. Allergies Height and weight in metric units Home Meds List All initial patient evaluations
Provider Responsibilities	<ul style="list-style-type: none"> Review scheduled studies and identify services that may occur during 	<ul style="list-style-type: none"> Provider paper order forms and/or order sets that will be used during downtime. 	<ul style="list-style-type: none"> Clinical documentation: <ul style="list-style-type: none"> Problems and diagnoses

	<p>downtime for potential rescheduling.</p> <ul style="list-style-type: none"> Identify where labels, pre-printed order forms, progress notes, and medication reconciliation forms are kept in the unit. 	<ul style="list-style-type: none"> Patient label must be affixed to the front and back of each form used. In the event that patient labels are unavailable, all records require a patient name, date of birth and MRN. 	<ul style="list-style-type: none"> Medication Reconciliation
Diagnostic Department Responsibilities	<ul style="list-style-type: none"> Print orders and requisitions for upcoming tests scheduled during the planned downtime. Ensure all test/ procedure results are entered if possible prior to the planned downtime. 	<ul style="list-style-type: none"> Collect paper order requisitions Preliminary results will be posted to PACs 	<ul style="list-style-type: none"> Enter all orders from paper requisitions and assigned accession numbers. Reconcile orders with dictation and EHR
Laboratory	<ul style="list-style-type: none"> Print orders and requisitions for upcoming tests scheduled during the planned downtime. Ensure all test/ procedure results are entered if possible prior to the planned downtime. 	<ul style="list-style-type: none"> Collect paper order requisitions Routine results will be noted to paper downtime forms and can be faxed to the ordering provider or respective unit. Critical results will be called to respective unit and STAT results will be faxed. 	<ul style="list-style-type: none"> Enter all orders from paper requisitions and assigned accession numbers Reconcile orders with results into the EHR.
Registration Responsibilities		<ul style="list-style-type: none"> Print patient labels and identification bands Keep a log of all patients registered See department-specific policy and procedure for additional details and duties. 	<ul style="list-style-type: none"> Register and reconcile patient log
Respiratory Therapy Responsibilities	<ul style="list-style-type: none"> Plan future respiratory treatments required during downtime 	<ul style="list-style-type: none"> Document administration of all respiratory medications and treatments on paper 	<ul style="list-style-type: none"> Document medication administrations on electronic MAR for

	and assure needed medications are on the nursing units or in the automated dispensing cabinets (ADC) 1 hour prior to downtime.	MAR during downtime.	all respiratory medications/ treatments given during the downtime.
HIM Responsibilities			<ul style="list-style-type: none"> • Medical records to be scanned into the EHR at time of discharge.

All revision dates:

3/1/2016

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/9/2022
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	10/3/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	7/12/2022
Nursing Administration	Sherri Block: Interim Chief Nursing Officer	7/12/2022
Policy Owner	Sherri Block: Interim Chief Nursing Officer	7/12/2022

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V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

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Nursing Executive, VCMC &
SPH
Policy Area: Administrative - Patient Care
References:

100.102 Electronic Health Record (EHR) Unplanned Downtime

POLICY:

To prevent interruption of patient care in the event the Electronic Health Record (EHR) is unavailable and to ensure proper documentation, communication and availability of necessary treatments are provided. Unplanned downtimes are defined as an unscheduled temporary suspension of EHR operations. It is required that all Ventura County Medical Center(VCMC)/Santa Paula Hospital (SPH) departments know what to do in the event of an unplanned EHR disruption.

PROCEDURE:

Unplanned Downtime

In the event of an unplanned downtime, the Help Desk will notify the nursing supervisors at VCMC and SPH to initiate Unplanned Downtime Procedures if the downtime is anticipated to be longer than one (1) hour. The nursing supervisors will notify the Administrator On Duty (AOD) and Paging. Paging will notify administration and department managers (agency-wide) via text or page. A recorded message will be heard on the Help Desk answering system with the details of the system and expected length of downtime.

PROCEDURES DURING UNPLANNED DOWNTIME

- A. 724 Workstations: There is at least one 724 workstation on each nursing unit and at each primary ancillary location. This workstation will provide read-only access to patient records, treatments and test results. The information on the workstations will be as recent as up to two (2) minutes prior to the unplanned downtime occurrence. Detailed instructions on how to use the 724 application are provided on the desktop of the 724 workstations.
- B. If unable to access the 724 workstation, call the Help Desk at (805) 677-5119.
- C. **Registration Responsibilities:**
 1. Hand write patient labels and identification bands
 2. Keep an updated log of all patients
 3. See department-specific policies and procedures for additional details and duties
- D. **Provider Responsibilities:**

1. Provider paper order forms and/or order sets will be used during downtime.
2. Patient label must be affixed to the front and back of each form used. In the event that patient labels are unavailable, all records require a patient name, date of birth and MRN.

E. Nursing Responsibilities:

1. Each unit is responsible to print the medication lists from the 724 workstation.
2. Blank paper MAR's will be used to transcribe new orders for MAR documentation.
3. Medication orders will be faxed to the pharmacy.
 - a. VCMC orders shall be faxed to VCMC Pharmacy at 652-6190.
 - b. Santa Paula Hospital orders:
 1. Between hours of 0800 to 1630, fax to SPH Pharmacy at 525-7091
 2. Between hours of 1631 to 0759, fax to VCMC Pharmacy at 652-6190
4. Stat orders will be called to the respective departments (Laboratory, Radiology, Respiratory, Pharmacy) by nurse or MOA.
5. Downtime paper requisitions will be completed and sent to the appropriate ancillary department (Laboratory and Radiology).

F. Pharmacy Responsibilities

1. Upon receipt of paper orders, dispense medications as ordered following pharmacy department procedures (See policy PH.7170.81).

G. Respiratory Therapy Responsibilities

1. Document administration of all respiratory medications and treatments on paper MAR during downtime.

H. Diagnostic Department Responsibilities:

1. Provide and collect paper order requisitions
2. Preliminary results will be posted to PACs

I. Laboratory Department Responsibilities

1. Provide and collect paper order requisitions
2. Routine results will be noted to paper downtime forms and can be faxed to the ordering provider or respective unit. Critical results will be called to respective unit and STAT results will be faxed.

J. Other Department Responsibilities:

1. See department-specific policies and procedures for additional details and duties.

PROCEDURES AFTER DOWNTIME: POST-RECOVERY DATA ENTRY

A. General Overview of Post-Recovery Data Entry:

1. All documentation will be back-dated/timed to reflect actual time of task performed.
2. All orders and documentation must be entered into the EHR within 24 hours.
3. Paper copies will be kept in thin charts until time of discharge.

4. Chart will be sent to HIM to be scanned to EHR upon discharge.

Note: Data must be entered on all patients (including patients discharged/expired during downtime) except for Emergency Department (ED) patients. Patients entering ED during downtime and are discharged during downtime remain on paper.

B. IT Department Responsibilities:

1. IT Department to communicate to nursing supervisors who will notify Paging that downtime is complete. Paging will send out all clear to administration and managers.

C. Registration Responsibilities:

1. Register and reconcile logged patients
2. Print patient labels, arm bands and deliver designated unit

D. Provider Responsibilities:

1. Problems and diagnoses
2. Medication reconciliation

E. Pharmacy Responsibilities:

1. Enter all orders for medications, including respiratory treatments and IV solutions from paper orders and order sets received during downtime into the EHR.

F. Nursing Responsibilities:

1. Document medication administrations on electronic MAR for all medications, IV solutions, immunizations, and oral contrasts given during the downtime. Administration by proxy may be used.
2. Document all intake and output totals.
3. Document last set of vital signs.
4. Document smoking status on patients 13 years of age or older.
5. Enter orders for EKG's ordered during downtime.
6. All Patient Care Orders excluding Laboratory, Radiology and medication orders will be entered into the EHR by Nursing or medical office assistant (Laboratory, Radiology and medication orders are entered by their respective departments from paper requisitions).
7. Document "INSERT" and "DISCONTINUE AND INACTIVATE" all invasive lines and devices (peripherals IVs, central lines, Foley catheters, intubation tubes).
8. Enter in admissions/transfers/discharges into EHR.
 - a. Allergies
 - b. Height and weight in metric units
 - c. Home medications
 - d. All Admission Assessments will remain on paper and will be labeled with a bar code patient label to be scanned into the EHR. Nurses documenting by proxy should indicate so in Nurse Notes.

G. Respiratory Therapy Responsibilities:

1. Document medication administrations on electronic MAR for all respiratory medications/treatments given during the downtime.

H. Diagnostic Department Responsibilities:

1. Enter all orders from paper requisitions and assigned accession numbers.

I. Laboratory Department Responsibilities:

1. Enter all orders from paper requisitions and assigned accession numbers
2. Reconcile orders with results into the EHR.

J. Health Information Management (HIM) Responsibilities:

1. Medical records to be scanned into the EHR at time of discharge.

UNPLANNED DOWNTIME RESPONSIBILITIES		
DEPARTMENT	DURING UNPLANNED DOWNTIME	AFTER UNPLANNED DOWNTIME
IT Department Responsibilities	<ul style="list-style-type: none"> • At start of downtime, Help Desk to notify nursing supervisors at VCMC and SPH to initiate Unplanned Downtime Procedures and 724 Workstation usage. 	<ul style="list-style-type: none"> • IT Department to communicate to nursing supervisors who will notify paging. Paging will notify Administration and managers that downtime is complete.
Registration Responsibilities	<ul style="list-style-type: none"> • Hand write patient labels and identification bands • Keep an updated log of all patients • See department-specific policies and procedures for additional details and duties. 	<ul style="list-style-type: none"> • Register and reconcile logged patients • Print patient labels, arm bands and deliver designated unit
Provider Responsibilities	<ul style="list-style-type: none"> • Provider paper order forms and/or order sets will be used during downtime. • Patient label must be affixed to the front and back of each form used. In the event that patient labels are unavailable, all records require a patient name, date of birth and MRN. 	<ul style="list-style-type: none"> • Clinical documentation: <ul style="list-style-type: none"> ◦ Problems and diagnoses ◦ Medication Reconciliation
Nursing Responsibilities	<ul style="list-style-type: none"> • Each unit is responsible to print the medication lists from the 724 workstation. • Blank paper MAR's will be used to transcribe new orders for MAR documentation. • Medication orders will be faxed to the pharmacy. <ul style="list-style-type: none"> ◦ VCMC orders to be faxed to VCMC Pharmacy at 652-6190. ◦ Santa Paula Hospital orders: <ul style="list-style-type: none"> ▪ Between hours of 0800 to 	<ul style="list-style-type: none"> • Document medication administrations on electronic MAR for all medications, IV solutions, immunizations, and oral contrasts given during the downtime. Administration by proxy may be used. • Document all intake and output totals. • Document last set of vital signs. • Document smoking status on patients 13 years or older.

	<p>1630, fax to SPH Pharmacy at 525-7091</p> <ul style="list-style-type: none"> ▪ Between hours of 1631 to 0759, fax to VCMC Pharmacy at 652-6190 <ul style="list-style-type: none"> • STAT orders will be called to the respective departments (Laboratory, Radiology, Respiratory, Pharmacy) by nurse or medical office assistant. • Downtime paper requisitions will be completed and sent to the appropriate ancillary department (Laboratory and Radiology). 	<ul style="list-style-type: none"> • Enter orders for EKG's ordered during downtime. • Allergies • Height and weight in metric units • Home medications • All initial nursing assessments
Pharmacy Responsibilities	<ul style="list-style-type: none"> • Upon receipt of paper orders, dispense medications as ordered following pharmacy department procedures. 	<ul style="list-style-type: none"> • Enter all orders for medications, including respiratory treatments and IV solutions from paper orders and order sets received during downtime into the EHR.
Diagnostic Department Responsibilities	<ul style="list-style-type: none"> • Provide and collect paper order requisitions • Preliminary results will be posted to PACs 	<ul style="list-style-type: none"> • Enter all orders from paper requisitions and assign accession numbers.
Laboratory Department Responsibilities	<ul style="list-style-type: none"> • Provide and collect paper order requisitions • Routine results will be noted to paper downtime forms and can be faxed to the ordering provider or respective unit. Critical results will be called to respective unit and STAT results will be faxed. 	<ul style="list-style-type: none"> • Enter all orders from paper requisitions and assigned accession numbers • Reconcile orders with results into the EHR.
Respiratory Therapy Responsibilities	<ul style="list-style-type: none"> • Document administration of all respiratory medications and treatments on paper MAR during downtime. 	<ul style="list-style-type: none"> • Document medication administrations on electronic MAR for all respiratory medications/ treatments given during the downtime.
HIM Responsibilities		<ul style="list-style-type: none"> • Medical records to be scanned into the EHR at time of discharge.
<p>724 Workstations: There is at least one 724 workstation on each nursing unit and at each primary ancillary location. This workstation will provide read-only access to patient records, treatments and test results. The information on the workstations will be as recent as up to 2 minutes prior to the unplanned downtime occurrence. Detailed instructions on how to use the 724 application are provided on the desktop of the 724 workstations.</p>		

If unable to access the 724 workstation, call the Help Desk at (805) 677-5119.

All revision dates:

3/1/2016

Attachments

Medication Administration Record

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/9/2022
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	10/3/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	7/12/2022
Nursing Administration	Sherri Block: Interim Chief Nursing Officer	7/12/2022
Policy Owner	Sherri Block: Interim Chief Nursing Officer	7/12/2022

VCMC Crash Cart Location			
North Tower Location	Type of Crash Cart		
Basement or Ground Level Floor:	Adult	Pediatric-Broselow	Neonatal
• Central Supply <i>Replacement carts only</i>	8	2	2
• NT Imaging	1	1	
• <u>NT Stress Test Room</u>	1		
• NT Ultrasound	1		
• NT Pre-OP (near bay 20)	1		
• NT Post/Pre-Op (near bay 25)	1		
• NT PACU	1	1	
• NT OR Core near room 1	1		1
• NT OR Core near room 3	1		
• NT OR Core near room 4		1	
• NT OR Core #6	1		
First Floor	Adult	Pediatric-Broselow	Neonatal
• NT ED Trauma #1		1	
• NT ED Trauma #2	1		
• NT ED Cardiac Rm #1	1		
• NT ED Cardiac Rm #2		1	
• NT ED Nursing Station	1		
• NT ED Triage/ Rapid Care area	1		
• NT ED CT Scanner	1		
• ICU #1	1		
• ICU #2	1		
• ICU#3A	1		
• ICU#3B	1		
• Med-Surg #1A	1		
• Med-Surg #2A	1		
Second Floor	Adult	Pediatric-Broselow	Neonatal
• NICU #1			1
• NICU #2			1
• C/S OR Rm	1		
• OB and L&D	1		
• L&D Station triage			1
• Post-Partum	1		
• Post-Partum Transitional nursery (TCN)			1
• PEDS	1	1	
• PICU	1	1	
Third Floor	Adult	Pediatric-Broselow	Neonatal
• Med-Surg 3A	1		
• Med-Surg 3B	1		

Commented [VA1]: Approved by Code Blue Committee 10-14-2022

Vintage VCMC- First Floor	Adult	Pediatric-Broselow	Neonatal
• OP RAD CT Scanner # 1	1	1	
• OP RAD CT Scanner # 2	1	1	
• OP Nuclear Med	1		
Vintage VCMC Third Floor	Adult	Pediatric-Broselow	Neonatal
• 3 West	1		
Vintage VCMC Fourth Floor	Adult	Pediatric-Broselow	Neonatal
• OP GI Lab	1		
• Bronchoscopy Suite	1		
Hillmont Psychiatric Center	Adult	Pediatric-Broselow	Neonatal
• IPU	1		
Santa Paula Crash Cart Location			
Location	Type of Crash Cart		
Basement or Ground Level Floor:	Adult	Pediatric- Broselow	Neonatal
• ED	1	1	1
• ICU	1		
• Med/Surg	1		
• PACU	1		
• OR		1	
• Imaging	1		
• OB			1
• Central Supply <i>Replacement carts only</i>	3	1	2
Type of Back-up Medication Tray (SPH After Hours Need Only)			
• Med/Surg Medication Room	4	1	1



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 9/1/2013
Effective: Upon Approval
Last Approved: N/A
Last Revised: 3/21/2019
Next Review: 3 years after approval
Owner: Todd Flosi, MD: Associate Chief Medical Officer, VCMC & SPH
Policy Area: Administrative - Patient Care
References:

100.220 Electronic Order Management

POLICY:

To describe how an electronic order is communicated and properly handled between providers and non-providers.

PROCEDURE:

1. Orders to non-providers shall be given only by a person lawfully authorized to prescribe or furnish. These orders shall be recorded promptly into the patient's electronic health record, noting the name of the person giving the order and the signature of the person receiving the order
 - a. **Medication orders** may be given to the RN, LVN, licensed psych tech, pharmacist, physician (and physician assistant from a supervising physician only), physical therapists (for certain topical medications only), and respiratory therapists when the orders relate specifically to respiratory therapy.
 - b. **Non-medication orders** shall be considered acceptable from a licensed independent practitioner to a licensed, registered, or nationally certified health professional if the orders received relate to the area of competence of the individual receiving the order: audiologists, cardiopulmonary technologists/technicians, dietitians (except parental nutrition), laboratory technologists, nurses, occupational therapists, physical therapists, radiological technologists, respiratory therapists, and speech pathologists.
2. Orders entered into the Electronic Health Record (EHR) by a non-provider shall include the appropriate communication type that either routes to the ordering provider for signature, as approved by the VCHCA *Clinical Advisory Team*, or has already been signed.
 - a. **RN/Staff Initiate/Discontinue – No Cosign**: This is a communication type that nursing or a technician will select when initiating an electronic order set that has been previously created and left in the planned state (signed, but not initiated) by a provider. This also pertains to situations where a nurse discontinues an electronic order set that is no longer applicable.
 - b. **Telephone with Read Back Verification – Cosign (TORB-Cosign)**: A telephone order shall be considered to be in writing from a licensed independent practitioner when received by telephone. All staff receiving a telephone order shall read back the complete order for verification from the ordering provider. Telephone orders are to be used infrequently and not for the convenience of the ordering provider.

- c. **Protocol/Standardized – Cosign:** Non-providers are allowed to initiate certain Protocols/ Standardized Procedures, but need orders routed to the provider for acknowledgement by co-signature.
- d. **Written/Fax/Transcribe – No Cosign:** In the rare instance a written paper or faxed order is transcribed into the EHR by a nurse, pharmacist, technician, or MOA, the orders containing medications will need to be scanned to Pharmacy. Pharmacists may enter Pharmacy and Therapeutics initiatives and billing/dispensing clarifications under this order communication type (see policy 100.216).
- e. **Verbal with Read Back Verification – Cosign (VORB – Cosign):** Verbal orders shall only be given by a prescribing provider in the event of an emergent situation or if the provider is unable to obtain access to a computer (e.g. the provider is in a sterile environment). Verbal orders shall be used infrequently and read back verification must be provided. Verbal orders shall not be given for chemo orders nor for non-formulary medications.
- f. **Future Orders – No Cosign:** Future orders are routed by choosing *Activate* within PowerChart once the correct encounter has been verified. This type of order does not need a communication type and will not route for co-signature.

- 3. All orders are active when signed and/or initiated.
- 4. Orders requiring co-signature shall be routed for signature and shall be authenticated within 48 hours with special attention to change in primary provider hand-off (rotating on/off service, transfer to another service. It is the expectation that all outstanding cosigned orders shall be signed before the provider leaves the service. Compliance shall be monitored with real-time reporting.
- 5. Any code status order other than "full resuscitation" can only be entered electronically by the provider or as a written order.
- 6. Any paper orders shall be scanned into the patient's electronic health record.
- 7. All electronic orders shall be reviewed daily for order accuracy and reconciliation of active orders.

References:

California Code of Regulations Title 22 Div 5 Chapter 1 Article 3 § 70263

Joint Commission. 2019 Hospital Accreditation Standards.

- Medication Management (MM) Standard: MM.04.01.01
- Records of Care, Treatment, and Services (RC) Standard: RC.01.01.01, RC.01.02.01, RC.01.03.01, RC.02.01.01, RC.02.03.07

All revision dates:

3/21/2019, 11/26/2018, 9/1/2013

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	8/3/2022
Policy Owner	Todd Flosi, MD: Chief Medical Officer, VCMC & SPH	3/24/2022

Current Status: Pending

PolicyStat ID: 9950376



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

Origination: 9/1/2004
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Last Revised: 2/1/2016
Next Review: 3 years after approval
Owner: Todd Flosi, MD: Associate Chief
Medical Officer, VCMC & SPH
Policy Area: Administrative - Patient Care
References:

100.223 Discharge Against Medical Advice (AMA)

POLICY:

This policy is to establish the procedure for discharging a patient Against Medical Advice (AMA).

PROCEDURE:

When a patient does not meet the criteria for a legal hold, is released by the courts or requests to be discharged AMA, the procedure for discharge is as follows:

1. Nursing staff should notify the treating physician of a patient's request to be discharged.
2. The treating physician will meet with the patient to explain the risks involved in failing to continue treatment.
3. If the patient continues to request discharge, staff will begin the process of discharge.
4. All patients will be encouraged to continue with medication regimen and to follow-up with outpatient services upon discharge. Social Services staff or designee will provide resource information or arrange for follow-up appointments if patient consents.
5. Patients will be offered drug prescriptions and medical follow-up appointments. Aftercare Plan and chart will document patient refusal of medications and/or follow-up appointments.
6. Staff will follow discharge procedure according to Administrative policy 100.038.
7. Patients with known reportable infectious diseases or other reportable conditions will be reported to the Public Health Department.

After Hours

1. Patient will be evaluated for change in legal status by certified unit staff. If patient was not on 5150 hold, initiate 5150 if criteria is met.
2. On Call physician will be notified and an order obtained for release AMA or for change in legal status.
3. Patient will be released or notified of change in legal status and detained. Patient will sign AMA form. Patient will be given referrals for follow-up treatment. All belongings will be returned except items kept in the locked unit safe. Patient will be required to return to obtain these items.

All revision dates:

2/1/2016, 5/1/2014, 3/1/2009, 2/1/2008, 3/1/2007,
10/1/2006

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/9/2022
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	10/3/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	11/22/2021
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	10/29/2021
Policy Owner	Todd Flosi, MD: Chief Medical Officer, VCMC & SPH	10/29/2021



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

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Last Revised: 1/28/2020
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Owner: Danielle Gabele: Chief Nursing Executive, VCMC & SPH
Policy Area: Administrative - Patient Care
References:

100.224 Emergency Medical Treatment and Labor Act (EMTALA)

POLICY:

The Emergency Medical Treatment and Labor Act (EMTALA) was enacted both by Congress to regulate and restrict the transfer, for economic or other non-medical reasons, all patients presenting for emergency services. The primary focus of EMTALA is to ensure access for all patients to emergency services and to prohibit discrimination in the provision of emergency services. This policy provides for:

- A. The Medical Screening Examination (MSE) conducted by a physician or Qualified Medical Person (QMP) will be provided to all patients presenting to the Emergency Department (ED).
- B. The transfer of patients with emergency medical conditions.

PROCEDURE:

- A. A medical screening examination (MSE) will be offered to any individual presenting for examination or treatment of a medical condition. The examination will be the same appropriate screening examination that would be performed on any individual with similar signs and symptoms, regardless of the individual's ability to pay for medical care.
- B. The medical screening examination or necessary stabilizing treatment shall not be delayed in order to inquire about an individual's method of payment or insurance status. Prior authorizations will not be requested for emergency services until the medical screening examination has been conducted.
- C. The hospital will not transfer any patient with an unstable emergency condition (including a pregnant patient having contractions or a patient with severe pain) unless a physician certifies that the medical benefits reasonably expected from the provision of treatment at the receiving facility outweigh the risks of the transfer.
 - 1. Prior to transfer, the receiving hospital and physician have agreed to accept the patient and to provide appropriate medical treatment.
 - 2. The hospital shall send to the receiving facility all medical records (or copies thereof) available at the time of transfer related to the emergency condition of the patient, including:
 - a. Records related to the patient's emergency condition, observations of signs or symptoms, preliminary diagnosis, treatment provided, results of any tests and vital signs at the time of transfer; other records (including pending test results or records not available at the time of

- transfer) must be forwarded as soon as practicable after the transfer;
- b. The patient's informed written consent to transfer or the physician's certification (or copy thereof); and
 - c. The name and address of any on-call physician who has refused or failed to appear within a reasonable time to provide necessary stabilizing treatment.
3. The transfer is effected using proper staff and equipment, as well as necessary and medically appropriate life support measures.

If a patient who has or may have an emergency medical condition is transferred to another facility for a test with the intention of the patient returning to the Hospital after the test, the Hospital will transfer in accordance with EMTALA standards.

PATIENT REFUSAL OF EMERGENCY SERVICES OR TRANSFER

- A. Under EMTALA the patient retains the right to refuse necessary stabilizing treatment and further medical examination, as well as a transfer to another facility.
- B. If a patient leaves the hospital before receiving a medical screening examination, either with or without notice to staff, staff should document the circumstances and reasons (if known) for the patient's departure and the time of departure.
- C. If a patient refuses stabilizing treatment after receiving a medical screening, the physician or QMP at Ventura County Medical Center (VCMC) and Santa Paula Hospital (SPH) will offer examination and treatment, and inform the patient of the risks and benefits of the examination and treatment and request that the patient sign an *Against Medical Advice (ADA)* form that he/she has refused further treatment. A summary of the risks of not receiving treatment as describes to the patient shall be documented in the medical record.

SIGNAGE

Signs will be posted in lobbies and other appropriate locations where patients may be waiting for treatment or where examination may occur specifying the rights of individuals to examination and treatment for emergency medical conditions and indicating the participation in the Medi-Cal program. The signs will also state the name, address and telephone for the State Department of Health Services. The signs will be posted in English and Spanish in the ED and Labor and Delivery.

DOCUMENTATION LOG

Each location that provides medical screening examination will maintain a central log recording the name of the person who presents for emergency services and whether the person refused treatment, was refused treatment or whether the patient was transferred, admitted and treated, stabilized and transferred or discharged.

ON-CALL RESPONSE

A list of on-call physicians is maintained in the ED. These physicians are to provide consultation or treatment necessary to stabilize a patient with an emergency medical condition. See Physician On-Call Administrative policy 100.107.

MAINTENANCE OF RECORDS

Transfer logs, on-call lists and changes to the on-call list and central logs shall be maintained for five (5) years.

DISPUTES

In the event of any concern over emergency services to a patient, a dispute with another hospital regarding a patient transfer or a concern about VCMC/SPH's compliance with EMTALA, the Hospital Administrator on duty and the Medical Director are to be notified immediately.

REPORTING

VCMC/SPH will report to the Health Care Finance Administration (HCFA) or State Licensing within 72 hours if it concludes that it has received an individual who has been transferred in an unstable emergency condition from another hospital. All hospital staff who believe an EMTALA violation has occurred shall report the violation to the Hospital Administrator on duty and Medical Director.

The hospital shall not retaliate, penalize or take adverse action against any Medical Staff member or employee for reporting violations of EMTALA or State laws to the proper authorities.

DEFINITIONS

Emergency Medical Condition

- A medical condition manifesting itself by acute symptoms of sufficient severity such that the absence of immediate medical attention could reasonably be expected to result in either placing the health of the individual in serious jeopardy; serious impairment of bodily functions; or serious dysfunction of any bodily organ or part; or
- With respect to a pregnant woman who is having contractions, there is inadequate time to effect a safe transfer to another hospital before the delivery or the transfer may pose a threat to the health or safety of the woman or her unborn child.

Medical Screening Exam (MSE)

An MSE is the process required to reach, within reasonable clinical confidence, the point at which it can be determined whether the individual has an emergency medical condition (EMC) or not. An appropriate MSE is dependent on the presenting signs and symptoms and may involve a wide spectrum of actions ranging from a simple process involving only a brief history and examination of the presenting symptoms to a complex process that includes ancillary studies and procedures. Medical includes both physiological and psychological symptoms.

Qualified Medical Person (QMP)

A Qualified Medical Person is a physician, nurse practitioner, physician assistant, and a specialty trained nurse such as obstetrics nurse who performs the examination and communicates the findings to an attending physician to determine if an EMC exists.

Transfer is defined as the movement of an individual outside of a hospital's facility at the direction of any person employed by the hospital, but does not include such movement of an individual who has been declared dead or leaves the facility without permission of any such person.

Labor is defined as the process of childbirth beginning with the latent or early phase of labor and continuing

through delivery of the placenta. A woman is in true labor unless the physician certifies that after a reasonable time of observation, the woman is in false labor.

Stabilization is defined as follows:

Labor and Delivery patients. Stabilization is defined as delivery of the child and the placenta. A woman having contractions "may not be transferred unless she, or a legally responsible person acting on her behalf, request a transfer or if a physician or other qualified medical personnel, in consultation with a physician, certifies that the benefits to the condition of the woman and/or unborn child outweigh the risks associated with the transfer."

Medical patients. Stabilization is defined as no material deterioration of the condition is likely, within reasonable medical probability, to result for or occur during transfer. A patient is deemed stabilized if the treating physician has determined, within reasonable clinical confidence, that the emergency medical condition has been resolved.

Capacity refers to the ability of the hospital to accommodate the individual requesting examination or treatment of a transfer patient. Capacity encompasses adequacy of staff, beds, equipment and past practices in accommodating additional patients beyond occupancy limits.

Psychiatric Patients

Stable for transfer. A psychiatric patient is considered "stable for transfer" if the patient has been assessed by the treating physician and determined to have no underlying organic basis for the presenting psychiatric symptoms; initial treatment has been provided as indicated; the patient has been treated sufficiently so that he/she is stable for transfer.

Stable for discharge. A psychiatric patient is considered "stable for discharge" if the patient no longer considered to be a threat to himself/herself or others.

All revision dates:

1/28/2020, 11/8/2016, 9/1/2015, 5/1/2006, 4/1/2000

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	11/14/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	11/7/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/2/2022
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/2/2022
Policy Owner	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/2/2022



VENTURA COUNTY HEALTH CARE AGENCY

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Last Revised: 9/14/2021
Next Review: 1 year after approval
Owner: Diana Zenner: Chief Operating Officer, VCMC & SPH
Policy Area: Administrative - Operating Policies
References:

100.236 Patient Safety Plan

POLICY:

This Patient Safety Plan supports and promotes the mission, vision and values of the Ventura County Health Care Agency (HCA) through implementation of a culture that is supportive of safety and reduction of risks for all stakeholders. Recognizing that effective safety improvement and risk reduction requires an integrated and coordinated approach, the following plan relates specifically to a systematic program to minimize physical injury, accidents and undue psychological stress during hospitalization. The organization-wide safety program will include all activities contributing to the maintenance and improvement of patient safety.

The Patient Safety Plan is focused on an approach geared towards the avoidance of medical errors and mitigation of hazardous conditions, by utilizing a systematic, coordinated and on-going approach to reducing risk and harm while improving safety. This approach focuses on processes and a proactive approach to reduce real or potential risk, and the integration of patient safety into all aspects of patient care.

The Patient Safety Plan is implemented through the continuous integration and coordination of the patient safety activities performed by members of the medical staff, nursing, ancillary and support services with each member of the healthcare team playing a crucial role to help ensure a safe environment.

The leaders of the organization are responsible for fostering an environment through their personal example; emphasizing patient safety as an organizational priority; providing education to medical and hospital staff regarding the commitment to reduction of medical errors; supporting proactive reduction in medical/healthcare errors; and integrating patient safety priorities into the design and redesign of all relevant organization processes, functions and services.

Leaders focus on establishing a culture of safety that minimizes hazards and patient harm, by focusing on process of care, modeling principles of a Just Culture and integrating patient safety into all functions and services. The framework of a Just Culture ensures balanced accountability for both individuals and the organization responsible for designing and improving systems in the workplace.

GOALS:

The goals of the Patient Safety Program include, but are not limited to:

1. Ongoing organizational learning about errors and risk avoidance;
2. Recognition that patient safety is an integral job responsibility;
3. Development of patient safety goals into job specific competencies;

4. Encouraging the recognition and reporting of errors and risks to patient safety without judgment or placement of blame;
5. Involving patients in decisions about their health care and promoting open communication about errors;
6. Collecting and analyzing data to evaluate care processes, to identify opportunities to reduce risk and implement improvement;
7. Communication of safety findings and the actions taken to improve processes and systems, in order to reduce risk.

PROCEDURE:

The procedures for immediate response to medical/health care error are as follows:

- A. Staff will obtain required orders to support the patient's clinical condition.
- B. Staff will immediately report the event either to the Nursing Manager or the House Supervisor if the event occurs during off-hours.
- C. If the event is at the level of a Sentinel Event or acute patient harm has occurred, the Administrator-on-call (AOC) should be notified.
- D. Staff will complete the online Notification Form

Authority and Responsibility

The authority to implement this plan is granted by the Oversight Committee. The responsibility of ensuring the tasks and duties described in this document are the responsibility of the Patient Safety Officer/Team. To ensure closed loop communication regarding team activities the Patient Safety Officer or designee will report to the Medical Executive Committee (MEC) and Oversight Committee on a quarterly basis.

Patient Safety Committee

The Patient Safety Committee (PSC) is composed of an interdisciplinary group that meets to review the organization's Patient Safety Program through a systematic, coordinated, continuous approach. The PSC meets no less than four (4) times per year to ensure the maintenance and improvement of patient safety in the establishment of plans, processes and mechanisms involved in the provision of patient care. The chairperson has the discretion to call additional team meetings and to form subgroups to address any outstanding patient safety issues.

- A. The scope of the PSC includes review of medical/healthcare errors involving patients of any age, visitors, hospital/medical staff, students and volunteers. Aggregate data from internal reports and external resources will be used for review and analysis in prioritization of improvement efforts, implementation of interventions and follow-up monitoring. The severity categories of medical/health care errors include:
- B. **No Harm Error:** an unintended act, either of omission or commission, or an act that does not achieve its intended outcome.
- C. **Mild to Moderate Adverse Outcome:** any set of circumstances that do not achieve the desired outcome and result in an mild to moderate physical or psychological adverse patient outcome.
- D. **Hazardous Conditions:** any set of circumstances, exclusive of disease or condition for which the patient is being treated, which significantly increases the likelihood of a serious adverse outcome.
- E. **Near Miss:** any process variation which did not affect the outcome, but for which a recurrence carries a significant chance of a serious adverse outcome.

- F. **Sentinel Event:** an unexpected occurrence involving death or serious physical or psychological injury or the risk thereof. Serious injury specifically includes the loss of limb or function. The phrase “or risk thereof” includes any process variation for which a recurrence would carry a significant chance of a serious adverse outcome.
- G. The Patient Safety Committee (PSC) will evaluate aggregate data/processes and NOT specific clinical details related to individual occurrences. Clinical details will be reviewed/addressed through the other established processes and committees.
- H. The PSC will be chaired by an appointee of the Executive Team.
 - 1. The responsibilities of the Chair may include but are not limited to:
 - a. Compliance with patient safety standards and initiatives;
 - b. Evaluation of work performance, as it relates to patient safety;
 - c. Reinforcement of the expectations of the Patient Safety Plan; and
 - d. Acceptance of accountability, for measurably improving safety and reducing errors.
 - e. These duties may include listening to employee and/or patient concerns, and/or interviews with hospital and medical staff to determine what is being done to safeguard against occurrences, and to respond to reports concerning workplace conditions.
 - 2. Team members include representatives of services involved in providing patient care, i.e., Pharmacy, Laboratory, Infection Prevention, Imaging, Nursing (ED, ICU, Pediatrics, OB, Perioperative and Medical/Surgical), Performance Improvement as well as Executive Team representation. The medical staff representative(s) on the team will be the Medical Director of Inpatient Quality, the Chief Medical Officer (CMO) and at least one resident/ medical student.
- I. The mechanism to ensure all components of the organization are integrated into the program is through a collaborative effort of multiple disciplines. This is accomplished by:
 - 1. Reporting of potential (Good Catch) or actual occurrence through the notification system by any employee in every department;
 - 2. Communication amongst hospital leadership to assure a comprehensive knowledge of not only clinical, but also environmental factors involved in providing an overall safe environment;
 - 3. Reporting of patient safety and operational safety measurements/activity to the Performance Improvement Coordinating Council (PICC), the MEC and to the Oversight Committee.

As this organization supports the concept that errors occur due to a breakdown in systems and processes, staff involved in an event with an adverse outcome will be supported by:

- A. A non-punitive approach supportive of a Just Culture;
- B. Voluntary participation in the Root Cause Analysis/Event Analysis for educational purposes and prevention of further occurrences;
- C. Resources such as the Employee Assistance Program (EAP) should the need exist;
- D. Regular staff surveys about their willingness to report medical errors.

Methods to assure ongoing in-services, education and training programs for maintenance and improvement of staff competence and support of an interdisciplinary approach to patient care is accomplished by:

- A. Providing information about reporting mechanisms to new staff in the initial orientation and during on-going training;
- B. Providing ongoing education, including reporting mechanisms, through information presented during annual competency;
- C. Testing staff knowledge regarding patient safety during annual competency;
- D. Obtaining a confidential assessment of staff's willingness to report medical errors at least bi-annually.

Internal reporting, in order to provide a comprehensive view of both the clinical and operational safety activity of the organization:

- A. These quarterly meeting reports will include ongoing activities including data collection, analysis, actions taken, and monitoring for the effectiveness of actions.
- B. The minutes/reports of the Patient Safety Committee will be reported to the MEC and the Oversight Committee on a quarterly basis, or more frequently, as indicated.

External Reporting:

- A. External reporting will be completed in accordance with all state, federal, and regulatory rules, regulations and requirements.

Solicitation of input and participation from patients and families in improving patient safety will be accomplished by:

- A. Conversations with patients and families during manager or administrative rounds;
- B. Comments from patient satisfaction surveys.
- C. Procedures used in communicating with families about the organization's role and commitment to meet the patient's right to have unexpected outcomes or adverse events explained to them in an appropriate, timely fashion, include:
 1. Patient's rights statements;
 2. Patient responsibilities: A list of patient responsibilities will be included in the admission information booklet. These responsibilities include the patient providing correct information about perceived risks and changes in their condition, asking questions, following instructions, accepting consequences, following facility rules, etc.;
- D. Annual assessment for barriers to effective communication among caregivers.

A proactive component of the program includes the selection of a high-risk or error prone process for concentrated activity through a Proactive Risk Assessment (PARA)/Failure Mode Effect Analysis (FMEA) process. The PARA/FMEA selection may be based on information published by The Joint Commission (TJC) Sentinel Event Alerts, and/or other sources of information including risk management, performance improvement activities, infection prevention/ control, research, patient/family suggestions/expectations or other identified potential high-risk processes.

- A. The process will be assessed to determine the steps where there is or may be undesirable variation (failure modes).
- B. Information from internal or external sources will be used to minimize risk to patients affected by the new or redesigned process.
- C. For each failure mode, the possible effects on patients, as well as the seriousness of the effect, will be

identified.

- D. The process will be redesigned to minimize the risk of failure modes.
- E. The redesigned process will be tested and implemented.
- F. Measures to determine effectiveness of the redesigned process will be identified and implemented. Strategies to maintain success over time will be identified.

The Patient Safety Committee (PSC) chairperson will submit a Quality Assessment/Performance Improvement (QAPI) Annual Report to the MEC and to the Oversight Committee which includes review of the hospital's patient safety activities. The report may include, but not be limited to:

- A. Definition of the scope of occurrences including Sentinel Events, Event Analysis or a Root Cause Analysis as well as near misses;
- B. Detail of activities that demonstrate the patient safety program has a proactive component by identifying the high-risk process (PARA/FMEA) selected for improvement efforts;
- C. Results of the high-risk or error-prone processes selected for ongoing measurement and analysis;
- D. A description of how the function of process design, which incorporates patient safety, has been carried out using specific examples of process design or redesign that include patient safety principles;
- E. The results of the program that assesses and improves staff willingness to report medical/health care errors;
- F. A description of the examples of ongoing training and other educational programs that are maintaining and improving staff competence and supporting an interdisciplinary approach to patient care.

Confidentiality

All information related to organizational patient safety performance improvement activities performed by the team members, in accordance with this plan are confidential and are protected. Confidential information may include, but is not limited to; Patient Safety Team minutes, any associated medical staff committee minutes, organizational performance improvement reports, data gathering and reporting, and untoward incident reporting.

Some information may be disseminated, as required, by federal review agencies, regulatory bodies, the National Practitioners Data Bank, or any individual or agency that proves a "need to know."

Evaluation and Approval

The Patient Safety Plan will be evaluated annually or as changes occur, and revised as necessary at the direction of the Executive Team and/or the MEC. The evaluation of the plan's effectiveness will be documented in a report to the MEC and Oversight Committee.

All revision dates:

9/14/2021, 4/14/2020

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	1/4/2023
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	12/12/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	12/12/2022
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/9/2022
Policy Owner	Diana Zenner: Chief Operating Officer, VCMC & SPH	12/9/2022

COPY

Current Status: Pending

PolicyStat ID: 12747561



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 4/1/2020
Effective: Upon Approval
Last Approved: N/A
Last Revised: 12/14/2022
Next Review: 2 years after approval
Owner: Sherri Block: Associate Chief
Nursing Executive, VCMC &
SPH
Policy Area: Administrative - Patient Care
References:

100.240 Suicide Risk Assessment

Purpose:

To provide a guideline for staff to use to identify patients that are at risk for suicide and develop a plan of care with appropriate interventions to keep them safe.

Policy:

Patients who are being evaluated or treated for a behavioral health condition as their primary diagnosis, and those that express suicidal ideation during the course of their care will be screened and assessed for suicidal ideation and risk using a validated tool. To identify and assure safe handling of patients with potential risk for suicide, the assessment will include identification of specific factors that may increase or decrease the risk for suicide on admission and an ongoing basis.

Departments:

All areas of Ventura County Medical Center (VCMC) and Santa Paula Hospital (SPH).

Definitions:

1. **Suicide:** Death caused by self-inflicted injurious behavior or endangerment with an intent to die as a result of the behavior.
2. **Suicidal Ideation:** Thinking about, considering, or planning suicide.
3. **Suicide Attempt:** Refers to self-inflicted life-threatening attempt at suicide that did not lead to death.
4. **Suicide Risk Factor:** Factors that can increase the risk for individuals to attempt to harm themselves.
5. **Protective Factors:** Factors that can serve to decrease a patient's suicide risk especially when several are present.
6. **Emotional or Behavioral Disorder:** refers to any DSM (Diagnostic and Statistical Manual of Mental Disorders) diagnosis or condition, including those related to substance abuse.
7. **Chief Complaint:** Refers to the patient's main reason for seeking treatment that day.

PROCEDURE:

EMERGENCY DEPARTMENT (ED):

1. The Registered Nurse (RN) in the ED will initiate a continuous observation of the patient if the patient's chief complaint is:

- a. Suicidal ideation
- b. Homicidal ideation
- c. Legal Hold Status

2. The RN will complete the Columbia Suicide Severity Rating Scale (C-SSRS) during triage on every patient age 12 and up when the patient's chief complaint is of a behavioral health and /or psychological nature. If the patient is not able to be assessed due to altered mental status, the RN will document that finding in the electronic health record (EHR).

- If the patient answers "no" on the C-SSRS screening questions 1, 2 and 6, the patient is considered not to be at risk for suicide at this time.
- If the patient answers "yes" to any of the questions on the C-SSRS then the screening algorithm will be followed, and the correct risk level will be placed based on the Suicide Screening answers.

3. If the patient is found to be at no, low, or moderate risk of suicide, the ~~Primary~~ RN will ~~document in the EHR~~ any re-screen the patient if there is a new occurrence of suicidal behavior, ideation, statement, or other noteworthy clinical change.

4. If the patient is found to be at low risk for suicide:

A. The RN in the ED will:

- ~~Notify the Licensed Independent Practitioner (LIP) of both and Charge Nurse of the risk level and the appropriate level of observation the patient was placed on.~~
Notify the Charge Nurse of the Positive Suicide Screen
- ~~Conduct the~~ Consider an environmental risk assessment that identifies and removes features in the physical environment that could potentially be used for harm.
- Document ~~the~~ any interventions in the EHR.

B. The ED LIP will assess the patient and document in the EHR:

- ~~Level of observation required and the justification~~
~~If a continuous observation is needed for safety, enter the corresponding order in the EHR.~~
- ~~Directly address~~ Consider addressing suicidality in the treatment and discharge (if applicable) plan.
Provide counseling and follow up care upon discharge, as well as suicide prevention information.
~~Provide counseling and follow up care upon discharge when appropriate.~~
~~Provide suicide prevention information upon discharge.~~

5. If the patient is found to be at moderate to high suicide risk:

A. The RN in the ED will:

- Initiate the continuous level of observation and notify the LIP and Charge Nurse of the risk level.
~~Notify the LIP of the risk level and the appropriate level of observation the patient was placed on.~~
~~Notify the Charge Nurse~~

- Conduct an environmental risk assessment that identifies and removes features in the physical environment that could potentially be used for harm.
- Document ~~the any~~ interventions in the EHR.

B. ~~The ED LIP will assess the patient and document in the EHR:~~

- ~~◦ Level of observation required and justification.~~
- ~~◦ Order for a Psychiatric Consultation and completion of C-SSRS assessment by Psychiatry.~~
- ~~◦ Order for Suicide Precautions~~
- ~~◦ Directly address suicidality in the treatment and discharge~~
- ~~◦ Provide counseling and follow up care upon discharge~~
- ~~◦ Provide suicide prevention information upon discharge or transfer~~

The ED LIP will assess the patient and document in the EHR:

- Complete suicide assessment and/or consult psychiatry.
- If assessment confirms patient is moderate to high risk, follow mitigation plan and continue suicide precautions if indicated.
- If patient meets criteria for safe discharge, directly address suicidality, refer for appropriate level of follow up care and provide suicide prevention information.
- If suicide assessment cannot be completed, the reason and safety plan will be documented in the EHR.

6. ~~After a~~When an ED Psychiatric consultation is initiated by the ED LIP, the consulting Psychiatric liaison will:

- Complete and document a Psychiatric evaluation, and Columbia Suicide Severity Rating Scale (C-SSRS) Suicide Assessment (this may take place in the Crisis Stabilization Unit (CSU) or Inpatient Psychiatric Unit (IPU) at the discretion of the covering psychiatrist).
- If the patient remains in the ED, provide Psychiatric care recommendations including level of observation and ongoing collaboration.
~~Psychiatry will follow the patient daily in the Emergency Department until discharge or transfer to other facility or unit.~~

INPATIENT PSYCHIATRIC UNIT (IPU) AND CRISIS STABILIZATION UNIT (CSU):

1. The Registered Nurse (RN) will assess for the presence of Suicide Risk Factors.

- Identification of risk factors results in further assessment for presence of a patient's plan and intent

2. Upon admission, the RN will complete a Columbia Suicide Severity Rating Scale (C-SSRS) ~~FULL ASSESSMENT~~full assessment on every patient admitted to the CSU or IPU.

3. After admission the patient will be assessed each shift with the Columbia Suicide full assessment (recent).

4. If there is a change in the patient's condition, a subsequent assessment will be completed by the RN upon readmission to the inpatient Psychiatric Unit or the CSU.

5. If the patient is not able to be assessed due to altered mental status, the RN will document that finding in the EHR.

~~6. Suicide Risk Factors include, but are not limited to:~~

- Family history of suicide
- Previous attempts to harm himself or herself
- Reports suicidal thoughts or intent
- Access to firearms
- Feelings of hopelessness
- Psychiatric diagnosis of mood disorder, impulsive behavior, panic disorder, substance dependence, schizophrenia, alcoholism, depression
- Status single (especially separated, widowed, depressed)
- Lacks social support
- Has a chronic illness
- Chronic pain condition
- Unemployed
- Current real or imagined loss or failure
- Presence of despair or depression
- Acutely intoxicated
- History of self-mutilation behavior

7. Protective Factors include, but are not limited to:

- Ongoing care for mental, physical, and substance abuse disorders
- Access to clinical interventions and support
- Support from family and community
- On-going supportive medical and mental health relationships
- Ability to problem solve
- Ability resolve conflicts
- Handle disputes in a non-violent way
- Exhibits cultural and religious beliefs that discourage suicide
- Required to care for younger dependent children.

86. Based on the RN assessment findings, the RN will:

- Initiate the level of patient observation
- Obtain LIP order for continuous observation if needed and the justification. Enter in the EHR.
- Obtain order for Suicide Precautions.

The Psychiatrist will assess the patient within 24 hours of admission to the CSU/IPU for suicidality, and will:

1. Complete and document the Psychiatric Evaluation in the EHR.
2. Document the level of observation required and the justification.
3. Review the Plan of Care and recommend specific interventions to manage patient's risk of harm to self or others.
4. Specific recommendations to manage the patient's risk of harm to self or others will be made.
5. Recommendation(s) will be made to modify the plan as needed based on risk factors.

MEDICAL/HOSPITAL UNITS:

Includes but is not limited to: Intensive Care Unit (ICU), Medical-Surgical, Telemetry, ~~Cardiac Care~~Definitive

Observation Unit (CCU), Definitive Observation Unit (DOU), Obstetrics (OB), Pediatrics, and Pediatric Intensive Care Unit (PICU).

1. The/If a patient presents through the ED, the RN in the medical/hospital unit will initiate a/continue the level of continuous observation of the patient if the patient's chief complaint is/initiated in the ED:

- ~~Suicidal ideation~~
- ~~Homicidal ideation~~

2. ~~The RN will complete the Suicide Risk Assessment as found in the systems assessment charting in the ER on every patient during admission age 12 and up.~~

- ~~Notify the LIP of both the risk level and ensure the appropriate order placed in the EHR for the level of observation the patient was placed on as appropriate.~~
- ~~Conduct the environmental risk assessment that identifies and removes features in the physical environment that could potentially be used for harm.~~
- ~~Document the plan and interventions in the EHR.~~

• If a patient presents via direct admission or surgery and the patient's primary complaint is a behavioral health complaint or there is clinical concern for suicidality, the RN will initiate the C-SSRS screen.

3. ~~If the patient is~~ For patients found to be moderate to high suicide/low risk based on the C-SSRS, the RN will:

~~Notify the LIP of both the increased risk level and ensure the appropriate order placed in the EHR for level of observation the patient was placed on as appropriate.~~

~~Initiate the continuous level of observation~~

- Notify the Licensed Independent Practitioner (LIP) and Charge Nurse of the risk level.
- ~~Conduct~~ Consider an environmental risk assessment that identifies and removes features in the physical environment that could potentially be used for harm.
- ~~Document the plan and any~~ Document any interventions in the EHR.

4. ~~If the patient is found to be low risk for suicide, the Medical Unit LIP will~~ assess the patient and document the following in the EHR:

~~Assess the patient and document the following in the EHR~~

~~Record level of observation required and the justification~~

~~If determined that a continuous observation is needed for safety and justified ensure the corresponding order is placed into Corner.~~

- Directly address/Address suicidality in the treatment and discharge (if applicable) plan. Provide counseling, follow up care and suicide prevention information upon discharge.
- ~~Provide counseling and follow up care upon discharge.~~
- ~~Provide suicide prevention information upon discharge.~~

4. If the patient is found to be moderate to high suicide risk, the RN will do all of the above (#2 above) plus:

- Initiate the continuous level of observation and notify the LIP and Charge Nurse of the risk level.
- Conduct an environmental risk assessment that identifies and removes features in the physical environment that could potentially be used for harm.
- Consult psychiatry or LIP to complete the suicide assessment
- Document any interventions in the EHR.

5. If the patient is found to be moderate to high risk for suicide, the Medical Unit LIP will:

- Assess the patient and document the following in the EHR
- Record level of observation required and the justification
- Order for a Psychiatric Consultation if not already completed for further treatment and mitigation plan.
~~Order for Suicide Precautions~~
- Directly address suicidality in the treatment and discharge (if applicable) plan. Provide counseling, follow up care and suicide prevention information upon discharge.
~~Provide counseling and follow up care upon discharge~~
~~Provide suicide prevention information upon discharge or transfer.~~

~~6. After a Medical Unit Psychiatric consultation is initiated by the Medical LIP the consulting Psychiatric liaison will:~~

- ~~• Complete and document a complete psychiatric evaluation~~
- ~~• Document the level of observation required and the justification~~
- ~~• Specific recommendations to manage the patient's risk of harm to self or others will be made.~~
- ~~• Maintain care of the patient in the Medical Unit up until discharge or transfer to another facility or unit.~~

6. Reassessment

- : If patient is found to be at no, low, or moderate risk for suicide, the primary RN will re-screen with patient with the C-SSRS if there are any new occurrences of suicidal behavior, ideation, statement, or other noteworthy clinical change.

PATIENT EDUCATION:

All patients who are admitted or treated for Psychiatric, emotional or behavioral disorders/complaints will be given the following information and directions in written form upon discharge.

1. "If you feel unsafe or feel that you might want to harm yourself or others, you can:"

- CALL 211 for Mental Health Intervention Services
- Call 1-800-273-8255 or 988 for the National Suicide prevention lifeline
- Call 911 or go to the nearest emergency room

2. Educational materials on suicide prevention will be included in the EHR discharge instructions.

STAFF EDUCATION/COMPETENCY:

1. All Registered Nursing staff will be educated and evaluated for competency on suicide risk assessment and mitigation upon hire, and when transitioning to another role.

2. Staff who could be assigned to the care of a patient at risk for suicide will be educated and evaluated for competency in suicide risk mitigation yearly.

REFERENCES

The Joint Commission, (2019) https://www.jointcommission.org//media/tjc/documents/standards/national-patient-safety-goals/2020/npsg_chapter_bhc_jul2020.pdf

ENFORCEMENT

Violations of this policy or associated procedure may result in appropriate disciplinary actions and measures in accordance with General rules of conduct and applicable collective bargaining agreements or other

applicable county policies or as outlined by any procedures document related to this policy.

All revision dates:

12/14/2022, 9/14/2021, 10/19/2020

Attachments

Columbia Suicide Rating Assessment with SAFE-T
Columbia Suicide Severity Rating Scale
Safety Attendant Room Checklist
VCMC-SPH Suicide Screen/Assessment Algorithm

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	12/11/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	12/5/2022
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/1/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	12/1/2022
Policy Owner	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	12/1/2022

TOP OF CART		
(2) Buckets for Ice	Binder: Clinical Update – Management of Malignant Hyperthermia	
MEDICATIONS- See Bottom Drawer		
DRAWER #1		
(1) Hyper/Hypothermia Blanket		
Blood Specimen Tubes: (each test should have 2 pediatric and 2 adult)		
<ul style="list-style-type: none"> • Green Top Tubes (REF 367960) -- CK, Myoglobin, SMA 19 (LDH, electrolytes, thyroid studies) • Blue Top Tubes (REF 363083) -- PT/PTT, Fibrinogen, Fibrin Split Products • Purple Top Tubes (REF 367856) – CBC, Platelets • Grey Top Tubes (REF 367922) – Lactic Acid Level (<i>after specimen is collected, put tube on ice</i>) 		
Multistix 10 SG Urine Dipstick	(8) Large Bags for ice	
(6) ABG kits	(4) Medium Bags for ice	
(2) Specimen Container	Alcohol Pads	
Drawer #2		
(4) Instant Cold Compress		
Drawer #3		
(3) Steri-Drape Large (1050)	(1) Urine Meter Catheterization Tray	(1) Blood Y-Type Tubing Set
(36) 60 mL Luer Lock Syringes	(1) Foley Catheter 18 fr	(2) 60 mL Catheter Tip Syringes
(4) IV Catheter 20 gauge	(6) Mini spike dispensing pin	(36) 18 gauge needles
(1) Roll of Tape	(4) IV Catheter 22 gauge	(4) IV Catheter 24 gauge
Drawer #4		
(1) Introducer Kit	(1) Continue-Flo Solution Set	(1) Art Line Kit
(1) Esophageal Stethoscope 9 fr	(2) Esophageal Stethoscope 18fr	(1) Esophageal Stethoscope 24fr
(1) Rectal Tube 28 fr	(1) Rectal Tube 32 fr	
(1) Salem Sump Tube Anti-Reflux Valve 6 fr	(1) Salem Sump Tube Anti-Reflux Valve 8 fr	(1) Salem Sump Tube Anti-Reflux Valve 12 fr
(1) Salem Sump Tube Anti-Reflux Valve 14 fr	(1) Salem Sump Tube Anti-Reflux Valve 16 fr	(1) Salem Sump Tube Anti-Reflux Valve 18 fr
Bottom Drawer - Medications		
(36) Dantrolene Sodium 20 mg vials (6 boxes)	(36) Sterile Water for injection 100 mL vials	(4) Furosemide 40 mg/4 mL PFS
(2) Calcium Chloride (10%) 10 mL PFS	(5) Sodium Bicarbonate 8.4% 50 mEq/50 mL PFS	(2) Dextrose 50% 25 gm/50 mL PFS
(3) Lidocaine 2% 100 mg/5 mL PFS		
Refrigerator - Medications		
(1) Insulin, regular 100 units/mL 3 mL	(3) 0.9% sodium chloride 1000mL bag	
<u>Location of refrigerated medications: VCMC ORCS: Main Pharmacy; VCMC OR: OR fridge; SPH OR: OR Fridge</u>		



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

Origination: 8/11/2020
Effective: Upon Approval
Last Approved: N/A
Last Revised: 11/28/2022
Next Review: 2 years after approval
Owner: Erlinda Roxas: Director
Laboratory Services
Policy Area: Administrative - Patient Care
References:

100.258 Blood Culture Specimen Collection

Purpose:

To establish guidelines for the proper collection of blood cultures by personnel trained to perform venipuncture.

Policy:

1. Personnel trained to perform venipuncture for blood cultures shall show competency prior to independent practice and annually thereafter.
2. Blood cultures aiding in the detection of bacteremia are collected by venipunctures
 - a. In situations where venipunctures are not possible such as in dialysis patients and pediatric patients, blood draw may be collected from angiocath, arterial line, or central venous line after confirmation with the licensed independent practitioner (LIP).

Considerations:

1. If possible cultures should be obtained before starting antimicrobial therapy; prior antimicrobial therapy may interfere with bacterial growth.
2. A positive culture result from a central line only may be considered a contaminant.

Equipment List:

1. Non-Sterile Gloves
2. Sterile Gloves
3. Alcoholic chlorhexidine pads for bottle top decontamination
4. Alcoholic chlorhexidine swabs for skin decontamination
5. Appropriately sized syringe(s) and/or needleless transfer device
6. Winged (butterfly) needle
7. Blood culture bottles (aerobic and anaerobic bottles)
8. Laboratory biohazard transport bag
9. Labels

10. 2" x 2" gauze pads
11. Small adhesive bandages
12. Tourniquet

Procedure:

Collecting Blood Cultures from Venipuncture in Adults and Pediatrics

For neonates, refer to section titled "Collecting Blood Cultures in Neonates".

1. Verify the provider order.
2. Gather all equipment from equipment list.
3. Perform hand hygiene.
4. Confirm the patient's identity using two identifiers.
5. Provide privacy.
6. Explain the procedure.
7. Raise the bed to waist level.
8. Perform hand hygiene.
9. Put on gloves.
10. Choose a venipuncture site.
11. Avoid use of a tourniquet, if possible. If necessary, apply the tourniquet.
12. Disinfect blood culture bottle tops with alcoholic chlorhexidine (CHG) pad by scrubbing the rubber stopper for at least five seconds and let dry for five seconds.
 - a. If alcoholic CHG is not available, use 70% isopropyl alcohol (alcohol pad) and scrub the rubber stopper for at least 15 seconds and let it dry.
13. Clean the skin at the venipuncture site with alcoholic chlorhexidine (CHG) swab by using a back-and-forth scrubbing motion for at least 30 seconds and allow it to dry for at least 30 seconds.
 - a. Don't palpate the site again to avoid transfer of microorganism to the venipuncture site. If palpation is necessary, don a sterile glove.
14. Perform a venipuncture. Discard the initial volume (1-3 mL) of the blood sample into a yellow-top tube or red-top tube. Then draw a quantity that is sufficient for isolating organisms.
 - a. For non-dialysis patients:
 - i. For adults, collect a set of two blood culture bottles (minimum 10 mL in each bottle), one for aerobes and one for anaerobes; two blood cultures (by separate stick) per septic episode is sufficient.
 - Fill the aerobic bottle first, followed by the anaerobic bottle.
 - ii. For pediatric patients, collect 1-3 mL into a yellow-top blood culture bottle.
 - b. ~~For dialysis patients:~~
 - i. ~~Draw one set through device and one more set from a separate venipuncture if possible, otherwise draw the second set from the device at a separate time and from a different port.~~

ii. For each set, see 14.a.i.

For dialysis patients:

i. One set of blood cultures from a separate site should be drawn. A second set will be drawn from dialysis access device. Only dialysis nurses can draw samples from dialysis access sites. A VCMC/SPH RN is responsible for sharing this policy with the dialysis nurse when blood cultures are needed from the line.

ii. For each set, see 14.a.i.

15. Immediately remove the tourniquet if used, unless drawing additional blood specimens.
16. Place a gauze pad over the puncture site and slowly and gently remove the needle from the vein. Apply pressure to the site. Cover the site with a small adhesive bandage.
17. Invert the bottles 8 to 10 times gently.
18. Discard syringes and needles in a puncture-resistant sharps container.
19. Return the bed to the appropriate position.
20. Label bottles at bedside, ensuring proper use of two patient identifiers.
 - a. Include date, time, Cerner ID and site.
21. Place the properly labeled bottles by set into two separate re-sealable biohazardous plastic bags.
22. Doff and discard your gloves. Perform hand hygiene.
23. Bottles must be sent to the laboratory within 2 hours of specimen collection.
24. Document the procedure in the electronic health record (EHR).

Collecting Blood Cultures from a Central Line in Adults

1. Follow steps 1-4 of procedure for Collecting Blood Cultures from Venipuncture.
 - a. Collecting blood cultures from a central venous catheter (CVC) or peripherally inserted central catheter is discouraged. If a patient has a CVC or PICC, the blood culture needs attending physician authorization. See Policy 2.a. for more information.
2. Stop all infusions for a period of time as discussed with the LIP. Ensure central line is clamped.
3. Proceed with steps 5-9 of procedure for Collecting Blood Cultures from Venipuncture.
4. Perform a vigorous mechanical scrub of the hub for at least 5 seconds using an alcoholic CHG pad, and allow to dry for at least 5 seconds.
5. If you're also drawing blood for other laboratory tests, draw blood for culture before drawing the sample for other tests. Maintaining sterility of the syringe tip, connect the empty syringe to the catheter, release the clamp, and withdraw at least 10 mL of blood for each blood culture bottle. Don't discard first drawn blood; this is the blood sample you'll be injecting into the culture bottle.
6. Clamp the catheter and remove the syringe.
7. Perform a vigorous mechanical scrub of the hub for at least 5 seconds using an alcoholic CHG pad, and allow to dry for at least 5 seconds.
8. While maintaining sterility of the syringe tip, connect the syringe with preservative-free normal saline solution, open the clamp and flush and lock the device or resume the infusion(s) as ordered.
9. Place a disinfectant-containing end cap on the hub to reduce the risk of vascular catheter-associated

infection.

10. Proceed with steps 17-24 of procedure Collecting Blood Cultures from Venipuncture.

Collecting Blood Cultures from a Central Line in Pediatrics

1. Refer to the following Lippincott Procedures:
 - a. [Blood Culture Sample Collection, Pediatrics](#)
 - b. [Implanted Port Blood Sampling, Pediatrics](#)
 - c. [Peripherally Inserted Central Catheter \(PICC\) Blood Sampling, Pediatrics](#)

Collecting Blood Cultures in Neonates

1. Refer to the following Lippincott Procedures:
 - a. [Blood Culture Sample Collection, Neonatal](#)
 - b. [Umbilical Artery Catheter Blood Withdrawal, Neonate](#)
2. Chlorhexidine should not be used in infants younger than two months of age as it can cause irritation and chemical burns.

References:

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6. Centers for Disease Control and Prevention. (2019). "Device-associated module: Bloodstream infection event (central line–associated bloodstream infection and non-central line associated bloodstream infection)" [Online]. Accessed April 2019 via the Web at http://www.cdc.gov/nhsn/pdfs/psscmanual/4psc_clabscurrent.pdf
7. Clinical and Laboratory Standards Institute (CLSI). (2007). *Principles and procedure for blood cultures: Approved guideline* (CLSI document M47-A). Wayne, PA: Clinical and Laboratory Standards Institute.

All revision dates:

11/28/2022, 12/3/2021, 8/11/2020

Attachments

Competency Validation Tool: Blood Culture Specimen Collection

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Infection Prevention Committee	Magdy Asaad: Infection Prevention Manager	12/20/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	12/2/2022
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/2/2022
Laboratory Services	Brad Adler, MD: Medical Director, Laboratory Services	12/2/2022
Laboratory Services	Erlinda Roxas: Director Laboratory Services	12/2/2022
Policy Owner	Erlinda Roxas: Director Laboratory Services	12/2/2022



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: N/A
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Owner: Sharon Waechter: Clinical Nurse Manager, Nursing Education
Policy Area: Administrative - Patient Care
References:

100.261 Safety Enclosure Beds (Posey Beds)

Purpose

- To protect patients that are at risk of injury when less restrictive options have been attempted without success
- To assist patients with certain diagnoses to become calm and less agitated

By Whom: RN's with demonstrated competency

Policy

- **The Safe Enclosure Bed (SEB) is a non-violent restraint.**
- **A physician's order is REQUIRED**
- **Refer to Restraint and Seclusion Policy 100.075 for all patient care, monitoring, management, and documentation requirements**
- **Clinical conditions that may require use of the SEB include but are not limited to:**
 - Acute psychosis
 - Cerebral palsy
 - Confusion that can result in patient harm or injury
 - Neurological impairment
 - Patients on anticoagulants
 - Patients with impulsive behavior
 - Lack of impulse control
 - Inability to process information related to self-care and care needs
 - Inability to differentiate degrees of danger
 - Seizure disorder
 - Severe osteoporosis
 - Severe trauma in a previous fall
 - Traumatic brain injury (TBI)
 - Uncontrolled perpetual movements related to diagnosis (i.e., Huntington's Disease)
 - Unsteady gait
 - Wandering behavior
- Use of torso and side filler cushions are recommended for all patients in the SEB.
- Whenever the patient is left unattended, the SEB must be in the lowest position with the casters (legs) touching the ground and then transfer brakes engaged and locked.
- The perimeter guard (soft side rail) **MUST** always be in the "up position" when providing care

- Patients that do not tolerate the SEB will immediately be transferred to a routine hospital bed with appropriate monitoring
- Any personal items inside the bed with the patient must be soft and determined to be safe by the RN
- Patients are NOT to be transferred to procedures in the SEB

Definitions

- The safe enclosure bed (SEB) is a hospital bed, canopy, and mattress system designed to help provide a safe, controlled environment for patients at extreme risk of injury from a fall or unassisted bed exit.
- The SEB is NOT recommended for use with the following patients:
 - Weight less than 46 pounds or greater than 300 pounds
 - Height less than 46 inches
 - Exhibiting violent or self- destructive behavior
 - PICA eating disorder
 - Rub their skin excessively (the netting may cause abrasions)
 - Claustrophobia
 - Critically ill
 - Patients with multiple tubes, lines, or infusions
 - Patients that are unable to reposition themselves in bed

Procedure

- A. Verify physician's order
- B. Confirm that patient does not meet any of the contraindications for use of the SEB
- C. Call House Supervisor to order bed, torso, and filler cushions
- D. When bed arrives inspect it to validate that:
 1. It is clean
 2. The canopy and metal frame are not bend or broken
 3. The casters (legs) are touching the ground and that the transfer brakes are engaged and locked
 4. The bed feels secure and free of any moving or loose parts
 5. All four (4) transfer brakes physically touch the floor when the bed is in the lowest position.
 6. The metal canopy frame is completely covered with foam padding, with no foam visible through covering
 7. The canopy and netting are free of any tears, holes, or cuts
 8. All zippers fully close and zipper latches completely seated in their boxes and that zippers close completely and open easily
 9. When pressure is applied along the entire length of the zipper, it stays together without any gaps or separation in the zipper
- E. Perform hand hygiene
- F. Confirm the patient's identity using two patient identifiers
- G. Before placing the patient in the bed ensure that:
 1. The patient can be easily accessed and that the bed can be moved to the center of the room to allow for access on all four (4) sides in case of an emergency

2. It is positioned away from wall, furniture, and other equipment
 3. The power cord is out of the way to avoid tripping
 4. The bed is away from all heat sources
 5. The bed is free of clutter or foreign objects
 6. The netting and canopy are free of sharp or hanging objects
 7. The caster (legs) are touching the ground and that the transfer brakes are engaged and locked
- H. Transferring the patient to a bed-obtain additional assistance if necessary
- I. Prepare the bed for the patient making sure:
1. The area around the bed is clear of tripping hazards
 2. The casters (legs) are touching the ground and that the transfer brakes are engaged and locked
 3. The mattress is in a flat position
 4. The perimeter guards are down
 5. Unclip the quick-release buckle
 6. Unzip the "U-shaped" side pane; secure it to the top of the canopy with the hook and loop tabs
- J. Move the patient to the bed and position to ensure comfort on the mattress
- K. Attach any monitoring equipment that is needed, secure the patient's IV lines, and/or drainage tubes
- L. Ensure the patient is comfortable and secure
- M. Zip the panels completely. Make sure the zipper is closed completely the entire length of the zipper
- N. Close the quick-release buckle; tug at the clip to ensure it is engaged
- O. Complete the "Quick-Check 10" checklist

Accessing and caring for a patient in a Safe Enclosure Bed

- A. Make sure the area around the bed is free from all tripping hazards
- B. Make sure the 4 caster brakes are locked
- C. Raise the bed to the appropriate height
- D. Unclip the quick-release buckle
- E. Unzip the "U-shaped" side panel and secure it to the top of the canopy with the hook-and loop-tabs
- F. Zip the perimeter guard into the "UP" position
- G. Provide care
- H. Unzip and lower the perimeter guard
 - I. Ensure patient feels comfortable and secure
- J. Zip the panels completely. Make sure the zipper is closed completely along the entire length
- K. Close the quick-release, and tug at the clip to ensure it is engaged
- L. Complete the "Quick-Check 10"

Moving the patient out of the Safe Enclosure Bed

- A. The use of safe lifting equipment must be used whenever possible
- B. Inform the patient of what you will be doing and provide reassurance
- C. Adjust the bed to necessary height
- D. Make sure the patient is a safe distance from the panel
- E. Make sure the area is clear of tripping hazards
- F. Make sure the casters (legs) are touching the ground and that the transfer brakes are engaged and locked
- G. Position the bed in the lowest position
- H. Place the mattress flat
 - I. Make sure the perimeter guard is down
- J. Unclip the quick-release buckle
- K. Unzip the "u-shaped" side panel and secure to the top of the canopy with the hook and loop tabs
- L. Detach tubes as needed
- M. Assist the patient to an upright position
- N. Help the patient slide both legs to the side of the bed
- O. Assist the patient with transferring using a gait/transfer belt as needed
- P. If the patient is unable to assist with transferring, the patient can be transferred from the unzippable access at the foot of the bed.
- Q. Obtain assistance from at least one additional person
- R. Use the top mattress and a slide board to safely transfer the patient onto another bed/gurney
- S. Emergency patient access and exit: Minimum of two people are needed for quick patient access and possible exit
- T. There is NOT a quick CPR release and the bed does NOT contain a CPR board
- U. To rapidly access the patient
- V. Raise the bed to disengage the transfer brakes
- W. Position the bed so it can be accessed from all four sides
- X. Lock all four casters (legs)
- Y. Lower the bed to the lowest position to engage transfer brakes
- Z. Unzip all panels
- AA. Attend to patient
- AB. If the bed becomes soiled:
 - 1. If slightly soiled it can be cleaned with hospital wipes
 - 2. If significantly soiled call House Supervisor to have the bed replaced
- AC. Refer to Attachment A: A Guide to the Posey Bed Components

References

Harris, J. (2015). Enclosure bed: A protective and calming restraint. *American Nurse Today*, 10(1).

Kim, C., Hughes, M., & Fields, W. (2018). Nurses' reactions to enclosure beds. *MedSurg Nursing* 27(2).

Posey (2017). Posey Bed 8070 Professional User Manual <https://f.hubspotusercontent40.net/hubfs/8218994/Sell%20Sheets%20and%20Brochures/Posey%20Bed%208070%20Invacare%20Training%20Manual.pdf>

All revision dates:

Attachments

Attachment A: A Guide to the Posey Bed Components

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/9/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	10/3/2022
Hospital Administration	Minako Watabe: Chief Medical Officer, VCMC & SPH	10/3/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Officer	3/7/2022
Policy Owner	Sharon Waechter: Clinical Nurse Manager, Nursing Education	3/7/2022

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V E N T U R A C O U N T Y
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Owner: Magdy Asaad: Infection Prevention Manager
Policy Area: Administrative - Environment of Care
References:

106.015 Bloodborne Pathogen Post-Exposure Evaluation and Management

POLICY:

This policy outlines the procedure to follow when a health care worker (HCW) at Ventura County Medical Center/Santa Paula Hospital or an Ambulatory Care clinic is exposed to a bloodborne pathogen.

PROCEDURE:

Definition of a Health Care Worker (HCW) occupational exposure to bloodborne pathogen:

- A. Percutaneous injury
- B. Mucous membrane
- C. Non-intact skin contact

with potentially infectious (HCV, HBV, HIV, etc.) body fluid (blood or bloody body fluid, tissue) or concentrated pathogen.

Procedure for HCW following exposure:

- A. Treatment of an exposure site: wash wound, skin, or mucous membrane.
- B. Report to manager/supervisor immediately.
- C. Report within (\leq 2 HOURS) to Emergency Department.
- D. Obtain and complete the Employer's Report of Occupational and Injury or Illness Form (GSA 75B) and Doctor's First Report of Injury Form.
- E. Identify and document the source individual if possible and obtain permission for source blood work.
- F. Meet with Health Professional to complete documentation, obtain counseling and medications (if indicated) and receive follow-up instructions from Employee Health.
- G. Provide informational packet to the HCW regarding bloodborne pathogen.

Employee Health Staff to provide exposed HCW with:

- A. The results of pending blood work and provide appropriate future testing, follow-up visits, and immunizations per current (CDC) guidelines.
- B. Infectious Diseases consultation, if indicated.
- C. Prescriptions for medications, if indicated.

Attachment A – Bloodborne Pathogen Exposure Checklist

All revision dates:

5/1/2012, 9/1/2009, 5/1/2006, 10/1/2004, 9/1/2001,
11/1/1989

Attachments

A: Bloodborne Pathogen Exposure Checklist

Approval Signatures

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Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
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V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

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Owner: Magdy Asaad: Infection Prevention Manager
Policy Area: Administrative - Environment of Care
References:

106.018 Infection Control Standard Precautions

POLICY:

Standard Precautions includes a group of infection prevention practices that applies to all patients regardless of suspected or confirmed infection status in any setting where healthcare is delivered. The 2007 revisions and additions to Standard Precautions reinforce existing practices and include additional measures to protect healthcare workers (HCW's) and patients.

PROCEDURE:

Use **Standard Precautions** for the care of all patients.

I. Hand Hygiene

- A. Hand hygiene is the single most important practice to reduce the transmission of infectious agents in health care.
- B. Hand hygiene is addressed in policy *106.055 Hand Hygiene*.

II. Gloves

- A. Wear gloves (clean, non-sterile gloves are adequate) when touching blood, body fluids, secretions, excretions, and contaminated items. Put on clean gloves just before touching mucous membranes and non-intact skin.
- B. Change gloves between tasks and procedures on the same patient after contact with material that may contain a high concentration of microorganisms.
- C. Remove gloves promptly after use, before touching non-contaminated items and environmental surfaces, before exiting the room, and before visiting another patient.
- D. Perform hand hygiene immediately to avoid transfer of microorganisms to other patients or environments.

III. Mask, Eye Protection, Face Shield

- A. Wear a mask and goggles or a mask with attached face shield to protect mucous membranes of the eyes, nose, and mouth during procedures and patient care activities (including suction and phlebotomy) that are likely to generate splashes or sprays of blood, body fluids, secretions, and excretions.
- B. Wear eye protection for caring of all patients in outbreak situations such as COVID-19

- C. Wear a gown (a clean, non-sterile, fluid resistant gown is adequate) to protect skin and to prevent soiling of clothing during procedures and patient care activities that are likely to generate splashes or sprays of blood, body fluids, secretions, or excretions.
- D. Wear a gown that is appropriate for the activity and amount of fluid likely to be encountered.
- E. Remove and discard soiled gowns as promptly as possible, especially after exiting a room. Do not reuse gowns or gloves.
- F. Wash hands to avoid transfer of microorganisms to yourself, other patients or environments.

IV. Patient Care Equipment

Handle used patient care equipment soiled with blood, body fluids, secretions, and excretions in a manner that prevents skin and mucous membrane exposures, contamination of clothing, and transfer of microorganisms to yourself, other patients and environments. Ensure that reusable equipment is not used for the care of another patient until it has been cleaned and reprocessed appropriately. Ensure that single-use items are discarded properly. See policy *106.061 Cleaning and Disinfection of Patient Care Equipment*.

V. Environmental Control

Ensure that there are adequate procedures for the routine care, cleaning, and disinfection of environmental surfaces, beds, bedrails, bedside equipment, and other frequently touched surfaces, and ensure that these procedures are being followed. Decontaminate using only hospital-approved disinfectants and antiseptics. See policy *106.061 Cleaning and Disinfection of Patient Care Equipment*.

VI. Linen

Handle, transport, and process used linen soiled with blood, body fluids, secretions and excretions in a manner that prevents skin and mucous membrane exposures. Avoid contamination of clothing and the environment. Linen should be held away from the body and discarded in linen cart. Linen cart should be close to bed being stripped to decrease contamination of yourself and clothing.

VII. Occupational Health and Bloodborne Pathogens

- Take care to prevent injuries when using needles, scalpels, and other sharp instruments or devices, when handling sharp instruments after procedures, when cleaning used instruments, and when disposing of used needles.
- Never recap used needles, never manipulate used needles using both hands, never use any other technique that involves directing the point of a needle toward any part of the body; rather, use either a one-handed "scoop" technique or a mechanical device designed for holding the needle sheath.
- Do not remove used needles from disposable syringes by hand. Do not bend, break, or otherwise manipulate used needles.
- Always deploy the safety feature after moving from the point of care.
- Always place used disposable syringes and needles, scalpel blades, and other sharp items in appropriate puncture-resistant, leak-proof and biohazard-labeled containers.
- Always use the container closest to the point of use. Place reusable syringes and needles in a puncture-resistant container for transport to the reprocessing area.
- Use mouthpieces, resuscitation bags, or other ventilation devices as an alternative to mouth-to-mouth resuscitation methods in areas where the need for resuscitation is predictable.

VIII. Patient Placement

For patients who may contaminate the environment or do not (or cannot be expected to) maintain

appropriate hygiene or environmental control, a private room is preferable. Cohorting may be done in accordance with policy 106.028 Isolation Precautions Guidelines, Appendices A and B.

IX. Respiratory Hygiene/Cough Etiquette

Any time or at any location, the patient must be triaged at the first point of entry:

- Triage the patient for respiratory illness or rash illness.
- Immediately implement appropriate measures such as respiratory etiquette and isolation.
- The expectation is that all patients, family members and friends will comply.
- Patient must wear mask until segregation is completed. If the patient does not wear the mask, the HCW will wear a mask.
- Move the patient to an appropriate location creating spatial separation or into an isolation room.

X. Safe Injection Practices

~~Used needles may not be re-injected into multi-dose vials or saline containers. Use a sterile needle and syringe for each puncture of multi-dose vials. If multi-use vials are used, the vial may only be used for one patient, except as noted in Pharmacy policy PH.79 Multiple Dose Vials.~~

- Used needles may not be re-injected into multi-dose vials or intravenous solutions. Use a sterile needle and syringe for each puncture of multi-dose vials. If a multi-dose vials are used, the vial may only be used for one patient, except as noted in Policy PH.79 Multiple Dose vials
- Medications packaged as single-dose or single use may not be used for more than one patient. This includes ampules, bags, and bottles of intravenous solutions.
- Do not use single-dose (single-use) medication vials, ampules, and bags or bottles of intravenous solution for more than one patient.
- Do not use fluid infusion or administration sets (e.g., IV bags, tubings, connections) for more than one patient.

XI. Special Lumbar Puncture Procedures

A surgical mask shall be worn by staff placing a catheter or injecting material into the spinal or subdural space (i.e., during myelogram, lumbar puncture and spinal or epidural anesthesia/analgesia).

REFERENCES:

Centers for Disease Control Isolation Precautions Guidelines
<http://www.cdc.gov/ncid>

All revision dates:

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Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Infection Control Committee	Magdy Asaad: Infection Prevention Manager	11/8/2022
Policy Owner	Magdy Asaad: Infection Prevention Manager	10/27/2022

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V E N T U R A C O U N T Y
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References:

106.029 Aerosol Transmissible Disease Exposure Control Plan

POLICY:

The aerosol (airborne) transmitted disease exposure control plan, mandated by the California's Occupational Safety and Health Administration ([OSHA Section 5199. Aerosol Transmissible Diseases](#)), describes the management of aerosol transmissible diseases in the Healthcare organization. (This policy addresses and replaces policy 106.019 Tuberculosis Exposure Control Plan.)

Applicability:

Ventura County Medical Center, Santa Paula Hospital, Ambulatory Care Clinics, the Behavioral Health Department

This policy includes all employees who could "reasonably anticipate" that by performing their job duties they may come into contact with suspected or known patients to be infected with an aerosol-transmissible pathogen or a novel/unknown pathogen for which there is no evidence to rule out airborne transmission.

PROCEDURE:

Responsibility:

Employees must know and follow the requirements of the standard as described in this policy.

The Infection Prevention and Control Manager is responsible for administering the aerosol transmissible plan. Authorship, implementation, and administration of the plan will be accomplished in collaboration with Administration, Infection Prevention and Control Committee, Employee Health Services, and Human Resources.

Engineering and Work Place Controls:

1. Supplies include: NIOSH-approved N95 mask/respirators, splash shield surgical masks, gowns, goggles, and gloves. These should be supplied by Central Supply. The Product Evaluation Committee will be responsible for leading and organizing the selection of alternate products when needed. In the event of a shortage of NIOSH-approved N95 masks and/or respirators, the local public health officer will be asked to release NIOSH-approved N95 respirator/masks from local stockpiles.
2. Maintenance, repair, and employee education regarding use of Powered Air Purifying Respirators (PAPRs) will be done by Respiratory Therapy. Users will clean respirators after each use. Hoods, which are personal use only, are either kept or processed.

3. Isolation signs: Infection Prevention and Control will supply isolation signs. Nursing will post the appropriate sign. When the patient is discharged, environmental services personnel will remove the sign to signal that the room has been terminally cleaned.
4. Negative pressure patient rooms are identified and managed by Facilities Management (see policy ~~F.75 Daily Inspection of Isolation Rooms~~ F.76 Isolation Rooms).
5. Isolation Policy and Procedure: Follow the directives in ~~Administrative policy 106.028, Isolation Precautions Guidelines~~ 106.028 Isolation Precautions Guidelines.
6. Policy and Procedure: ~~Administrative policy 106.018, Infection Control Standard Precautions,~~ 106.018 Infection Control Standard Precautions is applicable to all patients.
7. Respiratory etiquette is practiced in all settings by all employees in accordance with ~~Administrative policy 406~~ 106.018 Infection Control Standard Precautions. ~~018, Infection Control Standard Precautions.~~
8. Facilities will maintain the alarm system and air pressure system for the airborne isolation patient rooms.
9. Environmental Services: The cleaning and decontamination of the hospital environment is done according to the Environmental Services Department policies and procedures.
10. In the event of a surge of patients with an aerosol transmitted disease, the Emergency Management Plan will be put into effect. Supplies may be accessed through the disaster stockpiles via the Public Health Department.

Aerosol Generating Procedures:

1. All health care workers shall wear an N95 mask/respirator and eye protection as appropriate for level of exposure.
2. Procedures that may generate an aerosol include, but are not limited to:
 - Bronchoscopy
 - Intubation
 - Sputum Collection including sputum induction
 - Nasopharyngeal swab specimen collection
 - Nasal wash specimen collection
 - Suctioning

Patient Placement:

1. Patients who are identified as needing a negative pressure room (per Administrative policy 106.028, Isolation Precautions Guidelines) are classified as needing Airborne Isolation. In addition, the Aerosol Transmissible Disease Exposure Control Plan has included "novel and unknown pathogens" and "any other disease for which public health guidelines recommend airborne infection isolation" as needing Airborne Isolation.
2. **Patients must be placed in a functioning negative air pressure room within five (5) hours of identification.**
3. If there is no negative air pressure isolation room available, the patient must be transferred to another facility with a functioning negative air pressure room available. When no transfer possible, the local public health officer must be notified before the end of the five hour period and every 24 hours thereafter. The following information must be reported:
 - Date, time, and name of the local public health employee informed of the occurrence.

- Lack of availability of negative air pressure rooms in the jurisdiction.
- That reasonable efforts have been made to contact establishments outside the jurisdiction.
- All applicable measures recommended by the local health officer, the Infection Control Committee Chairperson, or the Hospital Infectious Disease Physician.
- All employees entering the room are in compliance with the appropriate Isolation Precautions.
- The attending physician may determine that the transfer may be detrimental to the patient and therefore the patient cannot be transferred to another facility for an airborne isolation room. This shall be documented in the patient's chart and a summary provided to the Plan Administrator. This summary shall include the name of the physician making the determination to not transfer the patient, the date and time of the initial decision, and the date and time of the person who performed the daily review. The summary record shall be kept for three (3) years.

Occupational Health:

1. A pre-employment health assessment will be done by Employee Health Services in accordance with Administrative policy [101.012 Pre-employment and Ongoing Staff Health Requirements](#) .
2. Management of exposures to communicable diseases is addressed in Administrative policy [100.020 Occupational Exposure to Communicable Diseases Other than Bloodborne Pathogens](#) .

Training:

1. Education regarding infection prevention and control practices is conducted during New Employee Orientation.
2. Mandatory annual updates are accomplished via the electronic educational system.
3. Upon employment, NIOSH-approved N95 respirator Fit Testing is conducted and employees are taught the appropriate way to apply the mask/respirator. Employees should request refitting if they experience changes in body weight. **Employee Health and unit managers will be responsible for tracking their employee's size and what brand the employee was fit tested on.**
4. Employees may obtain a copy of the Aerosol Transmissible Disease Standard (California Occupational Safety and Health Standards Title 8 Section 4) from the Infection Prevention and Control Office. See Attachment B.
5. Mask/Respirator fit-testing and competency training will be performed by Employee Health/[Respiratory Therapy](#) annually.
6. Just in time training will be used for PAPRs or alternate NIOSH-approved N95 masks as required and competency will be documented.
7. PAPRs will be available throughout the hospital. Employees must complete training to prior to use.

Record Keeping:

1. Orientation attendance will be kept by Human Resources.
2. Mandatory annual updates are accomplished via the electronic educational system.
3. Competency of fit testing: the initial competency is maintained in the employee's medical record in Employee Health Services. Subsequent fit testing competencies will be sent to Employee Health and retained in the employee's file.
4. Facilities Management will maintain records on testing of negative air pressure rooms. The records will be

kept for a minimum of five (5) years and will include the name and affiliation of the person performing the test, inspection and maintenance, the date, and any significant findings and actions taken.

REFERENCES:

California Code of Regulations Title 8 Section 5199 Aerosol Transmissible Disease Standard (8/09) (rev 10/2013)

Isolation Precautions: Centers for Disease Control (CDC)

Standard Precautions: Centers for Disease Control (CDC)

All revision dates:

11/29/2022, 6/13/2019, 5/1/2016, 11/1/2013, 9/1/2009, 5/1/2006

Attachments

106.029 Attachment A-Roles and Responsibilities of Team Members Caring for Patients Confirmed or Suspected of Having Mycobacterium Tuberculosis.pdf

Attachment B - Cal/Osha's Aerosol Transmissible Disease Standards and Local Health Departments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Infection Control Committee	Magdy Asaad: Infection Prevention Manager	11/8/2022
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V E N T U R A C O U N T Y
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Owner: Magdy Asaad: Infection
Prevention Manager
Policy Area: Administrative - Environment of
Care
References:

106.057 Infection Control Patient Education

POLICY:

There are education topics that must be addressed by the physician and nurse caring for patients who meet certain criteria as defined by California State Law and The Joint Commission Standards.

PROCEDURE:

- A. All patients, identified family members, guardians, and/or significant others are provided with the appropriate education pertinent to the diagnosis or needs assessed and identified during the hospital stay.
- B. Physicians, nurses, respiratory therapists, dietitians, and physical therapists will provide the education based on their scope of practice.
- C. When possible, the written educational materials will be given in the language the patient prefers.
- D. In accordance with California State law (SB 1058) and Joint Commission requirements, the following conditions are to be supplemented with written educational materials:
 1. Methicillin Resistant Staphylococcus Aureus (MRSA) infections or Positive MRSA screens.
 2. Clostridium difficile infection
 3. Vancomycin Resistant Enterococcus infection
 4. Surgical patients
 5. Patients with a central line
 6. Emerging Diseases of epidemiological significance
- E. Education will be documented in the patient's electronic health record by all disciplines providing the education.
- F. Only Infection Control Committee-approved educational materials are to be used for the above purposes.

PROCEDURE

- A. The healthcare provider will determine the patient, guardian and/or family's educational needs.
- B. The educational materials will be accessed on the intranet at any nursing unit computer terminal, utilizing the PolicyStat icon and then clicking on the Infection Control Patient Education policy and locating the desired educational handout in the addendum of the policy.

- C. Educational materials are distributed and reviewed with the patient and/or designated family members.
- D. Documentation will specify: materials given, teaching method, person(s) taught, and evaluation of learning.
- E. Patient and or relatives response to education will be documented, if patient is unable to comprehend, response will be documented as such.
- F. Each discipline will document the education in the electronic health record at the conclusion of the educational encounter.

REFERENCE

- A. The Joint Commission Standards
- B. California Senate Bill 1058

All revision dates:

11/29/2022, 11/1/2013

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
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VENTURA COUNTY
HEALTH CARE AGENCY

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Owner: Magdy Asaad: Infection Prevention Manager
Policy Area: Administrative - Environment of Care
References:

106.058 Infectious Disease Surge Planning Guidelines

POLICY:

In recognition of the importance of awareness and preparation for an influx of patients with an infectious disease, these guidelines have been developed to address the infection prevention and control aspects of the Surge Capacity/Emergency Operations Plan for Ventura County Medical Center (VCMC)/Santa Paula Hospital (SPH), Behavioral Health Clinics and the Ambulatory Care Clinics. The guidelines are adapted from recommendations made by The Centers for Disease Control and Prevention (CDC), the World Health Organization (WHO) and the State of California Department of Public Health Services. Modifications have been made appropriate to the hospital and clinic environment.

Note: This policy addressing an influx/surge of patients with an infectious disease is part of the system-wide approach to the Emergency Management Plan Administrative policy 106.034, which also addresses surge capacity and the response. Responses will vary depending on the clinical presentation of the disease and the presumed/ known agent.

This policy will serve as a tool or reference to provide an effective response to a large influx of infectious patients and guide practical and realistic planning for the clinics and VCMC/SPH. This would include events, such as:

- A. Suspected terrorist event (e.g., bioterrorism agents)
- B. Outbreak of an infectious disease (influenza pandemic, SARS, emergence of a novel virus such as COVID-19)

PROCEDURE:

There may be increased demand for negative pressure isolation rooms or units, HEPA filters and Personal Protective Equipment. Additional medical supplies will also be in demand.

Outpatient clinics may be required to vaccinate and/or supply medication to patients who do not require hospitalization. These areas may also function as triage areas in order to decrease the burden on the Emergency Department or VCMC/SPH.

Planning will include:

- A. Control of all entrances and exits to the facilities.

- B. Triage areas for patients to receive screening and assignment to an appropriate patient care area.
- C. Physical space for decontamination of patients, if necessary.
- D. Response to a demand for cohorting of patients.
- E. Response to a demand for negative pressure rooms or units.
- F. The need for additional supplies.
- G. The need for focused, targeted screening of all persons (healthcare workers (HCWs) and visitors) entering the facilities and careful monitoring of employees exposed to infectious patients.

Command and Control

The Hospital Incident Command System will be initiated by the Hospital Incident Commander upon the identification of an influx of patients. These patients may present with a similar clinical presentation and may quickly overwhelm the clinic or Emergency Department. The Hospital Incident Commander will notify the Public Health Department of the influx of patients. The guidance of the Medical Director of Infection Control will be given to the Hospital Incident Commander, Hospital Administration and Clinic Administration, Infection Control Committee Chair and Ambulatory Care Clinic Administration. Any of these individuals can be reached through Hospital Paging at 652-6075.

General Considerations

It is very important that HCW's must know and practice both standard precautions and the types of isolation described in the hospital Administrative Manual. **The provider must protect themselves first.** Failure to do so may result in the provider becoming a patient and a victim and thus not be able to care for or treat patients.

Essential to the control of the spread of respiratory viruses and bacteria is the prompt initiation of Standard Precautions and Respiratory Etiquette as defined by the (CDC) and social distancing or isolation. Early diagnosis or recognition of the clinical presentation in a patient seeking care within the system followed by rapid initiation of respiratory etiquette will enhance limiting the airborne spread of a virus or bacterium.

Clinics: when the patient checks in for an appointment:

- A. Ask if they are having any respiratory symptoms.
- B. If they do, give them a mask and educate/explain why they must wear it, tissues and a bag to put the used tissues in.
- C. Speak with the nurse about facilitating the patient's placement in a room, or designated area in triage, as soon as possible to minimize exposure in the waiting room.
- D. Document the mask in the electronic health record (EHR).

Emergency Department: When the patient arrives at the check-in window:

- A. Ask if they are having any respiratory symptoms.
- B. If they do, give them a mask and educate/explain why they must wear it, tissues and a bag to put the used tissues in.
- C. Speak with the triage nurse about facilitating the patient's placement in a room.
- D. Document the mask in the EHR.

A similar process is applied if a patient presents with a rash illness. Early recognition of the patient with a rash

and subsequent institution of isolation will assist in limiting spread of the disease.

Clinics: when a patient checks in for an appointment:

- A. Ask if they have rash.
- B. If they do, place them in an isolation room or designated alternative/outdoor waiting area.

Emergency Department: when the patient arrives at the check-in window:

- A. Ask the patient if they have a rash.
- B. If they do, place the patient in an isolation room or designated alternative/outdoor waiting area.

Locations for triage for those patients with fever, cough, sore throat, extreme fatigue may be the following: a tent outside the building, a physical space within the building that has negative air pressure with 10-12 air exchanges/hour (CDC guidelines) or a space separate from the clinic or hospitals.

Security

All entrances and exits to and from the buildings will be secured as determined by the Incident Commander. Limited access will be given only to HCW's or a family member who will also require a health screening. The screening criteria will be developed by the Medical Director of Infection Control, the Infection Control Committee Chair and the Infection Control Practitioner.

Admission Responsibility

Once the decision to admit a patient has been made, the Nursing Supervisor will decide patient placement. Facilities Management will advise the nursing supervisor (or Planning) which rooms are available for isolation if a negative pressure room is required. In conjunction with the Planning Division of the Incident Command System, the decision may be made to convert an entire patient area to negative air pressure.

Patient Management

The Emergency Management plan describes patient placement for an influx of patients, including those who may have a communicable infection.

For isolation cases, the hospital Isolation Precautions Guidelines, Administrative policy 106.025, are to be employed as described in the policy.

For cases of respiratory illnesses, respiratory etiquette should be followed as defined in the hospital Standard Precautions, Administrative policy 106.018. A surgical mask must be placed on the patient with education regarding the requirement to wear. Tissues, a trash bag for the used tissues and alcohol hand sanitizer along with the instruction of how to use the hand sanitizer must be given to the patient.

Limit the time that the patient is not situated in the appropriate isolation room.

Isolation of the patient:

- A. The type of isolation will be ordered by the Medical Director of Infection Control, the Infection Control Committee Chair and/or the Infection Control Practitioner.
- B. Isolation Precautions Guidelines, Administrative policy 106.028, applies to all patient care settings.
- C. Additional measures may be instituted by the Infection Control Committee Chair and/or Medical Director of Infection Control.

Respiratory Therapy Considerations

Healthcare Workers (HCW's) who are present during aerosol generating procedures performed on patients with influenza-like infection (or infection with a novel virus, e.g., corona virus, SARS) may be at increased risk of transmission. Consult with the Infection Control Committee Chair, regarding the need for all HCW's involved in an aerosol-generating procedure to wear a Powered Air Purifying Respirator (PAPR).

High-risk aerosol generating procedures include, but may not be limited to:

- A. Administration of aerosolized medication treatment
- B. Diagnostic sputum induction
- C. Bronchoscopy
- D. Airway suctioning
- E. Endotracheal intubation
- F. Positive pressure ventilation via face mask (e.g., BIPAP, CPAP) during which air may be forced out around the facemask.

Patient Placement

Negative Air Pressure Rooms will be used for Airborne Isolation.

Facilities Management will be called by the Nursing Supervisor when all negative pressure rooms are in use. The Infection Control Committee Chair, Medical Director of Infection Control, Medical Staff Director, Infection Control Practitioner, Administration and Facilities Management manager will determine patient placement locations when alternate isolation areas are needed.

Cohorting of patients will be done according to criteria set forth collaboratively with the Infection Control Committee, Medical Director of Infection Control and the Infection Control Practitioner.

Patient Transport/Movement

Limit movement of the patient to only that which is absolutely necessary.

Infection Control

- A. Conducts surveillance to identify those patients who have been identified with a communicable disease after admission.
- B. Monitors isolation.
- C. Reports cases to the local Public Health Department.
- D. Collaborates with Central Supply to ensure adequate and appropriate supplies are available. Assists in determining alternative vendor products/substitutes.
- E. Provides education for employees and Medical Staff. Medical Staff will be accessed through the Medical Staff office email system.

Pharmacy Department

The Pharmacy Department Director/designee will be responsible for the procurement and distribution of

medications, vaccines and anti-virals.

Employee Health Services

The Employee Health Practitioner, in collaboration with the Infection Control Committee and the Medical Director of Infection Control, is responsible for:

- A. Health screenings for employees to determine fitness for duty at the beginning of each work shift.
- B. Symptom clearance of HCW's.
- C. Assigning exclusion from work for employees using criteria established by the Infection Control Committee in collaboration with the local health department.
- D. Maintaining a line listing of HCW's who had unprotected face-to-face contact with an infected patient.
- E. Monitoring HCW sick calls.
- F. Prescribing prophylaxis and treatment for HCW's as determined by the Medical Director of Infection Control.
- G. Managing a vaccination program for HCW's as determined by the Medical Director of Infection Control.
- H. Return to work clearance control.

Laboratory Specimens

Consult with the Laboratory Department regarding collection and handling of specimens. The Laboratory Manager, in collaboration with Infection Control Committee, will determine the type of specimen, collection methodology, transport and laboratory handling procedure.

Laundry

- A. Infection Control will determine any deviations necessary from current laundry practices.
- B. If the disease is determined to be smallpox, a laundry chute **MUST NOT** be used.

Sterilization and Disinfection

- A. Use disposable items when possible.
- B. Environmental cleaning will be done in accordance with Environmental Services policies. Changes to the process or the disinfectant in use will be determined by the Infection Control Committee.
- C. Patient care equipment will be cleaned and disinfected in accordance with hospital Cleaning and Disinfection of Patient Care Equipment, Administrative policy 106.061.
- D. Hospital-approved disinfectant will be designated by Infection Control Committee based on available information of presumed agent.

Central Supply

- A. Will maintain a seven (7) day supply and a PAR level of isolation and personal protective equipment, alcohol hand gel and antimicrobial hand soap.
- B. Will notify Infection Control when a product substitution must be made. Infection Control will assist in choosing an alternate product if an alternate is available.

- C. Infection Control Committee will determine the appropriate disinfectant to be used.

Education

- A. Education regarding disease prevention and control for the following entities will be provided:
 - 1. Healthcare workers (HCW's)
 - 2. Families
- B. Disease specific Fact Sheets published by the CDC and the text Control of Communicable Disease in Man (American Public Health Association) may be used.

Care of the Deceased

- A. Follow hospital Post Mortem Care, policy A.40.
- B. The Incident Commander or Logistics Chief will coordinate with the Medical Examiner to ensure the safe disposal of bodies.

Waste Management

- A. Follow the Hospital Hazardous Materials and Waste Management Plan (Infectious Waste), policy 106.035.
- B. If the disease is determined to be smallpox, Infection Control Committee will issue a directive, in collaboration with Facilities Management, regarding the appropriate method of handling the waste. The CDC and local health jurisdiction advisories for waste management will be taken into consideration.

Ethics

In the event of a shortage of medical resources such as ventilators, the Bioethics Committee will assist in developing a framework for decision making in the care of patients.

Employee Childcare

- A. The hospital Emergency Disaster Plan will be followed when the surge is due to an outbreak of an infectious disease.
- B. Children whose parents are healthcare workers will be admitted to childcare after a health screening is completed.
- C. Ill children will not be admitted to childcare.

REFERENCE

- A. Isolation Precautions Guidelines, Administrative policy 106.028: VCMC Administrative Manual, Environment of Care Section
- B. Standard Precautions, Administrative policy 106.018: VCMC Administrative Manual, Environment of Care Section
- C. Emergency Operations Plan, Administrative policy 106.034, VCMC Administration Manual.
- D. Ambulatory Care Surge Capacity Plan
- E. Centers for Disease Control Bioterrorism, <http://www.cdc.gov/bioterrorism>.

- F. Department of Health and Human Services. Pandemic Influenza Planning. <http://www.hhs.gov/pandemicflu/plan>.
- G. COVID-19 updates <https://www.cdc.gov/socialmedia/syndication/405380/404364.html>
- H. The Hospital follows the CDC guidelines: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html>
- I. The Hospital follows All Facilities Letters (AFLs) ad published by California Department of Public Health <https://www.cdph.ca.gov/Programs/CHCQ/LCP/Pages/LNCAFL.aspx>

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11/29/2022, 5/1/2016, 3/1/2014

Attachments

No Attachments

Approval Signatures

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Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Infection Control Committee	Magdy Asaad: Infection Prevention Manager	12/20/2022
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V E N T U R A C O U N T Y
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Prevention Manager
Policy Area: Administrative - Environment of
Care
References:

106.060 Guidelines for the Management of Prion Disease

POLICY:

To define precautionary measures taken when a patient with suspected or confirmed prion disease undergoes an invasive neurological procedure.

PROCEDURE:

The physician, neurologist and/or neurosurgeon caring for the patient will notify the Surgery Department at the time of scheduling the case that the patient has been diagnosed with or is suspected of having a prion disease. Consideration should be given to referring the patient to a tertiary care center.

Prion disease includes Creutzfeldt-Jakob Disease (CJD) and is related to other transmissible spongiform encephalopathies (TSEs), including Kuru, Gerstmann-Straussler-Scheinker syndrome and fatal familial insomnia syndrome.

If a diagnosis of prion-associated disease is made after a neurosurgical procedure has been performed, an epidemiological investigation and risk assessment will be undertaken. Patients who are admitted with a known or provisional diagnosis of prion disease who do not require neurosurgery will receive care appropriate to their admitting diagnosis.

When a suspect or known case is scheduled for a procedure, the physician scheduling the procedure **must notify and get approval** from the following personnel:

- A. Medical Director of Infection Control
- B. Surgical Services Director
- C. Infection Control Nurse
- D. Pathologist

A plan for managing the infection prevention and control aspects of the case will be developed prior to the surgery.

BACKGROUND INFORMATION

Infection control and prevention interventions will be made based upon the Infectious Disease Physician and Neurosurgeon's assessment of the case. A plan must be in place prior to performing a procedure involving

tissue known to be of high infectivity or high risk for transmission.

Distribution of Infectivity of Prions in the Human Body

INFECTIVITY CATEGORY	TISSUE, SECRETION, EXCRETION		
HIGH INFECTIVITY or HIGH RISK	BRAIN , dura mater, spinal cord, cranial ganglia, cranial nerves, eye, (<i>corneal invasive procedures, intravitreal injections, ocular surgery</i>)		Spinal Cord Spinal ganglia Lymphoreticular Tissues in vCJD (<i>Tonsils, Spleen, Appendix</i>)***
MEDIUM or LOW INFECTIVITY or MEDIUM or LOW RISK **	Adipose Tissue Adrenal Gland Blood* Bone Marrow CSF Dental Pulp Feces Gingival Tissue Heart Intestine Kidney Liver Lung	Lymph Node, Muscle Olfactory Epithelium, Peripheral Nerve, Placenta, Prostate, Sclera (<i>Non-Invasive Eye Procedure + Contact W/ Superficial Cornea, Epithelium, Sclera, Conjunctiva</i>) [Tenometry, Gonioscopy] Serous Exudate	Skeletal Muscle Spleen Testes Thymus Thyroid gland
INSUFFICIENT DATA or NO INFECTIVITY	Milk Saliva Semen Sputum	Sweat Tears Urine	

*Only CJD Variant (vCJD) has shown bloodborne human to human transmission. It is not known what the minimum amount of vCJD-contaminated blood is required for transmission. Although transmission from blood in other human prion diseases has not been shown, **any** exposure to blood from patients with confirmed or suspected prion disease must be considered exposure to prion disease.

**Some tissues in this section have not yet been shown to contain prions or have not yet been shown to transmit disease, but have been placed in this category because of the blood exposure involved in sampling the tissues.

***Lymphoreticular tissue in vCJD is considered high risk.

MODES OF TRANSMISSION

The transmissibility of prions has been demonstrated by inducing disease in laboratory animals. The most effective method of infecting animals was by intracerebral inoculation of prions, with intraperitoneal and percutaneous inoculation being significant less effective, and ingestion of prions the least effective.

- A. Iatrogenic transmission is exceedingly rare. All known instances of iatrogenic prion disease have resulted from exposure to infectious brain, pituitary or eye tissue.
- B. Occupational: **There is no evidence of occupational transmission of prion disease to healthcare**

workers. The highest theoretical risk is from occupational exposure to high infectivity tissue through needlestick, splashing of the mucous membranes or unintentional ingestion. All healthcare personnel who work with patients with known or suspected prion disease must adhere to Standard Precautions. Transmission of prion disease has not been associated with environmental contamination or fomites.

ROUTINE CARE OF PATIENTS

Based on current knowledge, isolation of patients is not necessary; they can be cared for using Standard Precautions. A private room is not required for infection control purposes.

PERIOPERATIVE MANAGEMENT

All patients with a diagnosis of suspect/known prion disease require a higher level of infection prevention than routine Operating Room care. If a procedure is scheduled for "Brain Biopsy," it must be clarified with the Neurosurgeon that prion disease is not a potential diagnosis.

Cases should be scheduled first in the day to allow adequate time for cleaning and processing of specimens in Surgical Pathology.

A. OR Scheduling Procedure

1. Scheduling staff or Surgery front desk staff will ask if prion disease is a potential diagnosis when a brain biopsy is scheduled. If prion disease is a part of the differential diagnosis, the scheduling staff or front desk staff will notify the staff listed above.

B. Steps in Operating Room Procedure

1. Remove all non-essential items from room prior to surgery. Use as few instruments or supplies as possible. Confine the area of contamination as much as possible, and use as few items as possible.
2. There will be a sign posted outside the room restricting traffic.
3. The primary circulating nurse will focus entirely on containment precautions.
4. The circulating nurse will obtain prion disease supplies from Central Supply (listed below).
5. The scrub team (Surgeon, Assistant, Anesthesiologist, Circulator and Scrub) will wear:
 - a. Head protection
 - b. Fluid-impervious sterile gowns
 - c. Double gloves – puncture-resistant gloves are preferred
 - d. Masks with face shields, including visor or mask with goggles
 - e. Fluid repellent leg and shoe covers
 - f. Long sleeve disposable gowns
 - g. Eye, nose and mouth protection
6. OR hampers will be removed. All linen used in the OR including sheets, blankets, towels and disposable materials exposed to any patient fluids must be discarded into the red biohazard waste for pick up and subsequent incineration.
7. Kick buckets and trash receptacles will be lined with red biohazardous bags.
8. Sharps containers will be single-use; locked after the procedure for disposal (whether or not it is full).
9. Handling of Specimens:

- a. The circulating RN will invert the specimen bag to cover his/her gloved hand while the scrub nurse is passing off the specimen.
 - b. The circulator will evert the bag over the cup once the specimen is obtained.
 - c. All specimens will be double-bagged and labeled "CJD Precautions."
 - d. The circulating RN will notify Pathology that the specimen is obtained; reminding that prion disease precautions are required. Specimens will not be left unattended in pathology.
10. Instrumentation for Neurosurgery:
- a. For surgical set-up, see PREFERENCE CARD - only open the minimal amount of anything.
 - b. Obtain instruments which include as many single-use items as possible.
 - c. Do not use "immediate-use sterilization" for any dropped instruments.
 - d. Keep all instruments submerged in WATER, and do not allow protein to dry on any metal instrument surface.
 - e. The scrub nurse will assure that the fluid canister is securely contained within each of the red double-bags. All red bags will be transported to the biohazard waste area for pick up and incineration.
11. In the case of a craniotomy, the under-head drape will remain until the head is cleaned.
12. Two team members will don fresh sterile gloves, and one will lift the head while the other places a clean impervious drape beneath the head.
13. Sterile dressings from a separate sterile field will now be applied by this team.
14. At the conclusion, the circulator will notify PACU when the patient is ready for transport and that **Standard Precautions** are required for caring for patients with prion disease.

INSTRUMENT HANDLING POST SURGICAL OR BEDSIDE PROCEDURE

- A. Because instruments used on confirmed or suspected prion disease patients during neurosurgical or invasive procedures have been implicated in disease transmission in both animal and human cases, it is imperative that decision-making determine whether to:
 - 1. Destroy,
 - 2. Disinfect and quarantine, **OR**
 - 3. Disinfect and reprocess instruments **after the procedure.**
- B. Some equipment (endoscopes or ophthalmic) cannot be adequately disinfected after use without destroying the equipment.
- C. Use SINGLE-USE equipment whenever possible.
- D. The three parameters integrated into sterilization and disinfection processing for prion contaminated medical instruments are:
 - 1. The patient's risk of having a prion disease.
 - 2. The comparative infectivity of different body tissues (see table).
 - 3. The intended use of medical device.

CLEANING, DISINFECTION AND STERILIZATION

A. Cleaning, disinfection and sterilization of semi-critical and critical patient care equipment:

1. DO NOT USE IMMEDIATE-USE STERILIZATION for any instrument.
2. INSTRUMENTS MUST be kept wet (e.g., immersed in water or a prion-cidal solution) or damp after use and until they are decontaminated.
3. Instruments must be decontaminated by immediately placing them in an automated water-disinfector as soon as possible after use. Use enzymatic detergent known to eliminate the infectivity of prions.
4. SINGLE-USE INSTRUMENTS must be used, e.g. single-use biopsy sets, wherever possible.
5. After the instrument is cleaned, it should be sterilized by autoclaving (steam sterilization) or using a combination of sodium hydroxide and autoclaving using 1 of the 4 options below:
 - a. Option 1: Autoclave at 134C for 18 minutes in a pre-vacuum sterilizer.
 - b. Option 2: Autoclave at 132C for 1 hour in a gravity displacement sterilizer.
 - c. Option 3: Immerse in 1 N NaOH (1 N NaOH is a solution of 40 g NaOH in 1 L water) for 1 hour; remove and rinse in water, then transfer to an open pan and autoclave (121C gravity displacement sterilizer or 134C porous or vacuum sterilizer) for one hour.
 - d. Option 4: Immerse in 1 N NaOH for 1 hour and heat in a gravity displacement sterilizer at 121C for 1 hour, then clean and subject to routine sterilization.
6. Prion-contaminated medical devices that are impossible to clean or be fully exposed to steam and other sterilants should be discarded.
7. Currently, no recommendation can be made regarding the use of special prion reprocessing for reprocessing critical or semi-critical devices contaminated with low-risk tissues from high risk patients.
8. Environmental surfaces contaminated with low risk tissues from high risk patients require only standard disinfection.
9. **When a neuropathologic diagnosis of unsuspected prion disease is made on the basis of a brain biopsy or at the time of autopsy, instruments used on high risk tissues of the patient should be recalled and reprocessed using special prion reprocessing methods.**

B. Non-critical equipment contaminated with high risk tissue:

1. Clean, then disinfect with a 1:5 to 1:10 dilution of sodium hypochlorite or 1 N NaOH depending on material compatibility.
2. Ensure that all contaminated surfaces are exposed to the disinfectant.

C. Critical and semi-critical medical devices that have been contaminated with no-risk tissue:

1. Follow policy and procedure for cleaning and high level disinfection or sterilization.

CLEANING ENVIRONMENTAL AREAS

A. Non-critical environmental surface areas contaminated with high risk tissue:

1. Clean with a detergent and then spot decontaminate these surfaces with a 1:5 to 1:10 dilution of sodium hypochlorite with a contact time of at least 15 minutes.

2. Minimize environmental contamination by using disposable plastic backed cover sheets on work surfaces.

B. Environmental surfaces contaminated with low risk tissue:

1. Follow policy for cleaning blood and body fluid contaminated surfaces (tuberculocidal disinfectant).

LABORATORY SERVICES

- A. All specimens will be considered potentially infectious for prion disease.
- B. Pathologist and Infectious Disease Physician will determine the appropriate solution to be used to fix specimens.

IMAGING SERVICES

The interventional radiologist and the Infectious Diseases Physician in collaboration with Infection Control will determine the plan for infection control measures to be taken based on the type of procedure, tissue to be handled and probability of prion disease diagnosis.

PRECAUTIONS FOR HANDLING THE DECEASED PATIENT

On the death of a patient with confirmed or suspected prion disease, the removal of the body from the unit will be carried out using normal infection control measures.

OCCUPATIONAL EXPOSURE

- A. There is no evidence of occupational transmission of prion disease to healthcare workers.
- B. Percutaneous exposure to cerebral spinal fluid or brain tissue of an infected person can be followed by washing with detergent and copious water (avoid scrubbing), rinsing, and drying, although scientifically unproven to reduce risk. For maximum safety, consider briefly rinsing wound with 0.5% sodium hypochlorite (or another chemical with proven prioncidal activity) and then rinsing with water.
- C. Mucus membrane exposure to infectious tissues or fluids should be managed by irrigating the mucus membrane thoroughly with saline for several minutes.
- D. Follow Administrative policy 106.030, *Occupational Exposure to Blood and Body Fluids*.

NOTIFICATION

When a diagnosis of prion disease is made post-mortem or post-procedure, the following should occur: Multidisciplinary review of the case for risk assessment of transmission potential, case definition for "exposed" and notification of exposed patients and staff, if any.

REFERENCES

- A. Guideline for Disinfection and Sterilization of Prion Contaminated Medical Instruments. Society for Healthcare Epidemiology of America. *Infection Control and Hospital Epidemiology* 2010, Vol. 31, No. 2.
- B. APIC Text of Infection Control and Epidemiology
- C. Perioperative Standards and Recommended Practices. AORN

All revision dates:

3/1/2014

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Infection Control Committee	Magdy Asaad: Infection Prevention Manager	11/17/2022
Infection Control Committee	Leah Kory: Medical Director, Inpatient Quality	10/7/2022
Policy Owner	Magdy Asaad: Infection Prevention Manager	6/28/2022

Current Status: *Pending*

PolicyStat ID: 11421497



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 1/1/2014
Effective: Upon Approval
Last Approved: N/A
Last Revised: 1/1/2014
Next Review: 3 years after approval
Owner: Magdy Asaad: Infection Prevention Manager
Policy Area: Administrative - Environment of Care
References:

106.067 Infection Outbreak Investigation Response Guideline

POLICY:

The goal of an investigation is to identify probable contributing factors and to stop or reduce the risk for future occurrences. An investigation may be initiated when healthcare-associated infections, recovery of specific pathogens or other adverse events occur above the background rate or when an unusual microbe or adverse event is recognized.

All healthcare workers at Ventura County Medical Center/Santa Paula Hospital share the responsibility for communicating and participating in the prevention and control of healthcare-associated infections. Unusual occurrences should be reported to the Infection Prevention and Control Department.

The Infection Preventionist will initiate an investigation of the topic of concern. The Infection Preventionist will alert the Infection Control Committee Chair and the Hospital Infectious Disease Physician.

Hospital Administration will be made aware of the investigation and the nature of the problem. Meetings, communications and education with stakeholders will take place as necessary.

PROCEDURE:

1. Infection Prevention and Control will investigate and assemble preliminary information. A case definition will be developed and will be revised as necessary.
2. Data will be gathered and a line listing developed in collaboration with the Infectious Disease Physician and the Infection Control Committee Chair.
3. Investigation will include, but is not limited to:
 - a. Observational review of processes and procedures
 - b. Laboratory data review
 - c. Medical record review
 - d. Healthcare worker interview
4. Information and Data Analysis
5. Interventions as needed based on evidence based practice and data analysis
6. Compilation and reporting of findings to stakeholders

7. Changes in policy and process as needed
8. Education as needed
9. Continued vigilance to ensure a return to the background rate has occurred.
10. Summary of the investigation will be given to Administration, Infection Control Committee and stakeholders

All revision dates:

1/1/2014

Attachments

Outbreak Investigation Steps.docx

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Infection Control Committee	Leah Kory: Medical Director, Inpatient Quality	10/7/2022
Infection Control Committee	Magdy Asaad: Infection Prevention Manager	9/26/2022
Policy Owner	Magdy Asaad: Infection Prevention Manager	9/26/2022

Current Status: *Pending*

PolicyStat ID: 12274071



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

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Next Review: 1 year after approval
Owner: Diana Zenner: Chief Operating Officer, VCMC & SPH
Policy Area: Administrative - Operating Policies
References:

107.027 Quality Assessment and Performance Improvement Plan

POLICY:

The Quality Assessment & Performance Improvement (QAPI) Plan is a description of the efforts that are directed towards ensuring the consistent delivery of safe, quality, service-focused, effective health care for the patients we serve at Ventura County Medical Center (VCMC)/Santa Paula Hospital (SPH) and in the licensed hospital, Ambulatory Care (AC) clinics.

We look to achieve this through data assessment, outcomes review, process examination, evidenced based practice research, as well as the identification of opportunities for change and improvement. This is accomplished by systematically assessing patient outcomes and support processes to identify improvement opportunities, and to act on them in a timely manner.

The intent of the plan is the improvement of key clinical, support and managerial processes that are most important to the health and safety of our patients. Equally important, is our belief that each patient is entitled to quality health care and that every employee is individually obliged to contribute toward the improvement of patient care and safety. To fulfill this obligation, a plan has been developed and the organization shall nurture an environment that is supportive of excellence and learning, and one that is conducive to positive change.

GOALS AND OBJECTIVES:

In an effort to improve performance in clinical processes and outcomes, as well as to sustain performance, once it is improved, the primary goal of the QAPI Plan is to provide a comprehensive performance improvement program that will coordinate and integrate performance improvement activities across VCMC/SPH and the AC clinics. The approach to performance improvement is the continuous assessment and revision, when required to meet the goal of ensuring that patient outcomes are continually improved and that safe care is provided.

The objectives of the QAPI Plan include, but are not limited to:

1. Establish priorities for review, investigation and implementation of changes. Special consideration will be given to processes with the greatest impact on patient outcomes and those that are of the highest risk to patients.
2. Improve processes utilizing established performance improvement tools and techniques, as well as systems thinking.

3. Maintain a framework for improving performance that includes activities focusing on process design and redesign, while measuring, assessing and improving performance.
4. Identify, assess and implement corrective action plans for urgent situations requiring immediate action, such as processes that involve risks, have the potential for medical error, or may result in patient harm.
5. Conduct intensive analysis when significant undesirable performance is detected or suspected.
6. Ensure that accurate, valid data is available to monitor performance, and is used to identify opportunities for change.
7. Collect data designed to monitor the stability of existing processes, identify opportunities and changes that will lead to improvement, and document areas of sustained improvement.
8. Communicate outcomes of reviews and corrective action plans, to facilitate change.
9. Conduct ongoing and systematic assessment and documentation of hospital-wide issues, which have a direct or indirect impact on patient care.
10. Coordinate medical staff quality improvement activities with others within the organization, and integrate efforts whenever appropriate.
11. Maintain compliance with regulatory standards, which include those outlined in the Conditions of Participation (CoPs), via the Centers for Medicare and Medicaid Services (CMS), The Joint Commission (TJC) and the California Department of Public Health (CDPH): Title XXII.
12. Monitor, trend, communicate and implement interventions to improve the patient's perceptions of care that they received, while hospitalized.

Areas to consider when fostering a culture of improvement includes reducing factors known to contribute to adverse events and poor outcomes. These factors are often predicated on poorly designed systems, unanticipated system failures and failures in processes.

Opportunities to minimize these factors include, but are not limited to:

1. Recognizing and minimizing risks and/or processes that may lead to adverse events.
2. Communication regarding adverse events, in an effort to reduce future events and develop specific process change, to ensure similar events do not reoccur.
3. Focusing on processes and systems while continuing to hold individuals accountable for their personal responsibilities, which includes fostering an environment that supports the principles of a "Just Culture."
4. Exploring processes, tasks, equipment and other factors that may have contributed to adverse events.
5. Agreeing that standardized processes will lead to predictable outcomes and that aspiring to become a highly reliable organization requires a deference to operational experience and a predisposition with the fact that failure may occur.

THE PERFORMANCE IMPROVEMENT COORDINATING COUNCIL (PICC):

The Performance Improvement Coordinating Council (PICC) functions as the quality improvement committee for the hospitals and provides a forum for performance improvement (PI) activities, with primary responsibility for the quality assessment and performance improvement (QAPI) programs within the organization, including those related to regulatory compliance.

The PICC membership includes, but is not limited to:

1. Executive leadership
2. Representatives of medical staff
3. Departmental directors and managers and other members of the health care team.

Every leader and department participates in PI and safety efforts, with the intent of fostering departmental leadership and encouraging staff participation.

The PICC meets no less than 4 times each year, to monitor improvement activities and review quality metrics, in order to identify and prioritize improvement activities. Each meeting includes a review of current and proposed activities within the organization, along with analysis of data, to demonstrate the extent that these activities were successful, in achieving the intended outcomes.

The patient and family are the primary focus of every QAPI activity. The QAPI team shares the task of performance improvement with everyone who works at VCMC/SPH and the AC clinics. The QAPI team operates under a set of guiding principles, which include:

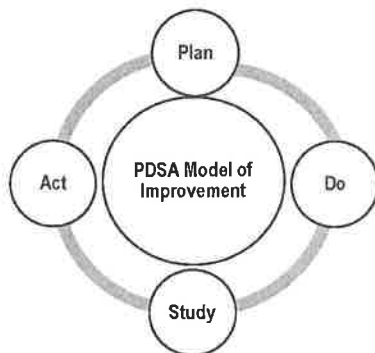
1. Ensuring that data is timely, relevant and valid.
2. Performance improvement efforts are visible throughout the organization.
3. Collaboration, in order to drive efforts to optimize patient outcomes and improve processes, which are the foundation of all QAPI activities and efforts.
4. Serving as subject matter experts who collaborate with others, in order to continually improve patient safety and serve as performance improvement mentors.
5. Ensuring that evidence-based principles of performance improvement are applied to improvement teams, processes and efforts.

METHODOLOGY AND MODEL OF IMPROVEMENT:

Performance Improvement (PI) methodologies, tools and strategies are integrated into activities to improve patient outcomes.

The **Plan, Do, Study, Act (PDSA)** is the primary methodology used within the organization:

- Plan the improvement and continued data collection
- Do Improvement, data collection and analysis
- Study the results
- Act to correct identified problem areas or improve performance.



Plan

Performance improvement projects are designed or redesigned to monitor expected performance. Projects are developed to measure, assess, improve and maintain process improvements.

Performance goals are established through comparison with other "like" facilities, and benchmarking with national and regional results. Comparative data from the NHSN, CMS, TJC or current/past department performance is utilized as well..

Do

Data collection is the basis of all performance improvement activities and provides a means of measuring performance, through which informed decisions can be made.

Study

Activities are assessed, reviewed and trended, to determine if process changes, interventions, or policies need to be created or revised. Changes that may need to occur may appear as:

1. System(s): Changes in communication channels, changes in organizational structure, adjustments in staffing and changes in equipment or documentation;
2. Knowledge Enhancement: In-service education, continuing education and circulating informational material;
3. Intensive Reviews/Focus Studies: When a medical/health care system, error-related occurrence is identified; proactive risk assessment activities are implemented, including intensive review and/or a focused study. A data collection tool is developed to address processes, functions, and services that can be designed or redesigned to prevent trends that may have contributed to the problem. Once all charts are reviewed, a summary report is compiled to report conclusions.
4. Root Cause Analysis: An event where a medical/health care error is established as a near miss, a causal analysis is completed to determine the underlying causes of the potential variation and the outline action plan is implemented.
5. Policy Revisions: Policies are developed or revised for significant organizational issues that are either interdepartmental or mandated to be hospital-wide, by accreditation agencies or state/federal legislation.
6. Proactive Risk Assessment/Failure Mode Effects Analysis: A Proactive Risk Assessment which is commonly referred to as a Failure Mode Effects Analysis (FMEA), will be conducted at least once every 18 months on one high-risk, high/low volume or "error prone" process. Once potential issues have been identified, the organization will establish processes to improve performance and measures to provide follow-up to ensure that improvement is maintained and that the information learned is communicated.

Act

When opportunities for improving performance are identified, a systematic approach is utilized to redesign the involved process, or to design a new process. When a department or service identifies an opportunity for improvement, the department/service will determine if other disciplines or departments will have an impact on the design/redesign of the process. If other disciplines or departments are involved, the opportunity for improvement will be referred to the appropriate department.

The approach to improving performance at VCMC/SPH and the AC clinics is based upon the following three questions:

1. What are we trying to accomplish?
2. What change can we make that will result in improvement?
3. How will we know that a change is an improvement?

Once those questions are answered, VCMC/SPH and the AC clinics examine “best practice” models that can be adopted and implemented. Results are monitored, rapid cycle changes are made, as indicated, and monitoring continues. The performance improvement model provides:

1. A systematic method for the design of a process.
2. Measurement of the level of performance and stability of important processes.
3. Assessment of the dimensions of performance, as relevant to functions, processes and outcomes.
4. Development of a plan for improvement.
5. Implementation of the outcomes.
6. Evaluation for additional opportunities for improvement.

Data Collection:

Each clinical professional discipline (hospital staff and medical staff) participate in the review of patient care/ services it provides. Results and/or findings and actions are reported through the defined reporting structure.

Information obtained through the performance improvement review are, when indicated, a cause for action and a resource for educational programs with the objective of benefiting the patients, staff, hospital and the community.

Sources of data for PI review activities include, but are not limited to:

1. Review of data related to patient safety events;
2. Performance measures related to accreditation and regulatory agencies, as well as other acceptable databases;
3. Patient throughput;
4. Outcomes measures;
5. Morbidity/mortality review findings;
6. Monitoring ~~activates~~ activities of the medical staff and hospital departments or committees;
7. Risk management findings;
8. Infection control review: surveillance, prevention, and reporting;
9. Medication use review;
10. Laboratory activities, including blood utilization and autopsy results;
11. Organ procurement activities, including conversion rates;
12. Utilization management review;
13. Staffing effectiveness;
14. Patient and staff satisfaction surveys;
15. Externally generated data received by the hospital;

16. Customer demographics and diagnoses;
17. Information management and medical record reviews;
18. Department specific indicators and PI team activities.
19. Guidance/direction from regulatory agencies, ie., TJC, CMS, CDPH, etc.

Performance measurement data will be collected, aggregated and analyzed, to determine if opportunities are identified, to improve safety and reduce risk. If performance improvement opportunities exist, the organization will prioritize those processes that demonstrate significant variation from desired practice, and allocate the necessary resources to mitigate the risks identified. The data will be utilized to:

1. Assess the intended and actual implementation of the process, to identify the steps in the process where there is, or may be undesirable variation.
2. Identify the possible effects on patients, and how serious those effects could be (criticality of the effect) for each undesirable variation.
3. Conduct a Root Cause Analysis (RCA) for the most critical effects, to determine why the variation led to that result.
4. Redesign the process and/or underlying systems to minimize the risk of that variation, or to protect patients from the effects of that variation.
5. Test and implement the redesigned process.
6. Identify and implement measures for the effectiveness of the redesigned process.
7. Implement a strategy for maintaining the effectiveness of the redesigned process over time.
8. When processes, functions or services are designed or redesigned, patient safety will be considered as part of the planning and implementation process.
9. Opportunities to reduce errors, which reflect the performance of the individual care provider, are addressed as appropriate, through the Medical Staff Peer Review process or through the organization's Human Resource policy(s).

Examples of data collected and employed interventions, to improve related outcomes (not limited to):

1. Operative or other procedures that place patients at disability or death;
2. Discrepancies between pre and post-operative diagnosis;
3. Events associated with sedation;
4. Administration of blood and blood components;
5. Transfusion reactions;
6. Resuscitation efforts;
7. Medication errors;
8. Adverse drug events;
9. Patient thermal injuries;
10. Incidents or injuries related to ferromagnetic objects in the magnetic resonance imaging (MRI) scanner room.

In order to reduce the likelihood of patient incidents and negative outcomes, VCMC/SPH and the licensed AC clinics shall track the frequency and type of medical errors and compile them, in order to learn from and

prevent future negative occurrences.

The Information Technology (IT) Department provides hardware and software support for the performance improvement activities of VCMC/SPH and the AC clinics. Data sources include, but are not limited to the following:

Internal Sources

1. Incident Reports from Notification System;
2. Adverse Drug Events and Adverse Drug Reactions;
3. Data from Patient Complaints;
4. Risk Management and Safety Findings;
5. Compliance Findings;
6. QAPI and special study findings i.e. tracer audits centered around areas such as high-level disinfection practices, ligature risk assessments and sterile compounding processes;
7. Infectious Disease Information;
8. Operative/Invasive Procedure, Blood Use, Autopsy, Restraint Reviews;
9. Morbidity/Mortality Review Findings;
10. Departmental Indicators;
11. Staff Surveys (includes perception of risk).

External Sources

1. The Joint Commission (TJC) accreditation standards, TJC Sentinel Event Alerts and TJC FAQs as well as communication related to the National Patient Safety Goals;
2. Core Measures Indicators;
3. Accreditation / Regulatory Deficiencies;
4. Patient Satisfaction Surveys;
5. Other Evidence-Based external sources.

Regulatory Reporting

The VCMC/SPH and the hospital clinics collect, reports and analyzes data for submission to the Centers for Medicare & Medicaid Services (CMS) as well to a variety of other regulatory entities. Data submission includes, but is not limited to:

1. Inpatient Quality Reporting (IQR);
2. Meaningful Use (MU);
3. Electronic Clinical Quality Measures (e-CQM);
4. Hospital Acquired Conditions (HACs);
5. Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS).

Additional Program Activity

Improvement activities may be conducted in partnership with other improvement programs. Every

improvement project is driven by measurable performance indicators. Relevant systems and sources of data inform the measurement of improvement. Evidence-based guidelines and current clinical literature provide information to guide improvement focus and measurement. Teams with operational and clinical representation design interventions to achieve targeted outcomes.

Authority, Accountability and Responsibility

The Oversight Committee has the ultimate responsibility for assuring the quality and effectiveness of patient care services provided by VCMC, SPH and the AC clinics. The Oversight Committee holds the medical staff leadership and hospital administration responsible for the establishment and maintenance of an effective Performance Improvement (PI) program. This includes maintenance of safe and effective care, the provision of PI management, planning PI activities and development of PI policies when indicated. The Oversight Committee has responsibility, either directly or through delegation, for the assessment and recommendations regarding the program's efficiency and effectiveness. The Oversight Committee is provided performance improvement updates on a quarterly basis and/or more frequently as indicated by a regulatory agency's activities.

The Chief Operating Officer (COO) has oversight for Performance Improvement, Quality Assessment and Patient Safety. The COO reports to the Chief Executive Officer (CEO)/Administrator who in turn reports to the Ventura County Health Care Agency Director. The COO is responsible for the QAPI Department and will provide reports to the Medical Executive Committee and to the Oversight Committee.

Performance Improvement activities are the responsibility of every department and every employee within the organization. In an effort to minimize patient harm, maximize clinical outcomes and sustain improvement momentum, the QAPI Department is responsible for coordinating, communicating, integrating and disseminating performance improvement activities within the organization and to ensure that regulatory compliance is maintained.

Medical Staff

The Medical Staff, through the Medical Executive Committee (MEC), has the responsibility for medical care rendered at VCMC/SPH and the licensed hospital clinics. The Medical Staff departments meet as designated in their rules and regulations to evaluate process and outcomes data. The Department Chair is responsible for reporting, monitoring and evaluating the outcomes and processes of performance improvement activities for the department. Outcomes and processes are reported up to the MEC and to the Oversight Committee as appropriate. The Medical Staff Rules and Regulations describe the scope of Medical Staff departments.

Each service or department develops a performance improvement plan specific to that department and selects or recommends improvement actions. Each department utilizes the pattern of care demonstrated by the results of the performance improvement monitoring and evaluation activities, as criteria for evaluating competence of licensed independent practitioners and allied health professionals. These activities include, but are not limited to, patient care review, generic screening case review, utilization review, infection control review, operative and other invasive/non-invasive procedure review, medical record review, blood and blood component review, medication use review and risk management review.

All information gathered is considered confidential and, as part of the medical staff records, is protected under California Evidence Code 1157. When the findings of the assessment process are relevant to an individual's performance, the medical staff is responsible for determining their use in ongoing professional practice evaluation, focused professional practice evaluation, peer review and/or any other periodic evaluations of licensed independent practitioner's competence.

Plan Evaluation

On an annual basis, or more frequently as indicated, the QAPI Plan will be reviewed, evaluated and revised to incorporate the most current TJC, CMS and CDPH regulatory standards. The review will assess the objectives, scope, organizational effectiveness and appropriateness of the program. The plan will be modified as needed, based on the results of the evaluation or more frequently if indicated. Individual committees and departments will review, evaluate and revise their performance improvement activities which may be re-prioritized based on significant organizational performance findings or changes in regulatory requirements, patient population, environment of care, or based upon expectations and needs of patients, staff, or the community. Priorities may be reset by the multidisciplinary Performance Improvement Coordinating Council (PICC) Committee in consultation with senior management, the MEC and/or the Oversight Committee.

Confidentiality

The Ventura County Health Care Agency (VCHCA) ensures the privacy and confidentiality of patient records and other protected information. All information generated within or as a result of the Quality and Performance Improvement Program and all peer review discussions and records are confidential and protected by California Evidence Code §1157.

Patient records and information are safeguarded and protected. Health information is shared in accordance with state and federal laws, statutes and guidelines. VCMC/SPH and AC clinics strive to ensure effective coordination of care with other providers and participates in efforts to legally and appropriately share information with partnering organizations to support integrated, patient-centered care for each person as a whole.

Persons receiving health care services have a right to expect that the confidentiality and privacy of individually identifiable medical information of or derived by health service providers will be reasonably preserved. The VCHCA complies with the Confidentiality of Medical Information Act (1982) and releases information pursuant to HIPAA, Lanterman-Petris-Short Act, Title 22, and other applicable state and federal guidelines, statutes and laws.

Policies that ensure privacy and confidentiality and appropriate release of medical records include:

1. An Oath of Confidentiality must be signed by all employees as a condition of employment.
2. Proper logging and control of patient records.
3. Controlled access to electronic medical information.
4. Regular security risk analysis to identify and mitigate risks.

APPENDICES:

1. Appendix A - Quality Assessment & Performance Improvement Plan Measures and Metrics 2019-2020

All revision dates: 10/17/2022, 11/10/2021, 4/17/2020, 8/1/2015, 9/1/2013, 10/1/2011, 1/1/2011, 5/1/2006, 1/1/2005, 1/1/2004

Attachments

107.027 Appendix A - Quality Assessment & Performance Improvement Plan Measures and Metrics 2022.pdf

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Hospital Administration	John Fankhauser, MD: Chief Executive Officer, VCMC & SPH	12/5/2022
Hospital Administration	Diana Zenner: Chief Operating Officer, VCMC & SPH	10/17/2022
Quality Assessment & Performance Improvement	Alicia Casapao: Director of Quality and Performance Improvement	10/17/2022
Quality Assessment & Performance Improvement	Diana Zenner: Chief Operating Officer, VCMC & SPH	10/7/2022
Quality Assessment & Performance Improvement	Leah Kory: Medical Director, Inpatient Quality	10/7/2022

Current Status: Pending

PolicyStat ID: 12685862



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

Origination: 9/1/1985
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Last Approved: N/A
Last Revised: 12/12/2022
Next Review: 3 years after approval
Owner: Sherri Block: Associate Chief
Nursing Executive, VCMC &
SPH
Policy Area: Administrative - Nursing
References:

108.006 Nurse Staffing and Scheduling

POLICY:

The Department of Nursing Services recognizes its obligation to provide an adequate number of skilled and qualified staff to meet the needs of the patients and scope of services required. It is the policy of the Nursing Department that a variety of nursing staff is used to provide necessary staffing. We believe that RN, LVN's, Nursing Assistants, Telemetry Technicians and Medical Office Assistants (MOAs) all contribute to safe efficient care when properly trained, supervised and assigned.

This policy further recognizes the rights and responsibilities of the Department of Nursing Services and Nursing staff in meeting mutual obligations for the care of the patients of Ventura County Medical Center (VCMC) and Santa Paula Hospital (SPH), ensuring adequate staffing is available to meet patient care requirements, while utilizing staff in an optimal manner. It provides a clearly outlined sequential process for providing necessary nursing staff, on all nursing units, and allowing requested employee time off, while meeting projected patient care needs, which provide written records of staffing assignments on all units, and allow retrospective analysis, as necessary, and meet external regulatory requirements.

PROCEDURE:

The hospital is flexible in its staffing, in order to respond to day-to-day shifts in census and workload. On low census days, or other periods of low workload, (and the hospital is adequately staffed throughout with qualified staff), employees may voluntarily take off hours of leave without pay in order to appropriately reduce the level of staff. The employee may choose to use accrued paid vacation instead.

If an excess of staff can be anticipated before the beginning of the shift, the Clinical Nurse Manager/ Supervisor may initiate phone calls to employees and offer them the opportunity to take the day off. When necessary, in times of low census, the guidelines described in the California Nurse Association Memorandums of Agreement (CNA MOA) will be followed. The employee may also initiate a call to the supervisor, prior to the beginning of the shift, to see if he/she is needed for duty. Leaves given in this way will also follow the plan developed by the Manager. Leave will be granted only after the needs of the hospital have been covered.

The Supervisor will note on the schedule, the number of hours and type of leave used by any employee.

Leave without pay may not be used or granted in advance and/or pre-planned. Leave without pay may be granted, at the employee's request, after the Supervisor has reviewed the staffing needs for the shift.

VCMC/SPH utilizes an automated scheduling system to create, project and print long-range schedules. This

system automates daily staffing allocation of available staff, based on census, patient acuity and budgetary provisions.

Staffing for the nursing units will be reviewed for a 24-hour time frame, on a daily basis, and adjustments are made prior to the start of each shift, as indicated. The Nursing Supervisor/Clinical Nurse Manager assumes this responsibility.

Nursing staff may be temporarily reassigned on a shift-by-shift basis, when changes occur in either the workload, the staffing requirements and/or availability of assigned staff. In these cases, Nursing Administration has the responsibility and right to assign staff to best meet the determined needs of the patient, with the licensure, skill and qualification levels available. Reassignment of nursing staff, on a pre-scheduled basis, is made through careful consideration of all facts, which include but are not limited to the following:

1. Patient census and acuity;
2. Number and classification of staff available;
3. Qualifications, experience and competence of staff, that is required and available;
4. Unfilled positions.

Daily shift assignments to the unit are finalized and are posted in the Nursing Administration Office at the beginning of the shift.

Any changes posted in staff assignments must be verified by the Nursing Supervisor/Clinical Nurse Manager.

Nursing staff are routinely assigned to areas in which they are qualified and have received training and proper orientation. It is the intent of the Nursing department that when a temporary and/or immediate assignment must be made, the needs of the patient and the needs of the employee will be considered. If immediate assignment is necessary, a "helping hands" orientation to the unit will be given and a resource person will be available. Employees are encouraged to discuss their assignments with their coordinator or supervisor in the event of concerns or problems.

Holidays: Refer to the appropriate union contract.

Vacation:

1. All employees, full-time, part-time and per diem, will submit vacation requests, in writing, to the Clinical Nurse Manager for approval prior to finalization of each four-week schedule (at the latest).
2. During the months of June through September, no more than two (2) weeks will be granted per employee, without special approval of the Clinical Nurse Manager.
3. During the period between December 1st and January 1st, requests for vacation hours in excess of 24 hours will require special approval by the Clinical Nurse Manager.

PROCEDURE

The 24-hour care of patients is planned, directed and evaluated by Registered Nurses. Staffing, both in numbers and competency, will be sufficient to ensure that:

- A. An RN defines, directs, supervises and evaluates care of all patients.
- B. Assessment and identification of patient care needs occurs on admission, during the patient's stay, on transfer and at discharge.
- C. A staff RN retains responsibility for all patients co-assigned to students and agency staff.

- D. Infection control measures are strictly adhered to.
- E. Staff competency is matched to patient needs.
- F. Patient emergency and safety requirements are met with appropriate equipment and staff
- G. Only direct patient care providers are included in the Patient Classification System.

The RN Resource/Charge Nurse, Clinical Nurse Manager or designee in each nursing area is responsible for assigning staff for daily patient care. The following information is taken into consideration when these assignments are made:

- A. The diagnosis and acuity of illness of each patient (category of nursing care required).
- B. If a patient is in isolation, the type of isolation and acuity of illness is considered when assigning the number of patients to a nurse.
- C. The job classification, experience and level of competence of each employee is considered, so that those patients requiring more acute assessment and deliberative nursing intervention are assigned to the more competent, experienced employee.
- D. Unit geography, the availability of support services, and the method of patient care delivery, i.e., team or primary care is taken into consideration when staffing the nursing floor.
- E. The hospital nursing department/service shall retain responsibility and global oversight for the nursing care and related duties when nursing students provide care within the patient care unit.
- F. Supervision and evaluation of nursing care being given will be the responsibility of the Charge Nurse during hours on duty. The Clinical Nurse Manager shares this responsibility for 24-hour patient care.
- G. The patient classification system will be annually reviewed and updated as necessary.

Schedules are printed every four (4) weeks (a four-week cycle) and further definition of scheduling includes:

Schedules will be posted three (3) weeks (21 days) prior to the start of the new schedule and contain the following four (4) weeks of scheduled work time.

Changes in Schedule/Special Requests:

For changes to the final posted schedule or special requests, the employee fills out the "Schedule Change Request Form" and obtains signature approval from the Clinical Nurse Manager before submitting the Form to the staffing office.

Schedules:

1. Prepared on a four (4) week basis, in order to provide a method of planning basic staffing of all nursing units within the Department of Nursing;
2. Updated every shift to reflect cancellations, illness, special requests and additional alterations or additions to the general staffing;
3. This record will be maintained for a period of three (3) years.

The Clinical Nurse Manager or their designee assists in this responsibility by reviewing the staffing levels and patient care requirements and communicating special needs/problems to the Nursing office. The Clinical Nurse Manager assists in this responsibility by monitoring sick calls and unexpected absences and communicates this activity to the Nursing office.

Approvals for exchange of days worked, are made on the basis that the exchange is made with someone of the same job class and skill level; the exchange is made within the same pay period and when minimum employment agreements are met. Approval for changes is made on the basis that no overtime is incurred and that appropriate staffing and skill mix is accomplished. Any emergency situation that is unexpected in nature, will be handled on an individual basis, by the Nursing Supervisor, if it occurs on weekends, holidays or after hours.

Daily Staffing:

The Clinical Nurse Manager/House Supervisor reviews and makes necessary adjustments to daily staffing.

1. Census activities will be reported at 4:00 AM, noon, and 2000 (twenty hundred hours or 8:00 PM.). Additional census confirmation may also be done at 1600 hours (4:00 P.M.). The Inpatient Psychiatric Unit (IPU) collects census information at 05:00 and 1700 hours (5:00 P.M.); all are used to plan daily staffing.
2. Staffing is reviewed and adjustments are made, based on staffing guidelines and census/acuity requirements.
3. The Clinical Nurse Manager will be responsible for covering staffing needs. The Clinical Nurse Manager may request assistance to place phone calls from the Staffing Office, or ask staff on the unit to make calls.

Acuity and Staffing

1. Acuity determination is done once per shift by the primary nurse. The charge nurse is responsible for ensuring that staffing is aligned to the acuity levels of the patients.
2. Annually, the Patient Classification System will be reviewed by nursing leadership and by the Registered Nurses who provide direct patient care, to establish unit-specific quality indices. Results will be discussed and alterations made as requested.
3. The staffing plan and individual staffing patterns will be evaluated at least annually by Nursing Leadership in order to determine their effective and efficient delivery of patient care.

Patient Classification System

This plan includes, but is not limited to, a method of determining staffing requirements based on the assessment of patient needs, including:

- A. Acuity
- B. The ability of the patient to care for himself/herself
- C. Degree of illness
- D. Requirements for special nursing activities
- E. Skill level of personnel required in his case
- F. Placement of the patient in the nursing unit

A method for the formulation of staffing determinations, including:

- A. State mandated staffing requirements
- B. The number of staff required
- C. The categories of staff available for patient care

A method for scheduling staff on a daily basis to ensure the availability of appropriate skill levels, and a method to facilitate the organization of a nursing care delivery system which will optimize the utilization of all resources and provide the best possible patient care.

The Resource/Charge Nurse, in conjunction with the Clinical Nurse Manager and the RN caring for the patient, will assess each patient, every shift, using the VCMC/SPH Patient Classification System (see attached).

The individual patient acuity will be documented on the acuity tool or in the Electronic Health Record.

The Acuity numbers will be obtained by the Nursing Office three (3) times a day to facilitate staffing for the upcoming shift.

The Nursing Supervisor/Clinical Nurse Manager will take into consideration the reported acuity values of each unit when making staffing decisions for the next shift. Annual interrater reliability testing will be completed on the acuity tools.

A. Assignment of Patient Care

Each shift's acuity values will be used by the Clinical Nurse Manager or Resource Nurse to make appropriate patient care assignments, using policy guidelines.

B. Staffing Plan

As part of this obligation, the Nursing Department has developed a master staffing plan to meet the needs of each unit in the most efficient manner. Census staffing plans, maintained in the Nursing Office, are based on average acuity assessments and state staffing requirements.

Increases in overall acuity of a particular unit may indicate the need for additional resources. The Nursing Supervisor is to be notified of such need. Every effort will be made to meet staffing needs.

For specifics see the attached Unit Specific Plans. Nurse staffing plans for each unit define specific unit needs.

Weekend Commitment:

1. Each full-time (F/T), part-time (P/T) and Per Diem staff member may be scheduled to work a minimum of two (2) weekends out of four (4), as needed by the unit.
2. All Staff: Weekend absences:
 - a. One (1) shift weekend absence allowed every calendar year
 - b. All others are subject to make up the time, i.e., automatically scheduled by the Clinical Nurse Manager for an extra weekend as needed by unit. The manager has the authority to replace another upcoming shift with a weekend shift for makeup purposes.
 - c. For the day shift, weekends are defined as any shifts where the majority of hours falls on Saturday or Sunday. For nightshift, weekends are defined as any shift that starts at 6 pm or later on Friday, Saturday and Sunday nights. For the purpose of weekend requirements, nightshift staff are only required to work 2 of the possible 3 nightshifts to fulfill each weekend requirement.

It is the daily responsibility of the Staffing Office, the Clinical Nurse Manager and Nursing Supervisor(s) to assign the available staff so that it matches the pattern required by the acuity and census.

Skill Mix Substitutions - If insufficient numbers of staff are available in a particular skill level, then substitutions may be made within certain guidelines:

1. A higher skill level may always be substituted for a lower level, e.g., RN for LVN.
2. A lower level may be substituted for a higher level only where there is adequate RN coverage on the unit, in order to assess patients and meet the State Nurse staffing ratios, to make appropriate assignments and to carry out complex care.

Assignment of Nursing Care of Patients

The Clinical Nurse Manager/Nursing Supervisor reviews the census and staffing for all units within the first two (2) hours of each shift.

Staffing Shortage - When there are insufficient numbers of staff in a given skill level, the Clinical Nurse Manager, Staffing Coordinator and/or Nursing Supervisor will be responsible for finding adequate coverage by doing one of the following:

1. Assign an alternate assignment for extra personnel on duty.
2. Request a regular part-time person to come in.
3. Request a per diem person to come in.
4. Request on-duty staff to work overtime.
5. Request off-duty staff to work overtime.
6. Request Registry personnel to come in.
7. Reassign on-duty staff for optimum coverage.
8. Mandate overtime (requires approval by a Nurse Executive or their designee).

The supervisor moves staff from low-census to high census areas, where possible. Moves are made based upon levels of licensure, training and competency of staff available.

All staff are expected to comply with appropriate requests to change their areas of work on short notice, in order to provide for safe patient care throughout the Hospital.

Unscheduled Leave:

1. It is the expectation that unscheduled leave will be minimal for a 12-hour shift program.
2. When it is necessary to use unscheduled leave, whenever possible, the employee will call in sick two hours before the start of the scheduled shift. For example, the 06:45 to 19:15 shift employee will notify the night shift supervisor by 04:45. The 1900 to 0700 shift employee shift will notify the day shift supervisor by 1645 (4:45 pm). For other shift starts, staff are expected to call in sick no later than two hours before the start of the scheduled shift.
3. No call, no shows and/or excessive absenteeism may be cause for disciplinary action.

Scheduled Leave:

1. All requests for scheduled leave (annual leave, educational leave, etc) will be planned in advance and must be submitted in writing, at least 14 days prior to the posting of the current four (4) week master schedule.
2. No more than one (1) employee may be scheduled off, at any one time, unless coverage is available.

3. All requests submitted **AFTER** the posting of the four week master schedule, may require the employee to arrange his/her own coverage.
4. All scheduled leave requests are subject to the approval of the Clinical Nurse Manager.

Overtime:

1. It is the policy of County of Ventura to avoid the necessity for overtime, whenever possible.
2. Overtime work may sometimes be necessary, in order to meet emergency situations, seasonal peak workload requirements or other defined times of need, as determined by Nursing Administration.
3. No employee shall work overtime unless authorized to do so, by his/her supervisor.

Guidelines:

1. An Employee anticipated need includes:
 - a. Anticipated need for overtime must be communicated to the Clinical Nurse Manager/Nursing Supervisor;
 - b. When possible, give a two (2) hour notice;
 - c. If notice is given in less than two (2) hours before the end of shift, give notice as soon as possible (ASAP);
 - The Clinical Nurse Manager or Nursing Supervisor will decide on a course of action, which may include:
 - Authorize overtime
 - Provide assistance to eliminate the need for overtime
 - Another action, as appropriate
 - d. Failure to notify in advance of overtime hours, may be grounds for disciplinary action.
2. The Clinical Nurse Manager/Staffing Personnel/Nursing Supervisor anticipated need includes:
 - a. Anticipated needs for overtime in an existing or upcoming shift, is identified;
 - b. The Clinical Nurse Manager or Nursing Supervisor will make telephone calls to off-duty staff and/or Registry and offer overtime, etc., to meet patient care needs.

Mandatory Overtime: In the event that the procedures above fail to provide safe, adequate staffing levels, it may be necessary to institute mandatory overtime.

1. Any need to mandate overtime must be authorized by the Nurse Executive or their immediate designee.
2. All mechanisms to provide safe patient care, without mandatory overtime, will have been exhausted.
3. At the decision to mandate overtime, employees on duty will be polled, to determine their ability to stay.
4. Otherwise, the Nurse Executive, working with the Clinical Nurse Manager or Nursing Supervisor, will make the final staffing decisions.
5. Mandatory overtime will continue for as short a time as possible, while continuing efforts are made to provide alternate staffing.
6. Failure to abide by these decisions may result in disciplinary action.

REFERENCES

1. California Code of Regulations 22 CCR.
2. United States Department of Health & Human Services.
3. California Department of Public Health.

All revision dates:

12/12/2022, 11/14/2022, 11/14/2022, 8/27/2021, 5/1/2016, 11/1/2013, 12/1/2010, 12/1/2001, 3/1/2000, 1/1/2000, 1/1/1999, 12/1/1992, 9/1/1988, 9/1/1987, 9/1/1986

Attachments

Nurse Acuity MedSurgTele.xlsx
Nurse Acuity NICU
NurseAcuity ICU.docx
NurseAcuity L&D.docx
NurseAcuity Peds.docx
NurseAcuity PICU.docx
NurseAcuity PP.docx
VCMC IPU Patient Acuity.docx

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/12/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	12/12/2022
Policy Owner	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	12/12/2022

Current Status: Pending

PolicyStat ID: 12617951



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 11/1/2016
Effective: Upon Approval
Last Approved: N/A
Last Revised: 11/1/2016
Next Review: 3 years after approval
Owner: Sharon Waechter: Clinical Nurse
Manager, Nursing Education
Policy Area: Administrative - Nursing
References:

108.020 Lippincott Procedures

POLICY:

Nursing standards drive consistency and high-quality outcomes in patient safety, patient care, service, and operations. At Ventura County Medical Center (VCMC)/Santa Paula Hospital (SPH), nursing standards are managed using the Lippincott Patient Care Standards management system accessible via the intranet. Lippincott Standards are evidence-based standards that are updated every three (3) months. The frequency of standard reviews is determined by a need resulting from process or technology change or by regulatory requirements (e.g., The Joint Commission mandates review every three years and the State of California mandates annual review).

PROCEDURE:

1. VCMC and SPH nursing staff will use the Lippincott Nursing Procedure online program as the reference for standard nursing procedures.
2. Lippincott's Nursing Procedures provides detailed descriptions of procedures that allow users to identify the procedure they need quickly and easily. Users can search by alphabetical list, browse by nursing or clinical category, or perform a search to identify a particular procedure. Each entry provides complete instructions, including the equipment needed, preparation guidelines, implementation steps, special considerations, documentation, and references. Video clips are included to clarify complex procedures. Each procedure is linked with at least one quick list. Quick lists provide a quick, less-detailed version of a procedure when only an overview is needed.
3. The Nursing Education Department will manage developments, new procedures, or revise existing procedures according to submission criteria. Submission requires the co-signature of at least one member of the Patient Care Standards Group.
4. The Chief Nurse Executive will review and approval changes to the all nursing policies and procedures.
5. The Chief Nurse Executive or designee will submit substantial nursing practice changes to the Medical Director for review and approval.
6. The Medical Director will determine if substantial nursing practice changes require submission to the Medical Executive Committee for review and approval.

All revision dates:

11/1/2016

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/29/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/29/2022
Policy Owner	Sharon Waechter: Clinical Nurse Manager, Nursing Education	11/29/2022

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PolicyStat ID: 12842585



VENTURA COUNTY
HEALTH CARE AGENCY

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Last Approved: N/A
Last Revised: 12/16/2022
Next Review: 3 years after approval
Owner: Alicia Casapao: Director of Quality and Performance Improvement
Policy Area: Administrative - Nursing
References:

108.021 Pressure Injury Prevention and Wound Management

POLICY:

Patients identified as being at risk for alteration in skin integrity or with pressure injuries will be managed by nursing personnel in collaboration with the provider team, if needed.

Goals:

The purpose of this policy is to establish guidelines for assessments/reassessments, interventions, and documentation to identify, prevent, and manage patients with potential or actual alteration in skin integrity. Goals are to:

- A. Maintain the integrity of the patient's skin.
- B. Minimize the causes and risk factors of skin breakdown.
- C. Provide for early detection and intervention of skin breakdown upon admission.
- D. Prevent the occurrence of skin breakdown.
- E. Promote prompt evaluation and intervention of any changes in skin integrity during hospitalization.

EQUIPMENT

- A. Electronic Health Record (EHR) skin assessment tool
- B. EHR - Braden Risk Assessment Tool
- C. Pressure reducing devices

PROCEDURE:

All adult and pediatric patients will be evaluated for pressure injury risk by using the age appropriate Braden Scale (See Attachments B & C) on admission and every shift. Risk assessments will be performed more often when the patient condition warrants more frequent assessments. Nursing staff will assess the skin integrity of all patients throughout their hospital stay. In addition, nursing will manage and collaborate with the health care team regarding patient's skin integrity. Patients and family are to be encouraged by health care providers to participate to the extent possible in the care and prevention of skin breakdown.

A. Assessment

1. Risk assessment

- a. Assess total skin condition upon admission and every shift utilizing the "Four Eyes Skin Assessment" (two sets of eyes = four eyes). This collaborative method utilizes two different licensed professionals (e.g., Two Registered Nurses (RNs) or One RN/One Nurse Practitioner (NP), Physician, or Physician Assistant (PA) to identify, describe and record suspected pressure injuries. Thorough skin assessment will be completed:
 - within four hours of a patient's admission - or
 - patient transfer to another unit - or
 - when greater than four (4) hours have passed since patient is off the unit - or
 - as necessary - with changes in patient condition - and/or
 - day of discharge / transfer
- b. A skin assessment includes, but is not limited to: skin color, description, integrity, temperature, turgor, and mucous membrane color
- c. Assess level of mobility
- d. Assess neurological status
- e. Assess circulatory status
- f. Review nutritional status
- g. Complete age-appropriate Braden Scale risk assessment tool every shift (Braden score of 14 or less places a patient at moderate or severe risk) ^{[1][2][3]}

B. Treatment/Interventions

1. Braden Score of 19 or greater
 - a. Assess for skin integrity risk every shift and as necessary with changes in patient condition
 - b. Encourage or assist patient to change position every two (2) hours
 - c. Provide patient/family education
2. Braden Score \leq 18 (18 or below)
 - a. Implement pressure relieving devices per nursing judgment:
 - i. Assist with turning at minimum every two hours. Use the Patient Positioning tracker to assist in displaying turn schedule.
 - ii. Implement appropriate pressure relieving devices:
 - Mattress overlay
 - Heel offloading boots
 - Foam wedges
 - Pillows
 - Special therapy beds
 - Protect skin underneath restrictive devices (i.e. restraints, splints, medical devices/ equipment)
 - iii. Assess the need for measures to control incontinence

- Condom catheter / Purewick external catheter
 - Frequent diaper changes
 - Barrier creams / barrier cream-infused cleansing cloths
 - Linen changes, as needed
 - Super absorbent chux pads
- iv. Initiate Dietary consult if patient screens positive for any of the following:
 - Body Mass Index < 18⁴
 - Poor intake
 - Excessive fluid loss (i.e. diarrhea, vomiting, blood loss, large wounds)
 - v. Initiate appropriate care plans in EHR (i.e. pressure injury management, pressure injury prevention, impaired tissue perfusion). Update care plans as indicated.
 - vi. Request a wound care consult, if indicated.
3. Braden Score \leq 14 (14 or below), pressure injury is present, or per nursing judgment
 - a. Initiate a wound care consult as soon as patient is identified as moderate or severe risk (Braden \leq 14)
 - b. Implement Pressure Injury Prevention Measures (see above 2.a.)
 - c. Initiate a dietary consult
 - d. Initiate order for turn schedule (nurse-initiated order in EHR)
 - e. Initiate appropriate Interdisciplinary Care Plans (see 2.a.v), and update as indicated
 - f. Consult with Wound Care Nurse for staging of Hospital Acquired Pressure Injuries (HAPI's) or Community Acquired Pressure Injuries (CAPI's) See Attachment A
 4. End-of-Life Patients
 - a. Reposition and turn the patient periodically to maintain patient's comfort.

C. Documentation

1. I-View Documentation
 - a. Skin-ADL-Nutrition flow sheet
 - i. Skin assessment on admission, every shift, transfer to another unit, and with changes in patient condition(as indicated)
 - ii. Braden Scale assessment
 - iii. Documentation of positioning devices, pressure relieving devices, and special surfaces/ beds in use
 - iv. Documentation of incision/ wound, if present, create a dynamic group
 - v. Position changes/ patient's ability to turn
 - vi. Documentation of skin integrity under medical equipment/ device(s)
 - vii. Patient response to interventions
 - viii. Patient/ family education

- b. Document/ Update Interdisciplinary Plan of Care (IPOC)
- c. Nursing progress notes
 - i. Describe wound(s) in detail and consult with Wound Care Team for staging
- d. Measure and photograph on discovery, prn changes, weekly (Wound Wednesday) and on day of discharge
 - i. Wounds with negative pressure wound therapy
 - ii. Suspicious wounds
 - iii. Pressure Injuries

D. Reporting

1. All actual or suspected pressure injuries must be reported immediately to department manager or designee, as well as an entry made into the notification system
2. All actual or suspected pressure injuries must be reported via the notification system, utilizing the "Skin Integrity" category
3. Notify physician and/or licensed independent practitioner
4. Notify wound care nurse

References

1. Preventing Pressure Ulcers in Hospitals. What are the best practices in pressure ulcer prevention that we want to use? October 2014. *Agency for Healthcare Research and Quality*. Retrieved from: <http://www.ahrq.gov/professionals/systems/hospital/pressureulcertoolkit/putool3.html>
2. Lyder CH, Ayello EA. Pressure Ulcers: A Patient Safety Issue. In Hughes RH, editor. *Patient Safety and Quality: An Evidence-Based Handbook for Nurses*. Rockville, MD; Agency for Healthcare Research and Quality (US); 2008 April. Chapter 12. <http://www.nlm.nih.gov/books/NBK2650>
3. Wolters Kluwer Health, Inc. (2004). By the Numbers: Braden Score Interventions. *Advances in Skin & Wound Care*, 17(3), 150. http://www.journals.lww.com/aswcjournal/citation/2004/04000/By_the_Numbers_Braden_Interventions.16.aspx.
4. Centers for Disease Control & Prevention. (May 2015). " *About Adult BMI* " [Online]. Accessed March 2016 via the web at http://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/index.html
5. Noonan, C., Quigley, S. & Curley, M.A.Q. (2010). Using the Braden Q scale to predict pressure ulcer risk in pediatric patients. *Journal of Pediatric Nursing*, 26(6), 566-575. DOI:<https://doi.org/10.1016/j.pedn.2010.07.006>

All revision dates:

12/16/2022, 9/13/2022, 1/28/2020, 2/1/1992

Attachments

- Attachment A - Pressure Injury Staging
- Attachment B - Braden Scale for Predicting Pressure Sore Risk.pdf
- Attachment C - Braden Q Scale.pdf

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	12/16/2022
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/16/2022
Policy Owner	Alicia Casapao: Director of Quality and Performance Improvement	12/16/2022

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PolicyStat ID: 12686619



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

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Last Approved: N/A
Last Revised: 1/28/2020
Next Review: 3 years after approval
Owner: *Sherri Block: Associate Chief
Nursing Executive, VCMC &
SPH*
Policy Area: *Administrative - Nursing*
References:

108.023 Blood Warmer Usage and Safety

POLICY:

To ensure that blood delivered to patients through the blood warmer is undamaged and at a safe temperature. This device is intended to aid in the prevention of inadvertent hypothermia during administration of blood, blood products, and other fluids.

PROCEDURE:

INDICATIONS

- A. Trauma
- B. Shock
- C. Hypothermia (<96 degrees Fahrenheit)
- D. Any condition requiring rapid multiple infusions

EQUIPMENT

- A. EnFlow warming unit on intravenous (IV) pole
- B. Blood warming disposable cassette
- C. Y-blood tubing solution set with pressure pump if needed
- D. Normal saline or preferred IV solution as per physician order.
- E. Filter for blood if needed per anesthesia
- F. Plug machine in; attach sliding warmer cable into controller

PROCEDURE (See attachment 1)

- A. Attach warming unit to IV pole and secure with clamp on side of unit. Power on the controller.
- B. Remove the warming cassette from its sterile packaging.
- C. Prime the cassette with the desired sterile IV fluid
- D. Connect the primed cassette to the patient IV tubing. Recommended to use the port closest to the patient's IV insertion site.

- E. Place the cassette into the warmer, by sliding the two halves of the warmer apart. Place the cassette in the warmer using the arrow guides. Then slide the halves closed. An audible beep will confirm correct placement.
- F. Secure the warmer using the attached clamp. Do not cover warmer with towels, sheets or blankets.
- G. Removing the cassette from the warmer immediately stops warming but not fluid flow.

DOCUMENTATION

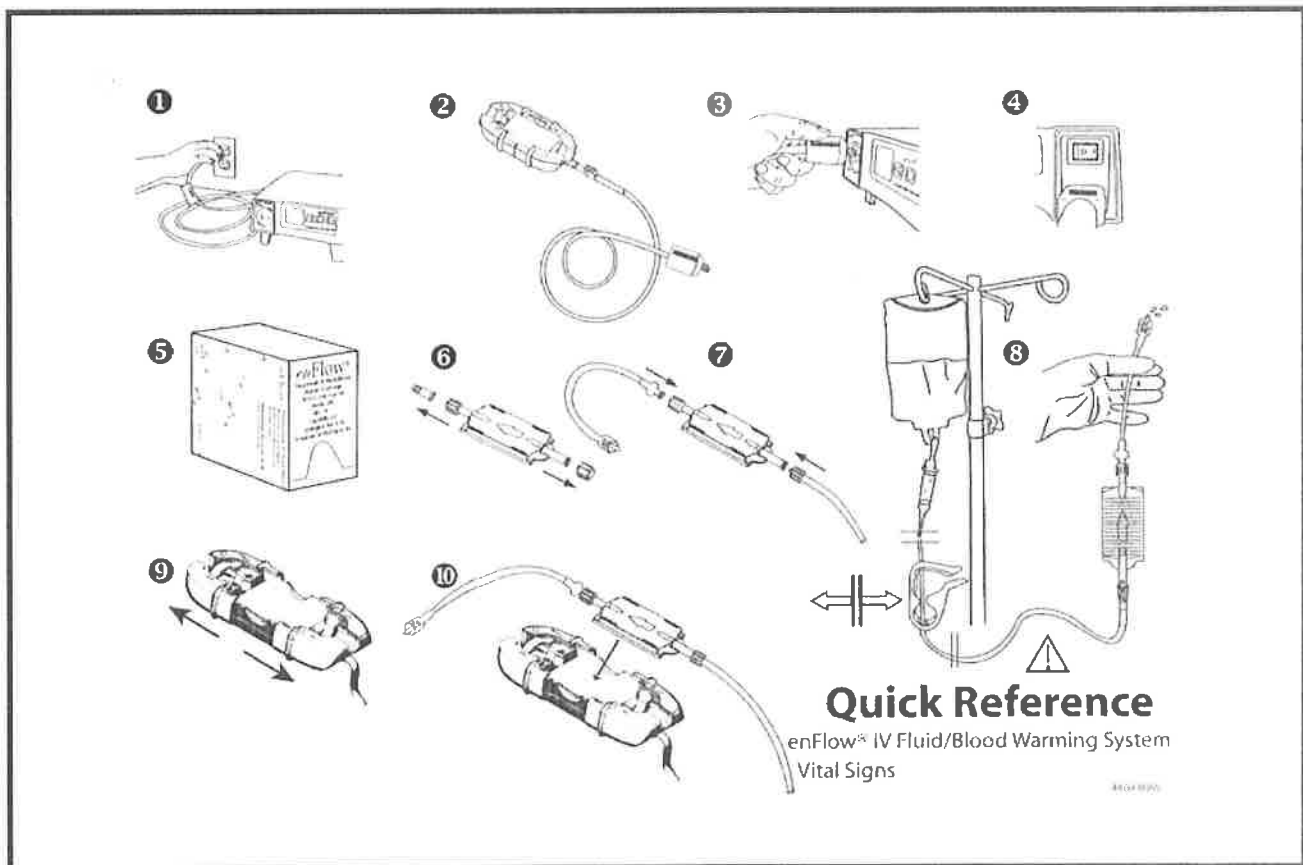
- A. Blood bank record of transfusion and Anesthesia Record
- B. Document in electronic health record (EHR) interactive iView

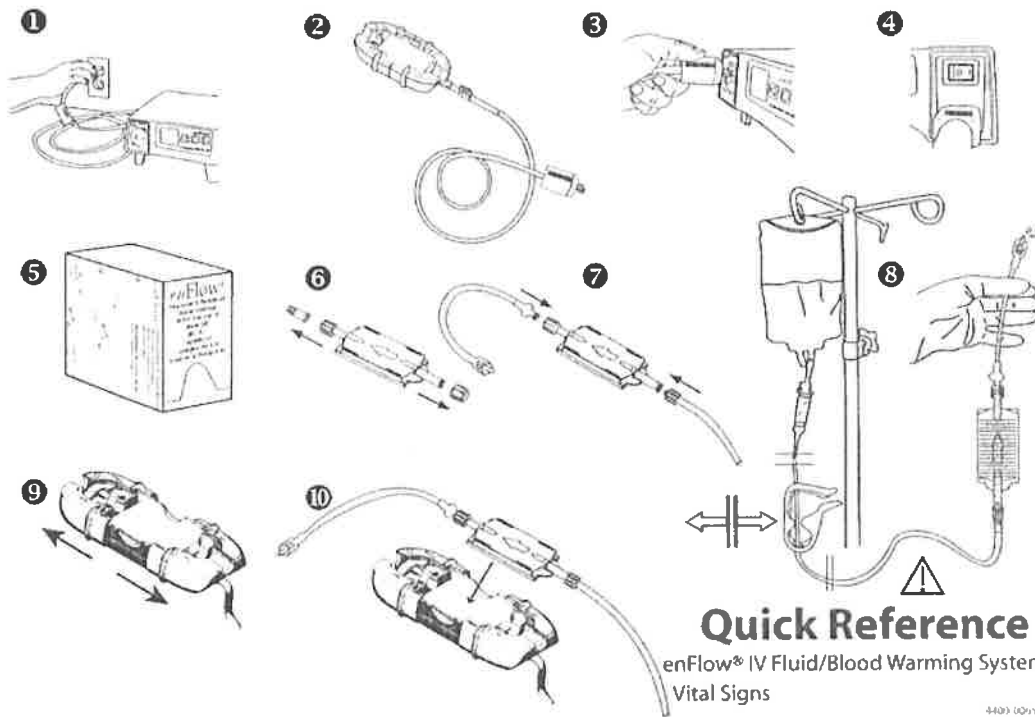
KEY POINTS

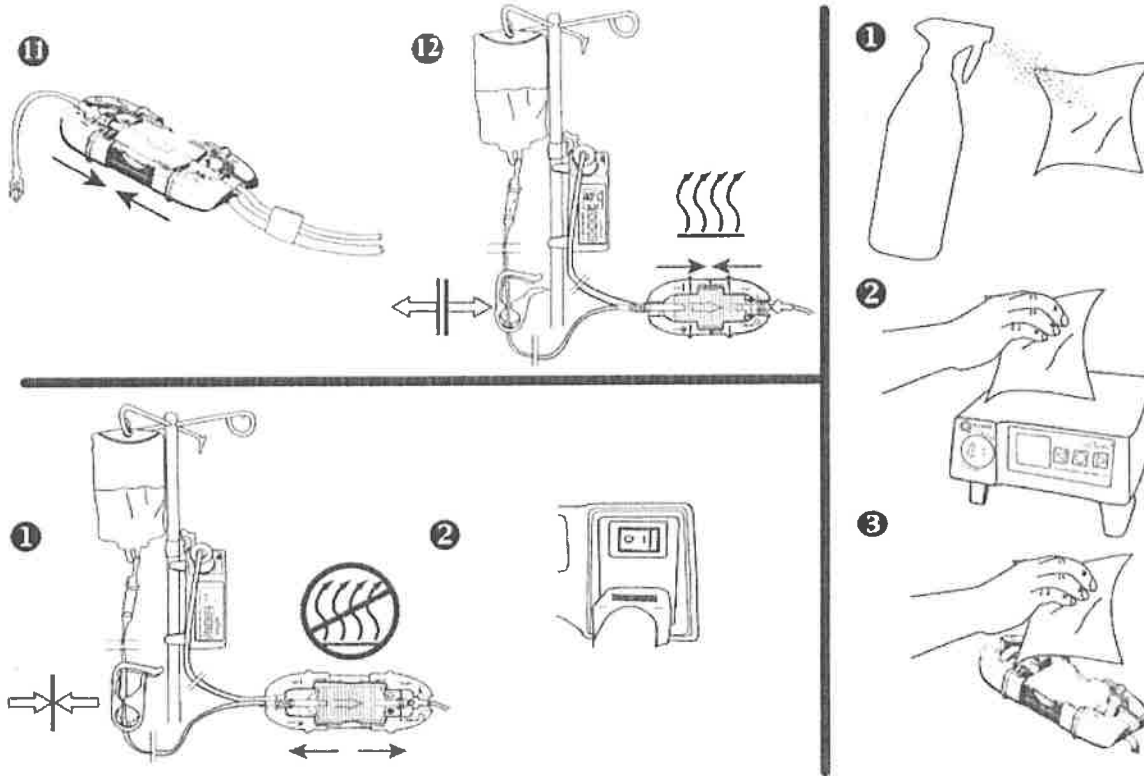
- A. Biomedical staff will check blood warmers with frequency per hospital policy.
- B. Temperature is selectable from 38 degrees – 43 degrees Celsius.
- C. Clean the surface of blood warmer with clear warm water, alcohol or non-staining germicidal disinfectant after each use.
- D. This device does not provide fluid flow rate control.

REFERENCE

- A. EnFlow system manual, GE Medical Systems. Manufactured for Vital Signs, a Division of Carefusion, 2015







All revision dates:

1/28/2020, 1/1/2017, 2/1/2012, 5/1/2011, 6/1/2006,
1/1/2005, 1/1/1997, 2/1/1996, 11/1/1992, 8/1/1990

Attachments

A: Quick reference

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	11/15/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/15/2022
Policy Owner	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	11/15/2022



VENTURA COUNTY
HEALTH CARE AGENCY

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Last Approved: N/A
Last Revised: 10/10/2022
Next Review: 3 years after approval
Owner: Hugo Ortiz: Diabetes Nurse Educator
Policy Area: Administrative - Nursing
References:

108.032 Blood Glucose Testing with the Nova StatStrip® Glucose Meter

POLICY:

To evaluate patient whole blood glucose levels using the NOVA BiomedicalStatStrip® Glucose Meter.

The StatStrip® Glucose Meter quantitatively measures glucose in whole blood. Glucose in the blood sample mixes with reagents on the test strip. The reaction produces an electric current. The amount of current that is produced depends on how much glucose is in the blood. The glucose result is displayed on the screen.

PROCEDURE:

Glucose testing may be performed by staff having successfully completed the NOVA StatStrip® Glucose Meter competency training activities and evaluations throughout VCMC/SPH, including RNs, LVNs, and NCAs. The competency of each person to perform the duties assigned must be assessed following training, and at least annually thereafter. Operator performance is monitored continuously through Point-of-Care QA reports and observations. Retraining and reassessment of employee competency must occur when problems are identified with employee's performance.

Supportive Data:

The NOVA StatStrip® Glucose Meter is used to definitively monitor the patient's blood glucose levels.

~~Reference Ranges:~~

Reference Ranges:

1. Non-fasting reference range: Normal: 70 – 140 mg/dL
A single up arrow by the result indicates the result is above the normal range.
A single down arrow by the result indicates the result is below the normal range.
2. Fasting reference ranges:
Normal: 70 – 99 mg/dL
Pre-diabetes: 100 – 125 mg/dL
Diabetes: > 125 mg/dL
3. Manufacturer Measurement Range: 10 mg/dL to 600 mg/dL.

Results below this range will display as "LO."
Results above this range will display as "HI."
Any HI or LO results should be retested.

4. Alert values:

< 70 and > 300 mg/dL

Neonates: < 50 and > 250 mg/dL

Alert low results display with 2 down arrows.

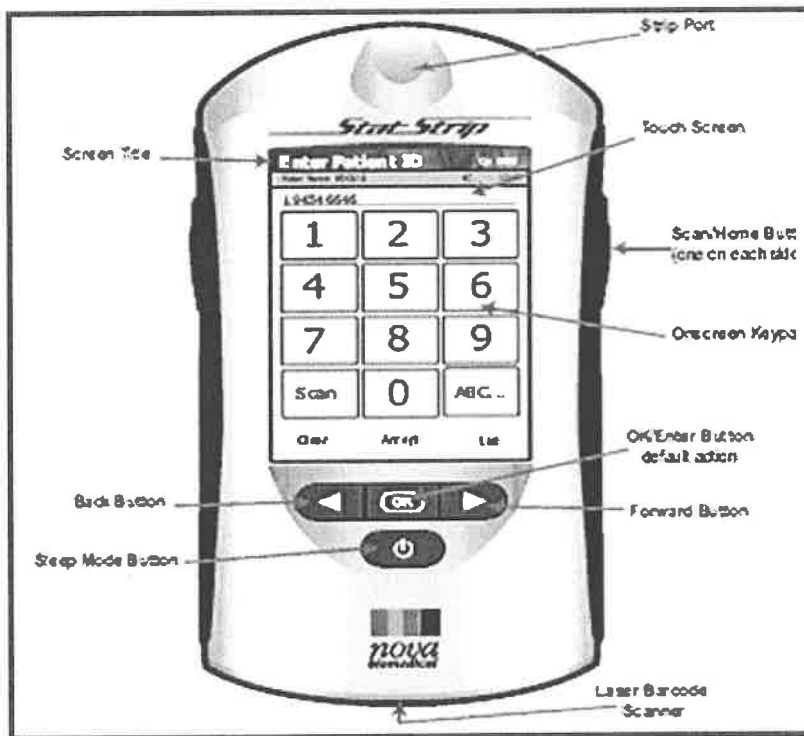
Alert high results display with 2 up arrows

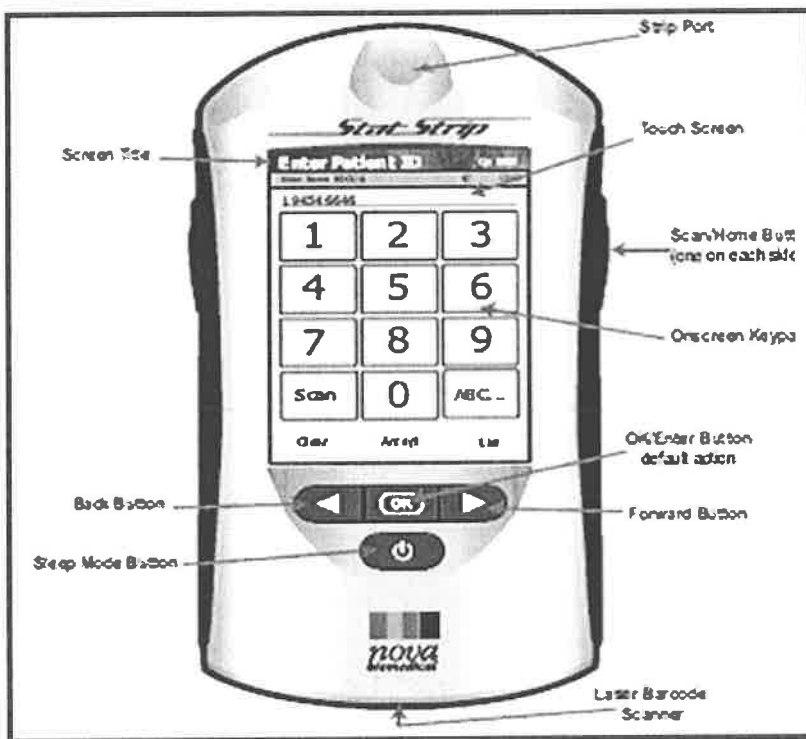
5. Alert value protocol: All alert values must be repeated using a fresh sample from a new stick, unless it is consistent with patient's previous result or if the patient has <70 mg/dL and hypoglycemic symptoms. If repeat results are inconsistent, send a specimen to the laboratory for verification.

6. Actions taken must be documented in the meter as described in the "Blood Glucose Patient Testing Procedure". Report to caregiver or provider, and follow his/her recommendations. Alert values obtained by an NCA must be reported immediately to the care nurse for assessment of the patient.

Equipment:

NOVA StatStrip® Glucose Meter





NOVA StatStrip® Glucose Meter

The acceptable temperature range for using the meter is 59-104°F (15-40°C).

Do not place the meter near a heat source. Meter should be held level when applying control or patient samples. Meter can be used at altitudes up to 15,000 feet.

Note: Clean the meter with a hospital approved disinfectant.

CAUTION:

DO NOT immerse the meter or hold the meter under running water.

DO NOT spray the meter with a disinfectant solution.

Materials

StatStrip® Glucose Test Strips, SAP # 343875,
Cardinal Cat. # NB42214DU

NOVA StatStrip ® Control Solutions Level 1 SAP # 342948,
Cardinal Cat # NB41741DU

NOVA StatStrip ® Control Solutions Level 3 SAP # 342949,
Cardinal Cat. #NB41743DU

Fingerstick supplies: disposable lancet device, gloves, alcohol wipes, non-sterile gauze.

Heel warmer (for heat application as necessary)

10 % bleach wipes or 1:10 bleach solution

Reagent Handling

1. NOVA StatStrip® Test strips

Store the StatStrip® Glucose Test Strips in the tightly closed vial at room temperature (15 to 30° C). The test strips shall be given an open date and a 180 day expiration date from the time of opening. The month, day, and year for both dates shall be documented on each open container.*

2. NOVA StatStrip® Control Solutions

Store the StatStrip® Glucose Control Solutions at room temperature (15 to 30° C). The control solutions shall be given a 90 day expiration date from the time of opening. The month, day, and year shall be documented on each open container.*

**In the event that the manufacturer date comes first, the manufacturer expiration shall be documented as the discard date.*

Calibration:

No calibration is necessary. Meter calibration is preset in meter using the strip lot number.

Quality Control Procedure:

1. Quality control frequency:

Note: *The meter will lock out testing of patients after 24 hours.*

Level 1 and Level 3 control testing must be performed every 24 hours that patient testing is performed, or if:

- a. A vial of strips has been left open or when the test strips have been exposed to extreme heat, humidity, or cold.
- b. The meter is dropped.
- c. When troubleshooting the meter.
- d. When patient test results contradict clinical symptoms.

2. Check the written expiration date on each level of Control solution.

3. Check the written expiration date on the StatStrip® Glucose Test Strip vial.

4. When removing the meter from the docking station, wait until the hour glass disappears.

5. Touch <WELCOME> on the screen, or the <OK> button.

6. Touch <LOGIN> on the screen, or the <OK> button.

7. Touch SCAN, or the <OK> button, and scan (or enter) your operator identifier (located on the front of your ID badge).

Note: *If the meter will not allow you to login, notify the trainer on your unit.*

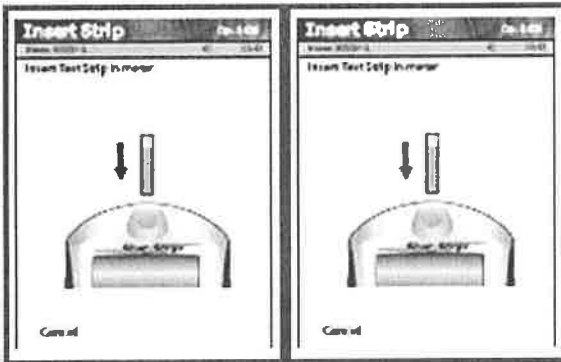
8. Touch <QC> block at the bottom of the screen.

9. Touch SCAN, or the <OK> button, to scan the barcode on the test strip vial.

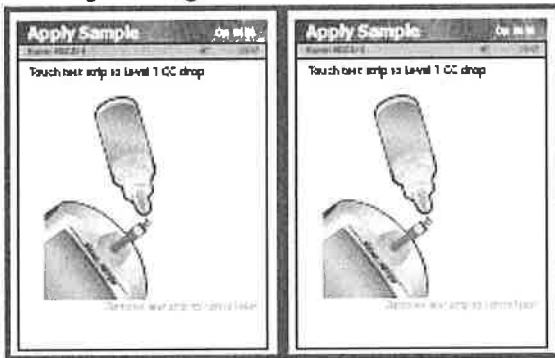
10. Touch SCAN, or the <OK> button, to scan the barcode on the control vial being tested.

11. Gently mix control by inverting vial 5 – 10 times, or by rolling the vial between the palms for at least five seconds in two directions.

12. Wipe tip of vial and expel several drops of Control solution to removed dried concentrations of material.
13. Place the strip into the test strip port with the blue side up and the white end exposed, as shown on the screen.



14. With the meter lying flat or pointing downward, touch a drop of the control solution to the end of the strip allowing it to migrate into the test area.



Caution: Keep the meter flat or pointing downward while applying sample and during testing to prevent sample from seeping into the test strip insert slot.

Note: The test strip must fill completely upon touching to the control drop. If the strip does not fill completely, **do not touch the strip to the control a second time**. Discard the strip and repeat the test with a new strip.

15. The control solution is drawn into the test strip automatically.
16. Wait for the countdown to end and the result to appear.
17. <PASS> or <FAIL> will appear in 6 seconds.
18. Remove the test strip from the meter and discard before the meter is moved.
Note: If "Fail" is displayed, touch <COMMENT> and enter up to three comments by touching the appropriate comment display. Touch <ACCEPT> to finalize the comment(s). Repeat the test with a new test strip.
19. When "Pass" is displayed, the test is completed.
20. Touch <ACCEPT>, or the <OK> button to finalize the test.
21. Repeat these steps to perform Level 3.
22. When both quality control test results have displayed "Pass," patient testing may be performed.
23. To prevent others from testing under your name, logout by touching the <Op: XXXX> icon at the top right

corner of the screen or <LOGOUT> at the bottom of the screen.

Note: This step prevents others from using your identity to perform testing or reviewing patient information.

The screen times out in 90 seconds if there is no activity, but your identity stays in the meter for 3 minutes.

24. Return the meter to the docking station.

Note: Meter must remain in the docking station when not in use to allow patient data transmission and maintain a fully charged battery.

25. Quality control notes:

- a. If a quality control test result displays "Fail," the problem must be corrected before the meter will allow you to proceed. Consider the following factors that may cause a failure of the quality control test:
- b. The test strip vial has been left opened for a period of time.
- c. Procedural error.
- d. The test strip or controls have been exposed to very high or low temperatures.
- e. The test strips are expired.
- f. The control solutions are expired and/or contaminated.
- g. Corrective action must be documented by entering a comment in the meter.
- h. Report two consecutive failures to the Laboratory Point-of-Care Coordinator.

Specimen Collection:

1. Type: Capillary, venous, neonatal (cord blood is not acceptable), and arterial whole blood specimens may be used for testing on the NOVA StatStrip® Glucose Meter.
2. Verify patient ID by using a minimum of two identifiers.
3. Don clean gloves.
4. With the meter flat or pointing downward apply sample.
5. Finger puncture:
 - a. Best locations for fingersticks are the 3rd and 4th fingers of the non-dominant hand.
 - b. Do not use the top or center of the finger.
 - c. Avoid fingers that are cold, cyanotic, swollen, scarred or covered with a rash.
 - d. Massage the finger to increase blood flow (gently squeeze the finger from hand to fingertip 5 – 6 times).
 - e. Cleanse fingertip with alcohol and wipe dry with clean gauze or cotton ball or allow to air dry (alcohol cause erroneous blood glucose results).
 - f. Using a sterile lancet, make a skin puncture just off the center of the finger pad.
 - g. Consider wiping away the first drop of blood (which tends to contain excess tissue fluid) and gently apply intermittent pressure to the surrounding tissue until the required blood volume is obtained.
 - h. Do NOT squeeze or apply strong repetitive pressure to the site (this may result in hemolysis or

increase tissue fluid in the blood). Consider using heat pack using heel warmer.

- i. Allow drop of blood to migrate smoothly into the end of the strip.

Caution: Do not touch test strip to the patient's finger or apply blood to the top of the strip.

6. Heel puncture:

- a. Warm the collection site with heel warmer.
- b. Clean the area with alcohol and wipe dry with clean gauze or cotton ball or allow to air dry (alcohol cause erroneous blood glucose results).
- c. Puncture the heel to get free flowing blood.
- d. Consider wiping away the first drop of blood with dry gauze or cotton ball.

7. Apply sample by touching the end of the strip to a drop of the blood allowing it to migrate into the test area.

Note: Collecting the sample in a heparinized capillary tube is also acceptable.

- a. Tilt the tube at a downward angle and allow gravity to draw blood into tube.
- b. Mix by gently rolling tube between two fingers.
- c. Attach the black transfer bulb to the capillary tube.
- d. Squeeze the bulb to transfer sample from the capillary tube to the target area of the test strip.

8. Venipuncture:

- a. Blood specimens must be performed within 30 minutes of specimen collection to minimize the effect of glycolysis.
- b. Collect the sample only in a Light Green top, heparinized, lab tube.
- c. Mix the collection tube by inverting gently.
- d. Using a syringe and needle, puncture the top of the light green top tube and withdraw a quantity of blood sufficient to dose the testing strip.
- e. Push a drop of blood out of the end of the syringe needle, avoid touching the end of the test strip with the needle.
- f. Apply sample by touching the end of the strip to a drop of the blood allowing it to migrate smoothly into the test area.

9. Syringe collection from a central line or arterial line:

- a. If not using closed inline sampling system, withdraw and discard 5 mL of blood to remove intravenous solution, heparin, or medications that may contaminate the sample.
- b. Collect the sample in a Light Green top lab tube or sodium heparinized syringe and perform glucose testing within 30 minutes.
- c. Mix the collection tube by inverting gently or rolling the syringe between the hands.
- d. Allow a drop of blood to form at the tip of the syringe.
- e. Apply sample by touching the end of the strip to a drop of the blood allowing it to migrate into the test area.

Blood Glucose Patient Testing Procedure:

1. Standard Precautions must be followed when using the NOVA StatStrip® Glucose Meter.
 - a. This procedure may expose the user to Bloodborne pathogens. To perform this procedure the user must wear gloves.
 - b. Isolation: To prevent contamination to the patient and/or meter, the meter and vial of test strips may be placed into clear plastic bags prior to testing in isolation and/or high risk blood borne pathogen areas.

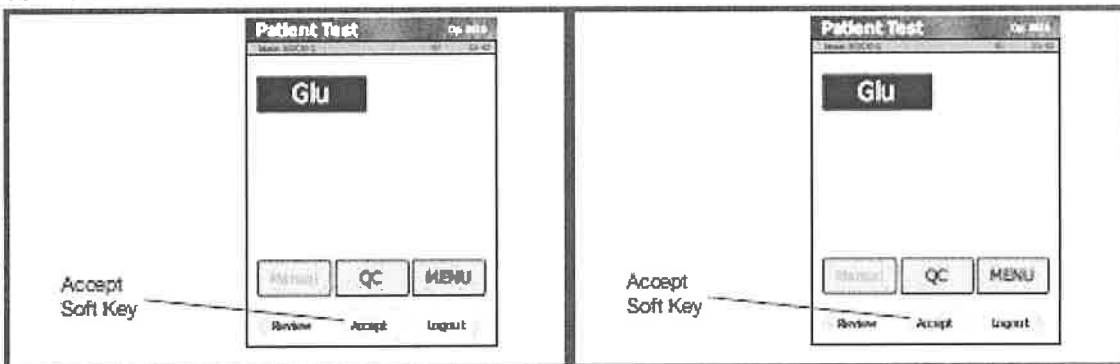
- Remove two test strips for testing before entering the isolation room and place the vial in a plastic bag.
- Once in the patient's room, scan the test strip vial through the plastic bag when prompted.

Note: Personal protection equipment and sharps MUST be discarded according to your clinic or unit's infection control policy.

2. Before removing meter from docking station, check to make sure it has completed the download, or you may have to redock it before testing can begin.
3. Check the expiration date on the StatStrip® Glucose Test Strip.

Note: When opening a new vial of StatStrip® Glucose Test Strip, write the 6 month expiration date on each vial.
4. Identify the patient using a minimum of two forms of identification prior to testing.
5. Touch <WELCOME> on the screen, or press the <OK> button, to activate the screen on the meter.
6. Touch <LOGIN> on the screen.
7. Touch SCAN and scan (or enter) your operator identifier (located on the front of your ID badge).

Note: If the meter will not allow you to sign in, notify your Clinical Nurse Manager or Superuser on your unit.
8. Touch the<PATIENT> box.



9. Touch <ACCEPT>, or the <OK> button.
10. Touch SCAN, or the <OK> button, to scan the barcode on the test strip vial.
11. Identify the patient: Ask patient to state name and DOB.
12. Touch SCAN, or the <OK> button, or manually enter the patient's Identification number (6 digit chart number) from the patient's armband.

Note:

For neonate before chart number issued: ID # = use date and military time (ex: born on March 5 at 1310,

ID# = 051310)

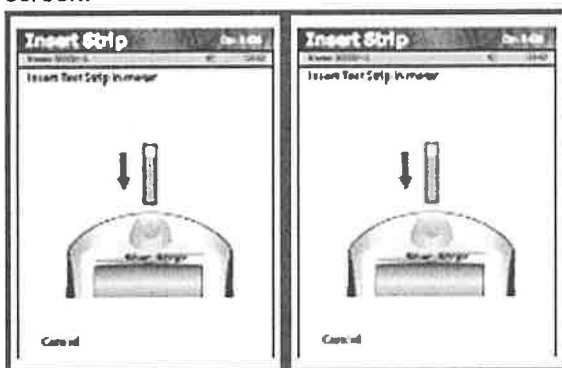
For ER patient prior to chart number: ID # = 3 digit log number (ex: 003)

NEVER ENTER A FALSE ID#!!

13. If available, the patient's demographics will appear on the screen.
14. Verify the demographics are correct.
15. Touch <ACCEPT>, or the <OK> button.

Note: If the patient's demographics do not appear, recheck the patient ID. If the ID number entered in the meter matches the patient's information, Touch <Downtime Override> and proceed. (There will be no demographics for ER patient or neonate without a chart number)

16. Place the strip into the test strip port with the blue side up and the white end exposed, as shown on the screen.



17. Don clean gloves.
18. Obtain blood sample.
19. Apply sample by touching the end of the strip to a drop of the blood allowing it to migrate into the test area.



Caution: Keep the meter flat or pointing downward while applying sample and during testing to prevent sample from seeping into the test strip insert slot.

Note: The test strip must fill completely upon touching to the drop of blood. If the strip does not fill completely, **do not try to add more blood**. Discard the strip and repeat the test with a new strip.

20. A beep will sound when enough sample has been drawn into the strip.
21. Wait for the countdown to end and the result to appear.
22. Remove strip before moving the meter.

23. Discard strip in biohazard container. Discard the lancet in the sharps container.
24. Perform hand hygiene.
25. If alert value is displayed, *actions must be documented in the meter by touching <COMMENT> and entering up to three comments by touching the appropriate comment display. Touch <ACCEPT>, to complete the comments.*
Note: *Alert values <70 mg/dl and >300 mg/dL (neonates: <45 mg/dL and >150 mg/dL) must be repeated, using a fresh sample from a new stick, unless the patient has a documented blood glucose >300 within the past 3 hours. Report to caregiver or provider, and follow his/her recommendations. Alert values obtained by any NCA must be reported immediately to the care nurse for assessment of the patient. Results must be verified by the clinical laboratory if requested by the provider.*
26. Touch <ACCEPT>, or the <OK> button, to finalized result and send to the patient's electronic record.
27. Document the blood glucose result (mg/dl), any treatment given, the time, date, and initials of operator in the patient's medical record.
28. To prevent others from testing under your name, logout by touch the <Op: XXXX> icon at the top right corner of the screen or <LOGOUT> at the bottom of the screen.
Note: *The screen will turn off in 90 seconds if there is no activity, but does not log you out for 3 minutes.*
29. Clean the meter between patients and/or prior to docking and PRN by following the cleaning procedure below.
30. Once meter is dry, return to the docking station.
Note: *Meter must remain in the docking station when not in use to allow patient data transmission and maintain a fully charged battery.*

Cleaning Procedure:

- ~~1. The meter must be cleaned between patients and prior to docking using a use a 10% bleach wipe or solution to clean the outside of the device then discard the soiled wipe into the appropriate container.~~
- ~~2. A second disinfectant wipe may be indicated if the device is grossly contaminated.~~
- ~~3. Allow the device to air dry before docking it or using on another patient.~~
- ~~4. Use a clean gauze pad or paper towel to wipe cleaner residue from the scanner window and touch screen, as needed.~~

~~**CAUTION** When using disinfectant wipes, squeeze out excess solution prior to using if necessary. Do NOT allow cleaning solution to get into the strip port. Or meter/base connectors. Wet strip ports can prevent the meter from sensing a strip has been inserted.~~

~~**Warning:** Do not expose the meter/base connectors and docking station circuitry to disinfectant or cleaning solution.~~

- ~~a. Do not clean the meter while performing a patient or control test.~~
- ~~b. Do not spray the meter with disinfectant solutions; always use a disinfectant wipe.~~
- ~~c. Do not immerse the meter or hold the meter under running water.~~

Cleaning and Disinfecting Nova StatStrip Glucose Meter:

- A. The meter must be cleaned and disinfected after each patient use to minimize the risk of transmission of blood-borne pathogens between patients and healthcare professionals.
- B. Cleaning the meter
 - 1. Clean the meter using a 10% bleach wipe after donning gloves
 - 2. Wipe the external surface thoroughly and discard soiled wipe into appropriate container.
- C. Disinfecting the meter
 - 1. Using a new 10% bleach wipe, thoroughly wipe the surface of the meter (top, bottom, left, and right sides) a minimum of 3 times horizontally and 3 times vertically avoiding the bar code scanner and electrical connector.
 - 2. Gently wipe the surface area of the test strip port making sure that no fluid enters the port.
- D. Observe manufacturer's contact time for germicidal wipe
- E. Use clean gauze pad or paper towel to wipe cleaner residue from the scanner window and touch screen, as needed
- F. Dispose of used wipe and gloves
- G. Wash hands thoroughly with soap and water

WARNING: Do not allow liquid to enter the strip port connector or allow pooling of liquid on the touch screen. If liquid does get into the strip port or connector, immediately dry the components with a dry cloth or gauze.

WARNING: Do not spray the meter with disinfectant solutions; always use a disinfectant wipe

WARNING: Do not immerse or hold the meter under running water.

Limitations and Precautions of the Procedure:

If a significant difference between the bedside and lab results is observed, the patient's glucose should be monitored by the lab.

- 1. Hematocrit range is 20-65%.
- 2. ~~Flow errors may occur with extreme high or low Hematocrit; repeat the test with a new strip. If the error code persists, send specimen to lab.~~ Flow errors may occur with extreme high or low Hematocrit; repeat the test with a new strip. If the error code persists, send specimen to lab.
- 3. ~~Flow errors may occur;~~ Flow errors may occur:
 - a. When applying the sample the finger touched the strip, slowing the flow of the sample.
 - b. The strip was not filled on the first touch of blood and was applied to the blood again.
- 4. The following conditions can cause erroneous results:
 - a. The test strips were used after the "Use By" date on the vial.
 - b. The strips were not stored in the vial with the cap tightly sealed.
 - c. The strip was not filled on the first touch of blood and was applied to the blood again.
- 5. In situations of decreased peripheral blood flow, finger stick blood testing may not be appropriate, as it may not reflect the true physiological state. Examples include, but are not limited to, severe dehydration

caused by diabetic ketoacidosis or the hyperglycemic hyperosmolar non-ketotic state, hypotension, shock or peripheral vascular disease.

6. Capillary samples must be obtained from free flowing blood. Excessive milking or squeezing of the puncture site may produce erroneous results.
7. Glucose results <10 mg/dL or >600 mg/dL are outside the linearity range and should not be considered accurate..
8. Test results are best when obtained within an operating relative humidity of 10-90% (non-condensing). Testing outside these ranges may produce inaccurate results.

Troubleshooting:

If for any reason your meter doesn't respond in the appropriate manner (i.e., barcode scanner does not work, meter will not download, unfamiliar error codes, etc.), reboot the meter.

1. Remove the battery from the meter for 10 seconds.
2. Place battery back into the meter, checking to position it correctly.
3. If this does not help, call the lab.

Meter Alert	Explanation	Resolution
Flow Error	May occur in patients with extremely high or low Hematocrit values. Also, when either the strip was not filled or the sample was not applied correctly.	Repeat the test with a new strip. If the error code persists, send specimen to lab. Repeat the test with a new strip.
Low Battery		Place meter in dock to recharge.
Test Strip Removed	Strip removed before test completed. Test cancelled.	Retest
Temperature	Meter will only work in temperature range of 59°-104°F (15°-40°C).	Make sure the meter is not near a heat source.
Bad Sample		Insert a new strip and retest.
Strip Rejected		Insert a new strip and retest.
Transfer Failed-Data	Meter cannot connect to the server.	Check that the computer is on. Check that all cables are connected. Call POCT.
Transfer Failed	Meter removed from dock before data transfer complete.	Re-dock the meter.

Maintenance:

Meter, base unit, and carrying case cleaning procedure:

1. Equipment must be cleaned if taken into the patient room using the "Cleaning Procedure," above. Only the meter and the test strip to be used should go into a patient's room. The base unit, carrying case and container with strips should not go into a patient's room.

2. If cleaning solution does get on the connector, dry thoroughly with a cloth or gauze pad before returning the meter to the docking station.

Operator Competency:

1. Competency Program

1. The Laboratory Director, or a qualified designee, shall provide orientation and training to, and assess the competency of staff and independent practitioners who perform waived glucose testing.
 - a. Clinical Nurse Managers (or those requested by a Clinical Nurse Manager) are determined to be the qualified designee after initial training from the Laboratory Point-of-Care Coordinator.
 - b. "Qualified designees" are required to perform annual competencies.
 - c. Documentation of the initial training and annual competencies of the "qualified designees" are kept by the Laboratory Point-of-Care Coordinator.
2. Initial orientation shall include the safe use and maintenance of the instrument.
3. Competency is performed initially and annually and includes at least two of the following methods per person per test:
 - a. Performance of a test on a blind specimen
 - b. Periodic observation of routine work by the supervisor or qualified designee
 - c. Monitoring of each user's quality control performance
 - d. Use of a written test specific to the glucose meter testing.
4. In addition, Superusers shall have additional training on troubleshooting and training techniques.

2. Initial Competency:

The individual unit nursing manager shall ensure that all new RN's and LVN's receive in-servicing on the Nova StatStrip® meter and operating procedure. Initial competency will be documented through the Nova StatStrip® ~~Glucosemeter Competency Checklist and written test~~ (Attachment A).

The Nursing Education Department will present this in-servicing content during Nursing Orientation at which time all new operators will complete a Nova StatStrip® competency checklist and will receive an operator ID barcode.

The operator ID consists of the operator's first and last initials and the last four digits of their social security number (i.e., NK3575).

To activate the operator ID, the new operator's competency checklist shall be forwarded to the Laboratory Point-of-Care Coordinator. After activation, the Coordinator will return the checklist to the unit nursing manager for maintenance in the nurse's employee file.

3. Continuing Competency:

Continuing operator competency shall be verified by each activated operator's completion of at least two patient tests and one QC procedure (high and low) every year. Additionally, all users shall verify competency by completion of the Nova StatStrip® Competency Checklist and Blood Glucose Management written test.

The Laboratory Point-of-Care Coordinator shall generate operator competency reports quarterly and shall

forward these reports to each nursing unit manager.

The Clinical Nurse Manager shall ensure that each operator maintains the minimum competency requirements.

The Laboratory Point of Care Coordinator shall periodically review and document the review of nursing records of Nova StatStrip® Glucose Meter initial and annual competency assessment.

All revision dates: 10/10/2022, 2/11/2019, 8/23/2018, 12/1/2013, 6/1/2010, 12/1/2004, 12/1/2001

Attachments

Nova StatStrip Glucometer Competency

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	10/23/2022
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	10/23/2022
Laboratory Services	Erlinda Roxas: Director Laboratory Services	10/23/2022
Laboratory Services	Brad Adler, MD: Medical Director, Laboratory Services	10/11/2022
Policy Owner	Hugo Ortiz: Diabetes Nurse Educator	10/10/2022



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: N/A
Effective: Upon Approval
Last Approved: N/A
Last Revised: N/A
Next Review: 11/27/2025
Owner: Sherri Block: Associate Chief
Nursing Executive, VCMC &
SPH
Policy Area: Administrative - Nursing
References:

108.045 Urinary Catheter Insertion/Maintenance/De-escalation

PURPOSE:

To guide the insertion, maintenance, and de-escalation of urinary catheters in order to prevent the incidence of catheter-associated urinary tract infections (CAUTI). This policy guides the nursing staff in the management of urinary catheters. Lippincott provides an additional resource for any items not addressed in this policy.

POLICY:

A. Catheter Use

1. Urinary catheters should be inserted only when necessary and left in place only for as long as necessary. They should not be used solely for the convenience of patient-care personnel or patient preference.
 - a. Alternatives to indwelling catheters must be considered first if suitable in a specific patient. These include the use of external male and female catheters, intermittent bladder catheterization and bladder massage.
2. To avoid urethral strictures associated with prolonged transurethral catheterization, suprapubic or transurethral catheterization should be considered in patients who need prolonged bladder catheterization for more than 4 weeks (e.g. those with neurogenic bladder or ulceration in perineal area).

B. Leadership for Appropriate Catheter Use

1. The clinical nursing unit leadership will oversee and support the safe use of urinary catheters as outlined in this policy.

C. Indications for Indwelling Catheter Use

1. Urinary catheters must be inserted only when there is an indication to do so. Indications include:
 - a. Hematuria, gross
 - b. Obstruction, urinary
 - c. Urologic/gynecologic surgery

- d. Decubitus ulcer-open sacral or periineal wound in incontinent patient
- e. Intake and output (I & O)- actively using urine output to guide therapy in critically ill patients
- f. Neurogenic bladder dysfunction, chronic indwelling catheter or No Code/Comfort Care
- g. Immobility due to physical constraints (e.g. unstable fractures)

2. Orders for insertion and discontinuation

- a. Foley catheters may be inserted in patients only by an order from a Licensed Independent Provider (LIP).
- b. The order will include the "Discontinuing a Urinary Catheter Utilizing the Houdini Protocol" order set
- c. The nurse will conduct an assessment of need each shift and will discontinue the catheter upon an order from a LIP and/or utilizing the Houdini Protocol. ***Please see Attachment A Houdini Protocol.***

D. Indwelling Transurethral Catheters Present on Admission or Placed Emergently

1. If an indwelling transurethral urinary catheter is present on admission, it should be documented as having been present and removed immediately, and a new catheter inserted if still warranted. A urine culture should be sent at this time. However, considerations should be given to alternative devices including external male and female urinary catheters.
2. If an indwelling transurethral urinary catheter is placed emergently, it must be removed as soon as possible (**after no longer than 48 hours**) since adherence to aseptic technique cannot be ensured, a baseline urine culture obtained, and a new catheter inserted if still warranted.

E. Catheter Insertion

1. Personnel who insert urinary catheters must have demonstrated competency in proper insertion technique.
2. Hand hygiene must be performed with an antimicrobial soap and water or an alcohol hand sanitizer before insertion and immediately before and after any manipulation of the catheter site or drainage system.
3. The Lippincott and American Association of Critical Care Nurses (AACN) procedure manual will guide the specific details of insertion.
4. Only one attempt at insertion is allowed for each catheter.
5. Indwelling catheters should be properly secured after insertion to prevent movement and urethral traction.
6. The foley catheter bag should be dated and timed as well as the securement device.

F. Documentation for Catheter Insertion

1. The following information must be documented in the patients medical record after catheter insertion:
 - a. Indication for catheter insertion
 - b. Date and time of catheter insertion
 - c. Individual who inserted the catheter

2. The date and time of removal of the catheter should also be documented in the patient's medical record
3. Documentation should be accessible in the patient's medical record and recorded in a standard format for data collection and quality improvement purposes.

G. Reminders to Nurses to Assess Indications for Catheter

1. Nurses will assess the indications for a catheter during each shift and will document in the medical record. If indications are not met for ongoing catheterization, the nurse will utilize the Houdini Protocol and remove the catheter.
2. The LIP may also indicate that the catheter be removed and intermittent catheterization performed or replaced with an external device.

H. Closed Sterile Drainage

1. A sterile, continuously closed drainage system sealed to the catheter must be maintained.
2. If breaks in aseptic technique, disconnection, or leakage occur, the catheter and collection system sealed to the catheter should be replaced using aseptic technique.

I. Irrigation

1. Irrigation should be avoided unless continuous bladder irrigation is ordered by a LIP.
2. The catheter-tubing junction must be disinfected before disconnection.

J. Urinary Flow and Collection Bag

1. Unobstructed flow should be maintained
2. To achieve free flow of urine:
 - a. Avoid any kinks in the catheter and collection tubing
 - b. The collection bag should be emptied when it is 2/3 full or before any ambulation and/or transport. A separate collection container for each patient should be utilized. The drainage spigot and non-sterile collection container should never come in contact.
 - c. Collection bags should always be kept below the level of the bladder but should never touch the floor.
3. If the catheter becomes obstructed, it should be removed. If there is a continued need for bladder catheterization, a new catheter should be inserted using aseptic technique.

K. Perineal Care

1. The perineum should be cleaned daily with soap and water. Chlorhexidine (CHG) is not recommended for perineal care.
2. Do not clean the perimeatal area with antiseptics to prevent CAUTI while the catheter is in place. Routine hygiene is sufficient.

L. Catheter Change

1. Indwelling catheters should be changed only as clinically indicated.

M. Bladder Scanners

1. The bladder scanning protocol can be found in policy [100.244 Discontinuing a Urinary Catheter Utilizing the Houdini Protocol.](#)

REFERENCE(S):

Centers for Disease Control (CDC) (n.d.) Guideline for prevention of catheter-associated urinary infections. <https://www.cdc.gov/infectioncontrol/guidelines/cauti/recommendations.html>

Lippincott Procedure Manual

Lo E., Nicolle, L., Classen D., Coffin, S., Gould, C., Maragakis, L., Meddings, J., Pegues, D., Pettis, A., Saint, S., & Yokoe, D. (2014). Strategies to prevent catheter-associated urinary tract infections in acute care hospitals: 2014 update. *Infection Control and Hospital Epidemiology*, 35(5), 464-479. <https://www.doi.org/10.1086/675718>

Meddings, J., Rogers, M., Krein, S., Fakh, M., Olmstead, R., & Saint S. (2013). Reducing unnecessary urinary catheter use and other strategies to prevent catheter-associated urinary tract infections: An integrative review. *BMJ Quality and Safety* 23, 277-289. <https://www.doi.org/10.1136/bmjqs-2012-001774>.

Mitchell, B., Curryer, C., Holliday, E., Rickard, C., & Fasuka, O. (2021). Effectiveness of meatal cleaning in the prevention of catheter associated urinary tract infections and bacteriuria: An updated systematic review and meta-analysis. *BMJ Quality and Safety* 11(6), e046817. <https://www.doi.org/10.1136/bmjopen-2020-046817>

All revision dates:

Attachments

Attachment A Houdini Protocol

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Danielle Gabele: Chief Nursing Executive, VCMC & SPH	12/12/2022
Nursing Administration	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	12/12/2022
Policy Owner	Sherri Block: Associate Chief Nursing Executive, VCMC & SPH	12/12/2022



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 9/1/2014
Effective: Upon Approval
Last Approved: N/A
Last Revised: 10/6/2022
Next Review: 3 years after approval
Owner: Mary Jane Green: HIM Manager
Policy Area: Health Information Management
References:

HIM.08 Healthcare Agency Use of Scribes

POLICY:

To provide guidelines for the procurement and utilization of medical documentation scribes by clinicians in the inpatient and ambulatory workplace of the Ventura County Healthcare Agency. Scribes are defined as employed or contracted individuals who work side-by-side with a medical provider as a "clinical information assistant." Scribes only provide assistance by direct documentation of a medical visit as it is verbalized by the provider at the time of the medical visit. The use of contracted services from outside of the United States will be excluded.

PROCEDURE:

Scribes SHALL:

1. Obtain proper credentials and training for electronic health record (EHR) use which includes compliance with continuing education and regulations concerning documentation within the Healthcare Agency EHR.
2. Document the medical encounter with accuracy.
3. Provide their name, title, time of documentation, date of documentation, and electronic signature on each medical document created.
4. Provide an attestation with each document created at the time of chart completion and forward to the medical provider for co-signature:
 - a. "I, _____, transcribed the note for _____."
5. Abide by all rules and regulations concerning HIPAA, The Joint Commission, and CMS guidelines, as well as Hospital policies and procedures and bylaws.

Scribes SHALL NOT:

1. Act independently and/or create documentation which does not originate from the medical provider
 - a. Review of systems (ROS) and Past Family/Social History (PFSH) is exempt as it can be obtain by ancillary staff or transcribed from a form completed by the patient.
2. Engage in physical patient contact of any kind.
3. Interpret information in the patient record.
4. Discuss any aspect of a patient's care with the patient's family members.

5. Enter orders or electronically prescribe on behalf of a medical provider.
6. Use anyone else's login credentials to document patient encounters or other forms of documentation
 - a. Scribes must have their own unique login and profile credentials as established by HIM and HCA IT.

Medical Providers SHALL:

1. Engage the services of a scribe solely for the purposes of medical documentation.
2. Maintain appropriate provider credentials, including compliance with continuing education and meaningful use within the Healthcare Agency Electronic Health Record in the event a scribe is unavailable for use.
3. Provide information for the scribe which accurately reflect what is obtained or performed during the medical encounter.
4. Review all forms of documentation created by a scribe and provide an attestation with each document at the time of chart completion:
 - a. "I, _____, personally performed the history, physical examination and medical decision making and confirmed the accuracy of the information in the transcribed note."
5. Abide by all rules and regulations concerning HIPAA, The Joint Commission, and CMS guidelines, as well as Hospital policies and procedures and bylaws.

All revision dates: 10/6/2022, 9/1/2014

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Health Information Management Committee	Mary Jane Green: HIM Manager	11/7/2022
Health Information Management	Mary Jane Green: HIM Manager	8/2/2021

Current Status: Pending

PolicyStat ID: 12686616



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

Origination: 11/1/2015
Effective: Upon Approval
Last Approved: N/A
Last Revised: 2/12/2020
Next Review: 3 years after approval
Owner: Tracy Chapman: VCMC - Med Staff
Policy Area: Administration - Medical Staff
References:

MS.102.019 Monitoring Medicare Opt-Out Verifications

POLICY:

To ensure Ventura County Health Care Agency Medicare patients are seen by appropriately qualified practitioners who are able to receive Medicare funds.

PROCEDURE:

The Ventura County Health Care Agency prohibits employment of or contracting with practitioners (or entities that employ or contract with such practitioners) who "opt-out" of Medicare or are excluded/sanctioned from participation.

SCOPE:

Medical Staff

- Prior to initial credentialing and recredentialing, the most recently issued "Medicare-Enrollment Opt-Out Affidavits" report is run from the following Website:
<https://data.cms.gov/Medicare-Enrollment/Opt-Out-Affidavits/7yuv-754z/data>
- Verification is reviewed within 30 calendar days of its release and monitored monthly by the Medical Staff Office.

DOCUMENTATION:

Documentation will be maintained of all reviewed information (e.g., hardcopy or electronic).

The results of the review are documented in the practitioner's paper or electronic credentialing file. Documentation includes the report date/run date and staff initials/signature. Electronic documentation indicating staff identification is accepted in lieu of staff initials/signature.

All revision dates:

2/12/2020, 11/1/2015

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Staff Office	Tracy Chapman: VCMC - Med Staff	pending
Medical Staff Office	Minako Watabe: Chief Medical Officer, VCMC & SPH	11/18/2022
Policy Owner	Tracy Chapman: VCMC - Med Staff	11/18/2022

Location	Anaphylaxis Kit	Anesthesiologist Medication Box	Cardiac Medication Box	Code Blue Medication Box	Code Blue Pharmacy Medication Box	Code White Pharmacy Medication Box	Code Stroke Medication Box	Epidural Medication Kit	Extravasation Kits	GI Lab Transport Box
VCMC Pharmacy	1	3	1	1	1	±	1		1	1
Inpatient Psychiatric Unit	1									
3WEST	1			1						
NTMST1	1									
NTMST3A	1								1	
NTMST3B	1			1					1	
NTPEDS	1								1	
NTPICU	1								1	
NTNICU										
NTOB	1									
NTOBPP	1									
NTED			1	1						
NTICU1 (ICU)	1			1						
NTICU2 (Telemetry)	1								1	
NTICU3 (DOU)	1									
NTRAD	1									
NTPACU1	1									
GI Lab										1
Outpatient CT Room 1	1									
Outpatient CT Room 2	1									
SPH Pharmacy	1									
SPH ED	1		1							
SPH ICU	1									
SPH MS	1									
SPH Nursery										
SPH OB	1							1		
SPH Radiology	2									
SPH OR										
Infusion Pharmacy										
Pediatric Hem-Onc Clinic									1	
Large Infusion Room									1	
Small Infusion Room									1	

Location	Hydrofluoric Acid Exposure Kit	Infusion Hypersensitivity Kit	Intubation Kits	Neonatal Resuscitation Box	NICU Transport Medication Box	OB Cytotec Medication Kit	PICU Transport Medication Box	Post-Partum Vaginal Bleeding Kit	Preeclampsia Medication Box	Pyxis Anesthesia Emergency Drug Kit
VCMC Pharmacy			4		21	2	1	1	2	
Inpatient Psychiatric Unit			1							
3WEST										
NTMS1			1							
NTNTMST3B										
NTMST3B										
NTPICU			2				1			
NTNICU					21					
NTOB			1			2		3	2	
NTOBPP						1		3	1	
NTORCS			1					1		
NTED	1		4							
STED			2							
NTICU1 (ICU)			3							
NTICU2 (Telemetry)										
NT ICU3 (DOU)			3							
NTPACU1			1							
GI Lab 1			1							
OR Core						1				
OR 1, 2, 3, 4, 5, 6										6
SPH ER	1		3							
SPH ICU			2							
SPH MS			1							
SPH Nursery				1		1				
SPH OB			1					1	1	
SPH Radiology										
SPH OR			1							3
Infusion Pharmacy		1								
Pediatric Hem-Onc Clinic		2								
Large Infusion Room		2								
Small Infusion Room		1								

PICU Transport Kit

MEDICATION	PAR	USED
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

DATE OF SERVICE: _____ RN: _____

Place **PATIENT ADDRESSOGRAPH** sticker on back and return to Pharmacy

PICU Transport Kit

MEDICATION	PAR	USED
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

DATE OF SERVICE: _____ RN: _____

Place **PATIENT ADDRESSOGRAPH** sticker on back and return to Pharmacy

PICU Transport Kit

MEDICATION	PAR	USED
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

DATE OF SERVICE: _____ RN: _____

Place **PATIENT ADDRESSOGRAPH** sticker on back and return to Pharmacy

PICU Transport Kit

MEDICATION	PAR	USED
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Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

DATE OF SERVICE: _____ RN: _____

Place **PATIENT ADDRESSOGRAPH** sticker on back and return to Pharmacy

PICU Transport Kit

MEDICATION	PAR	USED
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

DATE OF SERVICE: _____ RN: _____

Place **PATIENT ADDRESSOGRAPH** sticker on back and return to Pharmacy

PICU Transport Kit

MEDICATION	PAR	USED
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

DATE OF SERVICE: _____ RN: _____

Place **PATIENT ADDRESSOGRAPH** sticker on back and return to Pharmacy

PICU Transport Kit

MEDICATION	PAR	USED
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

DATE OF SERVICE: _____ RN: _____

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MEDICATION	PAR	USED
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

DATE OF SERVICE: _____ RN: _____

Place **PATIENT ADDRESSOGRAPH** sticker on back and return to Pharmacy

PICU Transport Kit

MEDICATION	PAR	USED
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

DATE OF SERVICE: _____ RN: _____

Place **PATIENT ADDRESSOGRAPH** sticker on back and return to Pharmacy

PICU Transport Kit

MEDICATION	PAR	USED
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

DATE OF SERVICE: _____ RN: _____

Place **PATIENT ADDRESSOGRAPH** sticker on back and return to Pharmacy

PICU Transport Kit

MEDICATION	PAR	EXPIRES
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

Filled by: _____ Date: _____

Checked by: _____ Date: _____

PICU Transport Kit

MEDICATION	PAR	EXPIRES
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

Filled by: _____ Date: _____

Checked by: _____ Date: _____

PICU Transport Kit

MEDICATION	PAR	EXPIRES
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

Filled by: _____ Date: _____

Checked by: _____ Date: _____

PICU Transport Kit

MEDICATION	PAR	EXPIRES
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

Filled by: _____ Date: _____

Checked by: _____ Date: _____

PICU Transport Kit

MEDICATION	PAR	EXPIRES
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

Filled by: _____ Date: _____

Checked by: _____ Date: _____

PICU Transport Kit

MEDICATION	PAR	EXPIRES
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

Filled by: _____ Date: _____

Checked by: _____ Date: _____

PICU Transport Kit

MEDICATION	PAR	EXPIRES
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

Filled by: _____ Date: _____

Checked by: _____ Date: _____

PICU Transport Kit

MEDICATION	PAR	EXPIRES
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

Filled by: _____ Date: _____

Checked by: _____ Date: _____

PICU Transport Kit

MEDICATION	PAR	EXPIRES
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

Filled by: _____ Date: _____

Checked by: _____ Date: _____

PICU Transport Kit

MEDICATION	PAR	EXPIRES
Flumazenil 0.5 mg/5 mL vial	1	
Ketamine 500 mg/5 mL vial	1	
Naloxone 2 mg/2 mL pre-filled syringe	2	
Propofol 500 mg/50 mL vial	1	

Filled by: _____ Date: _____

Checked by: _____ Date: _____

AMOUNT USED	MEDICATION	PAR	EXPIRE DATE
	Atropine 0.1 mg/mL 10 mL PFS	1	
	Calcium gluconate 100 mg/mL 10 mL vials	2	
	Epinephrine 0.1 mg/mL 10 mL PFS	2	
	Naloxone 1 mg/mL 2 mL PFS	2	
	Heparin 10 units/mL 3 mL PF flush	4	
	Heparin 100 units/mL 5 mL PF flush	1	
	Sodium bicarbonate 0.5 mEq/mL 10 mL PFS	3	
	Sodium chloride 0.9% 10 mL vial	4	
	SUPPLIES		
	1 mL Syringes	4	
	3 mL Syringes	2	
	10 mL Syringes	2	
	18 G/23 G/25 G needles	2 of each	
	Stopcocks 3-Way	2	
	Rapidfill Connector	4	
	Sodium chloride 0.9% 10 mL PFS	4	
	Alcohol Wipes	8	
	VCMC Blank Labels	4	

Filled by: _____

Date: _____

Checked by: _____

Date: _____

Date of use: _____



VENTURA COUNTY MEDICAL CENTER
SANTA PAULA HOSPITAL
NICU TRANSPORT BOX

ADDRESSOGRAPH:

Return the medication kit to the pharmacy after use.

NICU TRANSPORT BOX

MEDICATION	PAR	EXPIRE DATE
Atropine 0.1 mg/mL 10 mL PFS	1	
Calcium gluconate 100 mg/mL 10 mL vials	2	
Epinephrine 0.1 mg/mL 10 mL PFS	2	
Naloxone 1 mg/mL 2 mL PFS	2	
Heparin 10 units/mL 3 mL PF flush	4	
Heparin 100 units/mL 5 mL PF flush	4	
Sodium bicarbonate 0.5 mEq/mL 10 mL PFS	3	
Sodium chloride 0.9% 10 mL vial	4	
SUPPLIES		
1 mL Syringes	4	
3 mL Syringes	2	
10 mL Syringes	2	
18 G/23 G/25 G needles	2 EACH	
Stopcocks 3-Way	2	
Rapidfill Connector	4	
Sodium chloride 0.9% 10 mL PFS	4	
Alcohol Wipes	8	
VCMC Blank Labels	4	

FIRST EXPIRATION DATE: _____ SEAL #: _____

CHECKED BY: _____ ON: _____

RETURN TO PHARMACY FOR REPLACEMENT

NICU TRANSPORT BOX

MEDICATION	PAR	EXPIRE DATE
Atropine 0.1 mg/mL 10 mL PFS	1	
Calcium gluconate 100 mg/mL 10 mL vials	2	
Epinephrine 0.1 mg/mL 10 mL PFS	2	
Naloxone 1 mg/mL 2 mL PFS	2	
Heparin 10 units/mL 3 mL PF flush	4	
Heparin 100 units/mL 5 mL PF flush	4	
Sodium bicarbonate 0.5 mEq/mL 10 mL PFS	3	
Sodium chloride 0.9% 10 mL vial	4	
SUPPLIES		
1 mL Syringes	4	
3 mL Syringes	2	
10 mL Syringes	2	
18 G/23 G/25 G needles	2 EACH	
Stopcocks 3-Way	2	
Rapidfill Connector	4	
Sodium chloride 0.9% 10 mL PFS	4	
Alcohol Wipes	8	
VCMC Blank Labels	4	

FIRST EXPIRATION DATE: _____ SEAL #: _____

CHECKED BY: _____ ON: _____

RETURN TO PHARMACY FOR REPLACEMENT



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

Origination: 11/13/2019
Effective: Upon Approval
Last Approved: N/A
Last Revised: 11/22/2022
Next Review: 1 year after approval
Owner: Sul Jung: Associate Director of Pharmacy Services
Policy Area: Pharmacy Services
References:

PH.27.00 Hazardous Drug Overview

Purpose:

The Department of Pharmacy Services is responsible for dispensing of hazardous drugs (HDs) for Ventura County Medical Center, Santa Paula Hospital, and Ambulatory Care Campus Clinics. This policy provides an outline of the policies and procedures that the Department of Pharmacy Services will follow in preparation and compounding of sterile drug preparations. Facilities that handle HDs must incorporate USP <800> standards into the occupational safety plan. Ventura County Medical Center Pharmacy policies must, at a minimum, include: a list of HDs, facility and engineering controls, competent personnel, safe work practices, proper use of appropriate personal protective equipment (PPE), policies for HD waste segregation and hazardous waste disposal.

Policy:

- A. The Department of Pharmacy Services shall follow all policies and procedures pertaining to HDs and hazardous drug Compounding to ensure patient and worker safety. The policies are as follows:
 - PH.27.00 Hazardous Drug Overview
 - [PH.27.01 Hazardous Drug Training, and Safety Program](#)
 - [PH.27.02 Hazardous Drug Storage, Handling, Labeling, and Transport](#)
 - [PH.27.03 Hazardous Drug Garbing, and Compounding](#)
 - [PH.27.04 Decontamination, Spill, and Waste Management](#)
- B. Policies, procedures, and forms will be reviewed and revised annually to reflect local, state, and federal regulatory requirements as well as professional practice standards.
- C. The Department of Pharmacy Services shall not compound sterile drug preparations from non-sterile ingredients.
- D. Hazardous Drug policies shall be reviewed at least annually.
- E. Any revisions or deletions to hazardous drug policies shall be communicated to all pharmacy personnel involved in sterile compounding
- F. A list of HDs handled at the pharmacy will be reviewed and revised annually (Attachment A: VCMC-SPH Hazardous Drug List). This review includes an assessment of risk to determine containment strategies and work practices (Attachment B: Hazardous Drug Assessment of Risk, [Attachment C: Hazardous Medication Administrative Guideline](#)).

Reference Documents

United States Pharmacopoeial Convention, Inc. <800> Hazardous Drugs-Handling in Healthcare Settings.

United States Pharmacopeia National Formulary 35. Rockville, MD: US Pharmacopeial Convention, Inc., 2019.

NIOSH. Publication 2004-165. NIOSH Alert: Preventing Occupational Exposure to Antineoplastic and Other Hazardous Drugs in Health Care Settings. Sept 2004. <https://www.cdc.gov/niosh/docs/2004-165/pdfs/2004-165.pdf?id=10.26616/NIOSH PUB2004165> accessed on 9/30/2019.

NIOSH List of Antineoplastic and Other Hazardous Drugs in Healthcare Settings, 2016 from <https://www.cdc.gov/niosh/docs/2016-161/pdfs/2016-161.pdf> accessed on 9/30/2019.

ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2018. from <https://www.ashp.org/-/media/assets/policy-guidelines/docs/guidelines/handling-hazardous-drugs.ashx?la=en&hash=E0DF626948227B0F25CAED1048991E8E391F2007> accessed on 9/30/2019.

Kiffmeyer TK et al. Vapour pressures, evaporation behavior and airborne concentrations of hazardous drugs: implications for occupational safety. The Pharmaceutical Journal. Vol 268 March 2002. 331-7.

All revision dates:

11/22/2022, 11/10/2020, 11/13/2019

Attachments

- Attachment A: VCMC-SPH Hazardous Drug List
- Attachment B: Hazardous Drug Assessment of Risk
- Attachment C: Hazardous Medication Admin Guideline.pdf

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	11/22/2022
Pharmacy Services	Sul Jung: Associate Director of Pharmacy Services	11/22/2022

Antineoplastic Agents NIOSH Group 1			
Abiraterone	Cytarabine	Idarubicin HCL	Pomalidomide
Ado-trastuzumab emtansine	Cytarabine liposome	Ifosfamide	Ponatinib
Afatinib	Dabrafenib	Imatinib mesylate	Pralatrexate
Altretamine	Dacarbazine	Irinotecan HCL	Procarbazine HCL
Amsacrine	Dactinomycin	Ixabepilone	Regorafenib
Anastrozole	Dasatinib	Ixazomib	Romidepsin
Arsenic trioxide	DAUNOrubicin HCL	Letrozole	Sacituzumab govitecan
Axitinib	DAUNOrubicin HCL liposome	Leuprolide acetate	Sorafenib tosylate
Azacitidine	Decitabine	Leuprolide/Norethindrone	Streptozocin
Bacillus Calmette Guerin	Degarelix acetate	Lomustine	Sunitinib malate
Belinostat	Docetaxel	Mechlorethamine HCL	Tamoxifen citrate
Bendamustine	DOXOrubicin HCL	Megestrol acetate	Temozolomide
Bexarotene	DOXOrubicin HCL liposome	Melphalan	Temsirolimus
Bicalutamide	Enfortumab vedotin	Melphalan HCL	Teniposide
Bleomycin sulfate	Enzalutamide	Mercaptopurine	Thioguanine
Bortezomib	Epirubicin HCL	Methotrexate	Thiotepa
Bosutinib	Eribulin mesylate	Methotrexate sodium	Topotecan HCL
Brentuximab vedotin	Erlotinib HCL	Mitomycin	Toremifene citrate
Busulfan	Etoposide	Mitotane	trabectedin
Cabazitaxel	Everolimus	MitoXANTRONE HCL	Trametinib
Cabozantinib	Exemestane	Nelarabine	Trifluridine/tipiracil
Capecitabine	Fam-trastuzumab deruxtecan	Nilotinib HCL	Triptorelin pamoate
Carboplatin	Floxuridine	Oxaliplatin	Valrubicin
Carfilzomib	Fludarabine phosphate	Paclitaxel	Vandetanib
Carmustine	Fluorouracil	Paclitaxel protein-bound	Vemurafenib
Chlorambucil	Flutamide	Panobinostat	VinBLASStine sulfate
Cisplatin	Fulvestrant	Pazopanib HCL	VinCRISStine sulfate
Cladribine	Gemcitabine HCL	Pemetrexed	VinCRISStine sulfate liposome
Clofarabine	Goserelin acetate	Pentostatin	Vinorelbine tartrate
Crizotinib	Histrelin	Pertuzumab	Vismodegib
Cyclophosphamide	Hydroxyurea	polatuzumab vedotin	Vorinostat
*VCMC Formulary	*Restricted Use		

Hazardous Nonantineoplastic Agents NIOSH Group 2			
Abacavir	Esterified estrogens	Lenalidomide	Oxcarbazepine
Alefacept	Estradiol	Levonorgestrel	Palifermin
Apomorphine	Estradiol acetate	Liraglutide	Phenoxybenzamine HCL
Azathioprine	Estradiol cypionate	MedroxyPROGESTERone acetate	Phenytoin
Azathioprine sodium	Estradiol valerate	Mestranol	Progesterone
Carbamazepine	Estrogen-progestin	Methimazole	Propylthiouracil
Chloramphenicol	Estrone	Mipomersen	Raloxifene
Cidofovir	Estropipate	Mycophenolate mofetil	Rasagiline mesylate
Conjugated estrogens	Ethinyl estradiol	Mycophenolate mofetil HCL	Sirolimus
Conjugated estrogens	Ethinodiol diacetate	Mycophenolate sodium	Spirolactone
CycloSPORINE	Etonogestrel	Nevirapine	Tacrolimus
CycloSPORINE, modified	Fingolimod	Norelgestromin	Teriflunomide
Deferiprone	Fluoxymesterone	Norethindrone	Thalidomide
Dexrazoxane HCL	Fosphenytoin	Norethindrone acetate	Tofacitinib
Diethylstilbestrol	Ganciclovir sodium	Norgestimate	Uracil mustard
Divalproex sodium	Hydroxyprogesterone	Norgestrel	Valganciclovir HCL
Entecavir	Leflunomide	Ospemifene	Zidovudine
*VCMC Formulary			

Nonantineoplastic Agents Primarily with Adverse Reproductive Effects NIOSH Group 3			
Acitretin	Ergonovine	Misoprostol	Topiramate
Alitretinoin	Eslicarbazepine	Nafarelin	Tretinoin
Ambrisentan	Finasteride	Oxytocin	Ulipristal
Bosentan	Fluconazole	Pamidronate	Valproate sodium
Cabergoline	Ganirelix	Paroxetine	Valproic acid
Cetrorelix acetate	Gonadotropin, chorionic	Pasireotide	Vigabatrin
Choriogonadotropin	Icatibant	Peginesatide	Voriconazole
Clomiphene	Lomitapide	Pentetate calcium trisodium	Warfarin
Clonazepam	Macitentan	Plerixafor	Ziprasidone
Colchicine	Mentropins	Ribavirin	Zoledronic acid
Dinoprostone	Methylegonovine	Riociguat	Zonisamide
Dronedarone	Methyltestosterone	Temazepam	
Dutasteride	Mifepristone	Testosterone	
*VCMC Formulary			

Assessment of Risk - VCMC/SPH Formulary Drugs

AoR eligible?	Drug Name (generic)	Receiving and transport to storage PPE requirement	Storage	Manipulation/compounding	Pharmacy waste disposal	Finished dosage form storage	Transport to end user	Administration PPE requirement	Decontamination	Disposal	Pregnancy Category	Notes/Comments	NIOSH List Supplemental Information	Rationale for not requiring all 800 containment strategies	Alternative containment strategies and work practices (Pharmacy)	Alternative containment strategies and work practices (Nursing)	References
yes	abacavir tablet	Single glove	Gray Bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. (Mylan)	blue incineration waste	Category C	BBW, https://www.accessdata.fda.gov/drugsatfda_docs/label/2004/20977se7-011_20978se7-019_ziagen_lbl.pdf	Malignant tumors observed in male and female mice and rats. These observations were made at systemic exposures in the range of 6 to 32 times the human exposure at the recommended dose (300 mg twice daily). It is not known how predictive the results of rodent carcinogenicity studies may be for humans. Abacavir induced chromosomal aberrations both in the presence and absence of metabolic activation in an in vitro cytogenetic study in human lymphocytes.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. If crushing tablet, use Silent Knight and wear double gloves tested to ASTM 6978, a protective gown, and respiratory protection. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.	
yes	azathioprine tablet	Single glove	Gray Bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Contain and clean up spillage and place into an appropriate labeled waste disposal container. Avoid generating dust or aerosols. Wash spill surface using appropriate cleaning solutions. (Apotex)	blue incineration waste		BBW, MSHG, https://www.ncbi.nlm.nih.gov/books/NBK304317/ , do not crush http://www.saferx.co.nz/assets/Documents/cdd777f0eb/Crushing-table-RAC.pdf , IARC - https://www.ncbi.nlm.nih.gov/books/NBK304317/ , Report on Carcinogens NIH http://ntp.niehs.nih.gov	IARC Group 1 carcinogen; NTP* MSHG Protect from light.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6: Report on Carcinogens NTP	
yes	carbamazepine susp	Single glove	Gray Bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	Double gloves, gown, eye/face protection(if there is potential for splashing)	Avoid oxidizers	blue incineration waste	Fetal risk has been demonstrated		Black Box warning for aplastic anemia, congenital malformations in offspring of mothers who took drug; rapid transplacental passage No MSHG listed in section 16 of the DPI	<ul style="list-style-type: none"> In the repackaging process, when drawing up for a patient specific syringe, single gloves will be worn. Self-sealing drug dispensing plug to be used to help prevent evaporation, spills and contamination if applicable. If spillage occurs, then deactivate, decontaminate and clean area while wearing single gloves and gown. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 and (if there is a potential for vomit or spit up) a protective gown and eye/face protection while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.	
yes	carbamazepine tablet	Single glove	Gray Bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination.	blue incineration waste	Fetal risk has been demonstrated		Black Box warning for aplastic anemia, congenital malformations in offspring of mothers who took drug; rapid transplacental passage No MSHG listed in section 16 of the DPI	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. If crushing or cutting tablet is required, please contact pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.	
yes	choriogonadotropin	Single glove	refrigerated	NA	Blue incineration waste	refrigerated	hand delivered	Double gloves, gown, eye/face protection(if there is potential for splashing)	Collect material in appropriate container for disposal. Wash spill site with 10% bleach and ventilate area after material pickup is complete		Category X		may cause fetal harm when administered to a pregnant woman Chorionic gonadotropin use in pregnant women is contraindicated, and may cause fetal harm when administered to a pregnant woman. In animal studies, when human chorionic gonadotropin and pregnant mare's serum was given together, high incidences of external congenital anomalies were observed in mice, in a dose-dependent manner; however, the potential extrapolation to humans has not been determined.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.	
no	cidofovir	Single glove	Shelf in negative pressure room	follow USP 800	Trace: Yellow hazardous bin, Bulk: Black RCRA	yellow bin in refrigerator	Hand delivered with 1 pair of chemo glove	Double gloves, gown, eye/face protection(if there is potential for splashing). Administer with closed system drug transfer device if possible.	Collect spill with absorbent material and place in a suitable, properly labeled container for recovery or disposal.	Trace: Yellow hazardous bin, Bulk: Black RCRA	Category C	MSHG	MSHG - "Due to the mutagenic properties of cidofovir, adequate precautions including the use of appropriate safety equipment are recommended for the preparation, administration, and disposal of VISTIDE. The National Institutes of Health presently recommends that such agents be prepared in a Class II laminar flow biological safety cabinet and that personnel preparing drugs of this class wear surgical gloves and a closed front surgical-type gown with knit cuffs"				

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yes	clonazepam susp	Single glove	Baby blue bin with regular inventory	follow USP 800	Blue incineration waste	regular	delivered				Category D		Increased risk of congenital abnormalities when taken in first trimester	Clonazepam is believed to exert an antiseizure and antipanic effect by its ability to enhance the activity of gamma aminobutyric acid (GABA), the major inhibitory neurotransmitter in the central nervous system. All benzodiazepines can be expected to cross the placenta. Teratogenicity with clonazepam has not been confirmed; however, other benzodiazepines have demonstrated increased risk of congenital abnormalities when taken in first trimester. All benzodiazepines can be expected to cross the placenta. Teratogenicity with clonazepam has not been confirmed; however, other benzodiazepines have demonstrated teratogenic potential. In a case series study of 38 pregnant women who used clonazepam for serious panic disorder, maternal and fetal outcomes were positive.	<ul style="list-style-type: none"> When compounding, crush tablets using dedicated Silent Knight and wear double gloves tested to ASTM 6978, a protective gown, and respiratory protection. In the repackaging process, if drawing up for a patient specific syringe, double gloves, gown, and eye/face protection will be worn. Self-sealing drug dispensing plug to be used to help prevent evaporation, spills and contamination if applicable. If spillage occurs, then deactivate, decontaminate and clean area while wearing single gloves and gown. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 and (if there is a potential for vomit or spit up) a protective gown and eye/face protection while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	clonazepam tablet	Single glove	Baby blue bin with regular inventory	follow USP 800	Blue incineration waste	ClI safe	hand delivered	single glove	Sweep up spilled material and place in suitable container.	blue incineration waste	Category D	BBW	Increased risk of congenital abnormalities when taken in first trimester	Clonazepam is believed to exert an antiseizure and antipanic effect by its ability to enhance the activity of gamma aminobutyric acid (GABA), the major inhibitory neurotransmitter in the central nervous system. All benzodiazepines can be expected to cross the placenta. Teratogenicity with clonazepam has not been confirmed; however, other benzodiazepines have demonstrated increased risk of congenital abnormalities when taken in first trimester. All benzodiazepines can be expected to cross the placenta. Teratogenicity with clonazepam has not been confirmed; however, other benzodiazepines have demonstrated teratogenic potential. In a case series study of 38 pregnant women who used clonazepam for serious panic disorder, maternal and fetal outcomes were positive.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. If crushing or cutting tablet is required, please contact pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	colchicine tablet	Single glove	Baby blue bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Sweep up spilled material and place in suitable container.	blue incineration waste	Category C	solution available	Published animal reproduction and development studies indicate it causes fetal toxicity, teratogenicity, and altered postnatal development at exposures within or above the clinical therapeutic range	Colchicine is an antiinflammatory agent effective against gout flares and familial Mediterranean fever. Although animal studies with colchicine have demonstrated embryofetal toxicity and altered postnatal development at exposures within or above the clinical therapeutic range, several decades of published data, including observational studies, case series, and case reports of pregnant women with rheumatoid arthritis, Behcet's disease, or familial Mediterranean fever have shown no increased risk for major birth defects, miscarriage or other adverse maternal or fetal outcomes if colchicine is used during pregnancy.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	cyclosporine capsule	Single glove	Orange Bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Category C	BBW https://ntp.niehs.nih.gov/ntp/oc/content/profiles/cyclosporina.pdf	IARC Group 1 carcinogen; NTP** Cyclosporine, also known as cyclosporin A, is known to be a human carcinogen based on sufficient evidence of carcinogenicity from studies in humans (IARC Group 1 carcinogen; NTP**). Numerous case reports describe cancer (mainly lymphoma, Kaposi sarcoma, or skin cancer) developing in organ-transplant recipients, psoriasis patients, and rheumatoid arthritis patients treated with cyclosporin A as an immunosuppressive agent. The most likely explanation for the increased incidence of tumors in patients treated with cyclosporin A is immune suppression (Ryffel 1992)	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection Do not open capsule. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6: Report on Carcinogens NTP	
yes	cyclosporine suspension	Single glove	Orange Bin with regular inventory	Risk Assessment	Blue incineration waste	patient cassette	Pneumatic tube	Double gloves, gown, eye/face protection (if there is potential for splashing)	Absorb with an inert material. Clean area thoroughly. Avoid oxidizing agent.	blue incineration waste	Category C	BBW https://ntp.niehs.nih.gov/ntp/oc/content/profiles/cyclosporina.pdf	IARC Group 1 carcinogen; NTP** Cyclosporine, also known as cyclosporin A, is known to be a human carcinogen based on sufficient evidence of carcinogenicity from studies in humans (IARC Group 1 carcinogen; NTP**). Numerous case reports describe cancer (mainly lymphoma, Kaposi sarcoma, or skin cancer) developing in organ-transplant recipients, psoriasis patients, and rheumatoid arthritis patients treated with cyclosporin A as an immunosuppressive agent. The most likely explanation for the increased incidence of tumors in patients treated with cyclosporin A is immune suppression (Ryffel 1992)	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6: Report on Carcinogens NTP	
yes	cyclosporine IV	Single glove	Orange Bin with regular inventory	Risk Assessment	Blue incineration waste	patient cassette	Pneumatic tube	Double gloves, gown, eye/face protection (if there is potential for splashing). Administer with closed system drug transfer device.	Absorb with an inert material. Clean area thoroughly. Avoid oxidizing agent.	blue incineration waste	Category C	https://ntp.niehs.nih.gov/ntp/oc/content/profiles/cyclosporina.pdf	IARC Group 1 carcinogen; NTP** Cyclosporine, also known as cyclosporin A, is known to be a human carcinogen based on sufficient evidence of carcinogenicity from studies in humans (IARC Group 1 carcinogen; NTP**). Numerous case reports describe cancer (mainly lymphoma, Kaposi sarcoma, or skin cancer) developing in organ-transplant recipients, psoriasis patients, and rheumatoid arthritis patients treated with cyclosporin A as an immunosuppressive agent. The most likely explanation for the increased incidence of tumors in patients treated with cyclosporin A is immune suppression (Ryffel 1992)	<ul style="list-style-type: none"> Follow Standard Operating Procedures for proper behavior in the sterile compounding area and aseptic technique. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering, maintaining or discontinuing IV lines. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6: Report on Carcinogens NTP	
no	dexrazoxane IV	Single glove	Shelf in negative pressure room	follow USP 800	Trace: Yellow hazardous bin, Bulk: Black RCRA	yellow bin in refrigerator	Hand delivered with 1 pair of chemo glove	Double gloves, gown, eye/face protection (if there is potential for splashing)	Absorb spill with absorbent material and place in an impervious container (Alvogon). A damp cloth or a filtered vacuum should be used to clean spills of dry solid (Pfizer)	Trace: Yellow hazardous bin, Bulk: Black RCRA	Fetal risk cannot be ruled out	NDC: 51991-942-98, MSHG	Secondary malignancies observed in patients treated long term with Razoxane (a racemic mixture containing dexrazoxane); genotoxic in vitro and in vivo; in laboratory studies, testicular atrophy observed at or below the human dose				

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yes	dinoprostone	Single glove	regular	NA	Blue incineration waste	freezer	Pneumatic tube	double gloves, gown	Collect spilled material by a method that controls dust generation. A damp cloth or a filtered vacuum should be used to clean spills of dry solids.	blue incineration waste	Fetal risk cannot be ruled out.	BBW	Hazardous only for women in late pregnancy	Dinoprostone is a synthetic prostaglandin E2 (PGE2) analogue with smooth muscle contraction inducing property. PGE2 is the most common and most biologically active of the mammalian prostaglandins. Dinoprostone (Cervidil) is formulated as a vaginal insert that is controlled release up to 12 hours. It is hazardous only for women in late pregnancy.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	divalproex tablet/capsule	Single glove	Orange Bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Category X	BBW	Black Box warning for teratogenicity; FDA Pregnancy Category D; tumors seen in laboratory studies at doses below MRHD	Divaproex sodium is an antiepileptic compound that dissociates into sodium valproate and valproic acid in the gastrointestinal tract. There is a Black Box warning for teratogenicity, congenital malformations, including neural tube defects, and teratogenic in multiple species. The greatest risk for malformations is during the first trimester. The risk is dose-dependent; however, a threshold dose below which no risk exists has not been determined.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet or open capsule. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	estradiol tablet	Single glove	Orange Bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Fetal risk has been demonstrated	BBW	Black Box warning for malignant neoplasms; increased risk of endometrial cancer, breast cancer, and ovarian cancer; in laboratory studies, increased frequency of carcinomas of the breast, uterus, cervix, vagina, testis, and liver; present in breast milk	Under normal conditions, the ovaries produce estrogens in response to pituitary hormones. Estradiol is the main naturally occurring estrogen. Estradiol has a Black Box warning for malignant neoplasms and increased risk of endometrial cancer, breast cancer, and ovarian cancer with long-term continuous administration of estrogen. Laboratory studies showed increased frequency of carcinomas of the breast, uterus, cervix, vagina, testis, and liver with long term continuous administration of natural and synthetic estrogens. Literature reports estrogens are excreted into breast milk in small quantities and have not been associated with adverse effects in the nursing infant.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	estradiol valerate IM	Single glove	Orange Bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	pneumatic tube	Double gloves, gown, eye/face protection(if there is potential for splashing).	Contain and collect with an inert absorbent material. Place in appropriate container for disposal. Clean area thoroughly.	blue incineration waste	Fetal risk has been demonstrated		Black Box warning for malignant neoplasms; increased risk of endometrial cancer, breast cancer, and ovarian cancer; in laboratory studies, increased frequency of carcinomas of the breast, uterus, cervix, vagina, testis, and liver; present in breast milk	Under normal conditions, the ovaries produce estrogens in response to pituitary hormones. Estradiol is the main naturally occurring estrogen. Estradiol has a Black Box warning for malignant neoplasms and increased risk of endometrial cancer, breast cancer, and ovarian cancer with long-term continuous administration of estrogen. Laboratory studies showed increased frequency of carcinomas of the breast, uterus, cervix, vagina, testis, and liver with long term continuous administration of natural and synthetic estrogens. Literature reports estrogens are excreted into breast milk in small quantities and have not been associated with adverse effects in the nursing infant.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	estrogen/progestrone combinations	Single glove	Orange Bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination.	blue incineration waste	Category X		Combined oral contraceptives act to prevent pregnancy by suppressing gonadotropins, thereby primarily inhibiting ovulation. There is no firm evidence linking oral contraceptives with any fetal anomalies except masculinization of the female external genitalia. Exposure after 8 weeks of gestation would presumably be required for this effect to occur.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6: Report on Carcinogens NTP	
yes	estrogens, conjugated inj	Single glove	Orange Bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	Hand delivered with 1 pair of chemo glove	Double gloves, gown, eye/face protection(if there is potential for splashing).	Contain and collect with an inert absorbent material. Place in appropriate container for disposal. Clean area thoroughly.	blue incineration waste	Category X		Black Box warning for endometrial cancer and cardiovascular risks; long-term use in women increases the frequency of several cancers; NTP**	Conjugated estrogens are a noncrystalline mixture containing naturally occurring forms of mixed estrogens. Steroidal estrogens are known to be human carcinogens based on sufficient evidence of carcinogenicity in humans (NTP**). There is a Black Box warning for endometrial cancer and cardiovascular risks. Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, uterus, cervix, vagina, testis, and liver. IARC (1999) reported that an increased risk of endometrial cancer was associated with increasing duration of estrogen therapy, as well as a small increased risk of breast cancer.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering, maintaining or discontinuing IV lines. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6: Report on Carcinogens NTP
yes	estrogens, conjugated tablet	Single glove	Orange Bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination.	blue incineration waste	Category X		Black Box warning for endometrial cancer and cardiovascular risks; long-term use in women increases the frequency of several cancers; NTP**	Conjugated estrogens are a noncrystalline mixture containing naturally occurring forms of mixed estrogens. Steroidal estrogens are known to be human carcinogens based on sufficient evidence of carcinogenicity in humans (NTP**). There is a Black Box warning for endometrial cancer and cardiovascular risks. Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, uterus, cervix, vagina, testis, and liver. IARC (1999) reported that an increased risk of endometrial cancer was associated with increasing duration of estrogen therapy, as well as a small increased risk of breast cancer.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6: Report on Carcinogens NTP

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AoR eligible?	Drug Name (generic)	Receiving and transport to storage PPE requirement	Storage	Manipulation/compounding	Pharmacy waste disposal	Finished dosage form storage	Transport to end user	Administration PPE requirement	Decontamination	Disposal	Pregnancy Category	Notes/Comments	NIOSH List Supplemental Information	Rationale for not requiring all 800 containment strategies	Alternative containment strategies and work practices (Pharmacy)	Alternative containment strategies and work practices (Nursing)	References
yes	estrogens, conjugated vaginal	Single glove	Orange Bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	Double gloves, gown, eye/face protection(if there is potential for splashing).	Soak up with inert absorbent material.	blue incineration waste	Category X		Black Box warning for endometrial cancer and cardiovascular risks; long-term use in women increases the frequency of several cancers; NTP**	Conjugated estrogens are a noncrystalline mixture containing naturally occurring forms of mixed estrogens. Steroidal estrogens are known to be human carcinogens based on sufficient evidence of carcinogenicity in humans (NTP**). There is a Black Box warning for endometrial cancer and cardiovascular risks. Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, uterus, cervix, vagina, testis, and liver. IARC (1999) reported that an increased risk of endometrial cancer was associated with increasing duration of estrogen therapy, as well as a small increased risk of breast cancer.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 and (if there is a potential for contact) a protective gown and eye/face protection while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6: Report on Carcinogens NTP
yes	finasteride tablet	Single glove	Baby blue bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dispersal of dust in the air.	blue incineration waste	Category X		women should not handle crushed or broken finasteride tablets when they are pregnant or may potentially be pregnant, due to potential risk to a male fetus	Finasteride inhibits an enzyme that metabolizes testosterone to dihydrotestosterone. Testosterone itself is responsible for virilization of the Wolffian duct system into the epididymis, vas deferens, and seminal vesicle, whereas the testosterone metabolite dihydrotestosterone induces development of the prostate and male external genitalia. Women should not handle crushed or broken finasteride tablets when they are pregnant or may potentially be pregnant, due to potential risk to a male fetus. Drug-gene network analysis demonstrated that finasteride could disrupt the pathways associated with sex hormone signaling and oocyte maturation.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	fluconazole IV	Single glove	regular	Risk Assessment		pyxis	Pneumatic tube	Double gloves, gown, eye/face protection(if there is potential for splashing)	For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. Wash area with soap and water (Sagent	blue incineration waste	Category C	Premixed solutions may be excluded from some hazardous drug handling requirements. potential occupational hazard to men and women actively trying to conceive and women who are pregnant or may become pregnant, and are breast feeding, due to presence of the drug in breast milk	Case reports describe congenital anomalies in infants exposed in utero to maternal fluconazole (400–800 mg/day) during most or all of the first trimester, similar to those seen in animal studies	Fluconazole is an antifungal agent that inhibits fungal cell membrane formation and is used to treat candidiasis. Case reports describe congenital anomalies in infants exposed in utero to maternal fluconazole (400–800 mg/day) during most or all of the first trimester.	<ul style="list-style-type: none"> Follow Standard Operating Procedures for proper behavior in the sterile compounding area and aseptic technique. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering, maintaining or discontinuing IV lines. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	fluconazole suspension	Single glove	Baby blue bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Fetal risk cannot be ruled out		Case reports describe congenital anomalies in infants exposed in utero to maternal fluconazole (400–800 mg/day) during most or all of the first trimester, similar to those seen in animal studies	Fluconazole is an antifungal agent that inhibits fungal cell membrane formation and is used to treat candidiasis. Case reports describe congenital anomalies in infants exposed in utero to maternal fluconazole (400–800 mg/day) during most or all of the first trimester. Epidemiological studies suggest a potential risk of spontaneous abortion and congenital abnormalities in infants whose mothers were treated with 150 mg of fluconazole as a single or repeated dose in the first trimester.	<ul style="list-style-type: none"> In the repackaging process, when drawing up for a patient specific syringe, single gloves will be worn. Self-sealing drug dispensing plug to be used to help prevent evaporation, spills and contamination if applicable. If spillage occurs, then deactivate, decontaminate and clean area while wearing single gloves and gown. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	fluconazole tablet	Single glove	Baby blue bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Fetal risk cannot be ruled out		Case reports describe congenital anomalies in infants exposed in utero to maternal fluconazole (400–800 mg/day) during most or all of the first trimester, similar to those seen in animal studies	Fluconazole is an antifungal agent that inhibits fungal cell membrane formation and is used to treat candidiasis. Case reports describe congenital anomalies in infants exposed in utero to maternal fluconazole (400–800 mg/day) during most or all of the first trimester. Epidemiological studies suggest a potential risk of spontaneous abortion and congenital abnormalities in infants whose mothers were treated with 150 mg of fluconazole as a single or repeated dose in the first trimester.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	fosphenytoin IV	Single glove	Orange Bin with regular inventory	Risk Assessment	Blue incineration waste	patient cassette	Pneumatic tube	Double gloves, gown, eye/face protection(if there is potential for splashing).	Absorb with an inert dry material and place in an appropriate waste disposal container.	blue incineration waste	Fetal risk cannot be ruled out	BBW	Metabolized to phenytoin: IARC Group 2B; NTP***	Fosphenytoin is metabolized to phenytoin. Phenytoin and its sodium salt have a IARC Group 2B; NTP*** classification meaning it is reasonably anticipated to be human carcinogens based on sufficient evidence from studies in experimental animals. Phenytoin as its sodium salt caused lymphoma and leukemia in mice by two different routes of exposure (liquid and intraperitoneal injection). The data available from epidemiological studies are inadequate to evaluate the relationship between human cancer and exposure specifically to phenytoin.	<ul style="list-style-type: none"> Follow Standard Operating Procedures for proper behavior in the sterile compounding area and aseptic technique. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering, maintaining or discontinuing IV lines. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6: Report on Carcinogens NTP
no	ganciclovir IV	Single glove	Shelf in negative pressure room	follow USP 800	Trace: Yellow hazardous bin, Bulk: Black RCRA	hazardous drug transfer cart	Hand delivered with 1 pair of chemo glove	Double gloves, gown, eye/face protection(if there is potential for splashing)	collect solids (avoid dust formation) and hand over to waste removal (genentech)	Trace: Yellow hazardous bin, Bulk: Black RCRA	Category C	MSHG, BBW	MSHG - "Handle and dispose valganciclovir tablets according to guidelines for antineoplastic drugs because ganciclovir shares some of the properties of antitumor agents"				

Assessment of Risk - VCMC/SPH Formulary Drugs

AoR eligible?	Drug Name (generic)	Receiving and transport to storage PPE requirement	Storage	Manipulation/compounding	Pharmacy waste disposal	Finished dosage form storage	Transport to end user	Administration PPE requirement	Decontamination	Disposal	Pregnancy Category	Notes/Comments	NIOSH List Supplemental Information	Rationale for not requiring all 800 containment strategies	Alternative containment strategies and work practices (Pharmacy)	Alternative containment strategies and work practices (Nursing)	References
yes	gonadotropin, chorionic IM	Single glove	regular/segregated	Risk Assessment		refrigerated	Pneumatic tube	Double gloves, gown, eye/face protection (if there is potential for splashing)	Collect material in appropriate container for disposal. Ventilate area and wash spilled site after material pick up.	blue incineration waste	Category C		Defects of forelimbs and central nervous system and alterations in sex ratio have been reported in laboratory studies	Chorionic gonadotropin is an analog of human luteinizing hormone and is used to stimulate production of gonadal steroid hormones in males and to stimulate ovulation in females. Luteinizing hormone is normally produced in the pituitary gland and human chorionic gonadotropin is produced by the human placenta. Exposure to chorionic gonadotropin showed defects of forelimbs and central nervous system and alterations in sex ratio. These defects were reported in mice receiving combined gonadotropin and chorionic gonadotropin therapy in dosages to induce superovulation.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	medroxyprogesterone acetate IM	Single glove	Orange Bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	Pneumatic tube	Double gloves, gown, eye/face protection (if there is potential for splashing)	Collect spill with absorbent material. Clean spill area thoroughly with water.	blue incineration waste	Category X	MSHG- Vials MUST be stored upright	IARC Group 2B	<p>Progesterone is a naturally occurring steroidal hormone found in a wide variety of tissues and biological fluids. It is secreted by the ovary in normal adult cycling female mammals, by the placenta in pregnant females, and by the adrenal cortex. It is essential for the normal functioning of the uterine lining, for the development of mammary glands, and for support of pregnancy through childbirth.</p> <p>Medroxyprogesterone has an IARC Group 2B classification meaning it is reasonably anticipated to be a human carcinogen based on sufficient evidence of carcinogenicity from studies in experimental animals. Long-term intramuscular administration of medroxyprogesterone has been shown to produce mammary tumors in beagle dogs. Medroxyprogesterone acetate was not mutagenic in a battery of in vitro or in vivo genetic toxicity assays.</p> <p>MSHG Vials MUST be stored upright at controlled room temperature.</p>	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. Vials MUST be stored upright at controlled room temperature. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6. Report on Carcinogens NTP
yes	medroxyprogesterone acetate tablet	Single glove	Gray Bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Category X	MSHG	IARC Group 2B	<p>Medroxyprogesterone is a derivative of progesterone, which is a naturally occurring steroidal hormone found in a wide variety of tissues and biological fluids. It is secreted by the ovary in normal adult cycling female mammals, by the placenta in pregnant females, and by the adrenal cortex. It is essential for the normal functioning of the uterine lining, for the development of mammary glands, and for support of pregnancy through childbirth.</p> <p>Medroxyprogesterone has an IARC Group 2B classification meaning it is reasonably anticipated to be a human carcinogen based on sufficient evidence of carcinogenicity from studies in experimental animals. However, there was no evidence of a carcinogenic effect associated with the oral administration of PROVERA to rats and mice. Medroxyprogesterone acetate was not mutagenic in a battery of in vitro or in vivo genetic toxicity assays.</p>	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6. Report on Carcinogens NTP
yes	methimazole tablet	Single glove	Gray Bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Category D		Appears in human breast milk	Methimazole appears in human breast milk. However, in several studies, there were no effects on breastfed infants of mothers taking methimazole.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	methylergonovine inj	Single glove	regular/segregated	Risk Assessment		regular/segregated	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Category C	straight draw	Use is contraindicated during pregnancy because of its uterotonic effects	Methylergonovine acts by directly stimulating contractions of uterine and vascular smooth muscle. The uterotonic effect of methylergonovine maleate is utilized after delivery to assist involution and decrease hemorrhage, shortening the third stage of labor. Animal reproductive studies have not been conducted with methylergonovine so it is not known whether methylergonovine maleate can cause fetal harm or can affect reproductive capacity.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	misoprostol 25 mcg tablet	Single glove	Baby blue bin with regular inventory	follow USP 800	Blue incineration waste	Baby blue bin with regular inventory	Pneumatic tube	single glove for intact tablets	A damp cloth or a filtered vacuum should be used to clean spills of dry solids. Clean spill area thoroughly.	Blue incineration waste except medications on P or U List	Category X	BBW		<p>Misoprostol is a synthetic prostaglandin E1 analogue and used off-label depending on the dose for labor induction or cervical ripening, treatment of incomplete or missed abortion, and postpartum hemorrhage. Misoprostol administration to women who are pregnant can cause birth defects, abortion, premature birth, or uterine rupture. Uterine rupture has been reported when misoprostol was administered in pregnant women to induce labor or to induce abortion. Congenital anomalies following first trimester exposure have been reported, including skull defects, cranial nerve palsies, facial malformations, and limb defects. Misoprostol may produce uterine contractions; fetal death, uterine perforation, and abortion may occur.</p>	<ul style="list-style-type: none"> When cutting tablets, use dedicated pill cutter and tray and wear double gloves tested to ASTM 6978, a protective gown, and respiratory protection. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.

Assessment of Risk - VCMC/SPH Formulary Drugs

AoR eligible?	Drug Name (generic)	Receiving and transport to storage PPE requirement	Storage	Manipulation/compounding	Pharmacy waste disposal	Finished dosage form storage	Transport to end user	Administration PPE requirement	Decontamination	Disposal	Pregnancy Category	Notes/Comments	NIOSH List Supplemental Information	Rationale for not requiring all 800 containment strategies	Alternative containment strategies and work practices (Pharmacy)	Alternative containment strategies and work practices (Nursing)	References
yes	misoprostol tablet	Single glove	Baby blue bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	Pneumatic tube	single glove	A damp cloth or a filtered vacuum should be used to clean spills of dry solids. Clean spill area thoroughly.	blue incineration waste	Category X	BBW		Misoprostol is a synthetic prostaglandin E1 analogue and used off-label depending on the dose for labor induction or cervical ripening, treatment of incomplete or missed abortion, and postpartum hemorrhage. Misoprostol administration to women who are pregnant can cause birth defects, abortion, premature birth, or uterine rupture. Uterine rupture has been reported when misoprostol was administered in pregnant women to induce labor or to induce abortion. Congenital anomalies following first trimester exposure have been reported, including skull defects, cranial nerve palsies, facial malformations, and limb defects. Misoprostol may produce uterine contractions; fetal death, uterine perforation, and abortion may occur.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5. DOI: 10.1016/j.reprotox.2006.03.015
yes	mycophenolate mofetil tablet	Single glove	Orange Bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Fetal risk has been demonstrated	BBW	Black Box warning for embryo fetal toxicity, malignancies, and serious infections; increased risk of first-trimester pregnancy loss and increased risk of congenital malformations; Special warning: Tablets should not be crushed and capsules should not be opened or crushed. Avoid inhalation or direct contact with skin or mucous membranes of the powder contained in capsules and oral suspension (before or after constitution). If such contact occurs, wash thoroughly with soap and water; rinse eyes with plain water.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.	
yes	nevirapine susp	Single glove	Gray Bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Avoid oxidizers.	blue incineration waste	Fetal risk cannot be ruled out	BBW	In laboratory studies, hepatocellular adenomas and carcinomas were seen at doses lower than human dose	<ul style="list-style-type: none"> In laboratory studies, hepatocellular adenomas and carcinomas were seen at doses lower than human dose. Long-term carcinogenicity studies in mice and rats were carried out with nevirapine. Mice were dosed with 0, 50, 375 or 750 mg/kg/day for two years. Hepatocellular adenomas and carcinomas were increased at all doses in males and at the two high doses in females. The mechanism of the carcinogenic potential is unknown. Given the lack of genotoxic activity of nevirapine, the relevance to humans of hepatocellular neoplasms in nevirapine treated mice and rats is not known. However, in genetic toxicology assays, nevirapine showed no evidence of mutagenic or clastogenic activity in a battery of in vitro and in vivo studies. In the repackaging process, when drawing up for a patient specific syringe, double gloves, gown, and eye/face protection will be worn. Self-sealing drug dispensing plug to be used to help prevent evaporation, spills and contamination if applicable. If spillage occurs, then deactivate, decontaminate and clean area while wearing single gloves and gown. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 and (if there is a potential for vomit or spit up) a protective gown and eye/face protection while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.	
yes	nevirapine tablet	Single glove	Orange Bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Fetal risk cannot be ruled out	BBW, suspension available	In laboratory studies, hepatocellular adenomas and carcinomas were seen at doses lower than human dose	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.	
yes	oxcarbazepine tablet	Single glove	Gray Bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Fetal risk cannot be ruled out	suspension available	Tumors observed in laboratory studies at 1/10 the maximum recommended human dose (PI)	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.	
yes	oxytocin IV	Single glove	Baby blue bin with regular inventory	Risk Assessment	Blue incineration waste	Transfer cart or pass thru fridge	Pneumatic tube	single gloves	Vacuum spillage with a vacuum cleaner having a high efficiency particulate (HEPA) filter, or absorb liquid with clay absorbent, absorbent pads or paper towels. Wipe working surfaces to dryness, and then wash with soap and water.	blue incineration waste	Category C	BBW	Hazardous only for women in third trimester	<ul style="list-style-type: none"> Oxytocin is a human peptide hormone and neuropeptide that is used as a medication to facilitate childbirth. Oxytocin is normally produced in the hypothalamus and release by the pituitary. Oxytocin plays an important role in stimulating cervical dilation as well as stimulating uterine contractions in the 2nd and 3rd stages of labor. Exposure to oxytocin is believed to pose a risk to women in their third trimester of pregnancy relative to the risk of stimulating uterine contractions which may result in early labor. Receive the compounded units from FDA Registered 503B Outsourcing Facility When compounded units not available, follow Standard Operating Procedures for proper behavior in the sterile compounding area and aseptic technique. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering, maintaining or discontinuing IV lines. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.	

Assessment of Risk - VCMC/SPH Formulary Drugs

AoR eligible?	Drug Name (generic)	Receiving and transport to storage PPE requirement	Storage	Manipulation/compounding	Pharmacy waste disposal	Finished dosage form storage	Transport to end user	Administration PPE requirement	Decontamination	Disposal	Pregnancy Category	Notes/Comments	NIOSH List Supplemental Information	Rationale for not requiring all 800 containment strategies	Alternative containment strategies and work practices (Pharmacy)	Alternative containment strategies and work practices (Nursing)	References
yes	pamidronate IV	Single glove	Baby blue bin with regular inventory	Risk Assessment	Blue incineration waste	refrigerated regular	Pneumatic tube	Double gloves, gown, eye/face protection (if there is potential for splashing)	Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Spills: Soak up with inert absorbent material (mylan)	blue incineration waste	Category D		Embryo-fetal toxicities at doses below the recommended human dose	Pamidronate is a bisphosphonate that inhibits bone resorption via actions on osteoclasts or on osteoclast precursors and indicated for treating hypercalcemia, Paget's disease, and osteolytic bone lesions of multiple myeloma. Bisphosphonates are poorly absorbed following oral administration, and intravenous therapy has been preferred. Exposure to pamidronate is believed to pose a risk to embryo-fetus. Literature reports in which pamidronate has been taken by pregnant women and women of childbearing age reported lack of increase in the frequency of malformation and effects on the newborn that were transient (if any were observed).	<ul style="list-style-type: none"> Follow Standard Operating Procedures for proper behavior in the sterile compounding area and aseptic technique. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering, maintaining or discontinuing IV lines. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>
yes	paroxetine tablet	Single glove	Baby blue bin with regular inventory	NA		regular	Pneumatic tube	single glove for intact tablets	Recover product and place in an appropriate container for disposal.		Fetal risk has been demonstrated		Increased risk of congenital abnormalities when taken in first trimester; complications in pregnancy when taken in third trimester	Paroxetine can cause fetal harm when used during pregnancy. In epidemiological studies, first-trimester exposure to paroxetine was associated with an increased risk of congenital malformations, particularly cardiovascular malformations. Complications in pregnancy were reported when taken in the third trimester.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>
yes	pasireotide SubQ	Single glove	Baby blue bin with regular inventory	Risk Assessment		regular	Pneumatic tube	Double gloves, gown, eye/face protection (if there is potential for splashing)	Clean up the rest with absorbent material and discharge properly.	blue incineration waste		For pancreatic resection. To prevent leakage induced mortality.	Increased implantation loss and decreased viable fetuses, corpora lutea, and implantation sites at doses less than the human recommended dose	Pasireotide is a somatostatin analog, which is a peptide inhibitor of multiple endocrine, neuroendocrine, and exocrine mechanisms. In the hypothalamus, it regulates the secretion of hormones coming from the pituitary gland, including growth hormone and thyroid stimulating hormone. Rat studies showed increased implantation loss and decreased viable fetuses, corpora lutea, and implantation sites at doses less than the human recommended dose.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>
yes	phenytoin IV	Single glove	Gray Bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	Pneumatic tube	Double gloves, gown, eye/face protection (if there is potential for splashing)	Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth.	blue incineration waste	Fetal risk cannot be ruled out	BBW	IARC Group 2B; NTP***	Phenytoin and its sodium salt have a IARC Group 2B; NTP*** classification meaning it is reasonably anticipated to be human carcinogens based on sufficient evidence from studies in experimental animals. Phenytoin as its sodium salt caused lymphoma and leukemia in mice by two different routes of exposure (liquid and intraperitoneal injection). The data available from epidemiological studies are inadequate to evaluate the relationship between human cancer and exposure specifically to phenytoin.	<ul style="list-style-type: none"> Follow Standard Operating Procedures for proper behavior in the sterile compounding area and aseptic technique. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering, maintaining or discontinuing IV lines. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6. Report on Carcinogens NTP
yes	phenytoin susp	Single glove	Gray Bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	Double gloves, gown, eye/face protection (if there is potential for splashing)	The spill area should be ventilated and decontaminated after material has been picked up.	blue incineration waste	Fetal risk cannot be ruled out		IARC Group 2B; NTP***	Phenytoin and its sodium salt have a IARC Group 2B; NTP*** classification meaning it is reasonably anticipated to be human carcinogens based on sufficient evidence from studies in experimental animals. Phenytoin as its sodium salt caused lymphoma and leukemia in mice by two different routes of exposure (liquid and intraperitoneal injection). The data available from epidemiological studies are inadequate to evaluate the relationship between human cancer and exposure specifically to phenytoin.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. In the repackaging process, if drawing up for a patient specific syringe, double gloves, gown, and eye/face protection will be worn. Self-sealing drug dispensing plug to be used to help prevent evaporation, spills and contamination if applicable. If spillage occurs, then deactivate, decontaminate and clean area while wearing single gloves and gown. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 and (if there is a potential for vomit or spit up) a protective gown and eye/face protection while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6. Report on Carcinogens NTP
yes	phenytoin tablet	Single glove	Gray Bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Category D		IARC Group 2B; NTP***	Phenytoin and its sodium salt have a IARC Group 2B; NTP*** classification meaning it is reasonably anticipated to be human carcinogens based on sufficient evidence from studies in experimental animals. Phenytoin as its sodium salt caused lymphoma and leukemia in mice by two different routes of exposure (liquid and intraperitoneal injection). The data available from epidemiological studies are inadequate to evaluate the relationship between human cancer and exposure specifically to phenytoin.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6. Report on Carcinogens NTP
yes	progestins (levonorgestrel) IUD	Single glove	Gray Bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	Double gloving and a protective gown are recommended for administration	Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water.	blue incineration waste	Fetal risk has been demonstrated			Levonorgestrel is contraindicated during pregnancy. If pregnancy occurs with a levonorgestrel intrauterine in place, there is an increased risk of ectopic pregnancy, including loss of fertility, miscarriage, septic abortion (including septicemia, shock and death), and premature labor and delivery. Studies to date have not found a significant increase in adverse effects with long-term use of oral progestin contraceptives; however, several cases of masculinization of the external genitalia of the female fetus have been reported following exposure to progestins with doses higher than those used for oral contraception.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>
yes	progestins (levonorgestrel) tablet	Single glove	Gray Bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Category X			Levonorgestrel is contraindicated during pregnancy. If pregnancy occurs with a levonorgestrel intrauterine in place, there is an increased risk of ectopic pregnancy, including loss of fertility, miscarriage, septic abortion (including septicemia, shock and death), and premature labor and delivery. Studies to date have not found a significant increase in adverse effects with long-term use of oral progestin contraceptives; however, several cases of masculinization of the external genitalia of the female fetus have been reported following exposure to progestins with doses higher than those used for oral contraception.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>

Assessment of Risk - VCMC/SPH Formulary Drugs

AoR eligible?	Drug Name (generic)	Receiving and transport to storage PPE requirement	Storage	Manipulation/compounding	Pharmacy waste disposal	Finished dosage form storage	Transport to end user	Administration PPE requirement	Decontamination	Disposal	Pregnancy Category	Notes/Comments	NIOSH List Supplemental Information	Rationale for not requiring all 800 containment strategies	Alternative containment strategies and work practices (Pharmacy)	Alternative containment strategies and work practices (Nursing)	References
yes	propylthiouracil tablet	Single glove	Gray Bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Category D		IARC Group 2B; NTP***	Propylthiouracil has a IARC Group 2 B classification meaning it is reasonably anticipated to be a human carcinogen based on sufficient evidence of carcinogenicity from studies in experimental animals. Oral exposure to propylthiouracil caused benign or malignant thyroid tumors (follicular-cell adenoma or carcinoma) in four species of rodents.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6: Report on Carcinogens NTP
yes	spironolactone syrup	Single glove	Gray Bin with regular inventory	follow USP 800	Blue incineration waste	regular	Pneumatic tube			blue incineration waste	Category C		Black Box warning for tumorogenicity in laboratory studies	Exposure to spironolactone has a warning for tumorogenicity in laboratory studies. The initial toxicity data was on potassium canrenoate, an aldosterone antagonist structurally related to spironolactone. Although high doses of potassium canrenoate caused monomyelocytic leukemia in rats, concerns of tumorogenicity should not be extrapolated to humans. From a scientific point this policy is questionable because the major pathway of the metabolism of spironolactone is not via canrenone or canrenoate, but through pathways that retain the sulfur moiety.	<ul style="list-style-type: none"> When compounding, crush tablets using dedicated Silent Knight and wear double gloves tested to ASTM 6978, a protective gown, and respiratory protection. In the repackaging process, if drawing up for a patient specific syringe, double gloves, gown, and eye/face protection will be worn. Self-sealing drug dispensing plug to be used to help prevent evaporation, spills and contamination if applicable. If spillage occurs, then deactivate, decontaminate and clean area while wearing single gloves and gown. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 and (if there is a potential for vomit or spit up) a protective gown and eye/face protection while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	spironolactone tablet	Single glove	Gray Bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Category C		Black Box warning for tumorogenicity in laboratory studies	Exposure to spironolactone has a warning for tumorogenicity in laboratory studies. The initial toxicity data was on potassium canrenoate, an aldosterone antagonist structurally related to spironolactone. Although high doses of potassium canrenoate caused monomyelocytic leukemia in rats, concerns of tumorogenicity should not be extrapolated to humans. From a scientific point this policy is questionable because the major pathway of the metabolism of spironolactone is not via canrenone or canrenoate, but through pathways that retain the sulfur moiety.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	tacrolimus capsule	Single glove	Gray Bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Category C	BBW	Increased risk of lymphomas and other malignancies; reproductive effects seen in laboratory studies below the MRHD; excreted in breast milk	Patients receiving immunosuppressants, including tacrolimus, are at increased risk of developing lymphomas and other malignancies, particularly of the skin. The risk appears to be related to the intensity and duration of immunosuppression rather than to the use of any specific agent. Reproductive effects were seen in laboratory studies below the maximum recommended human dose (MRHD). Tacrolimus is also excreted in breast milk.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 while administering medication. Do not open capsule. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	temazepam capsule	Single glove	Baby blue bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	hand delivered	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Category X		Increased risk of congenital malformations associated with treatment during the first trimester of pregnancy	Temazepam, a minor metabolite of diazepam, is a hypnotic agent belonging to the benzodiazepine class. Teratogenicity with temazepam has not been confirmed; however, other benzodiazepines have demonstrated teratogenic potential. An increased risk of congenital malformations associated with the use of diazepam and chlorthalidopoxide during the first trimester of pregnancy has been suggested in several studies.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not open capsule. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	testosterone IM	Single glove	regular/segregated	Risk Assessment		regular/segregated	Pneumatic tube	Double gloving and a protective gown	Soak up with inert absorbent material.	blue incineration waste	Category X		Children should avoid contact with unwashed or unclothed application sites on skin; FDA Pregnancy Category X	Testosterone is an endogenous androgen and is produced in different levels by males and females. Androgens are responsible for normal growth and development of male sex organs and maintenance of secondary sex characteristics. It is recommended that children and women should avoid contact with unwashed or unclothed application site. Exposure of a female fetus to testosterone may result in varying degrees of virilization. Decreased fertility has been noted in some men receiving testosterone replacement therapy.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	topiramate susp	Single glove	Baby blue bin with regular inventory	follow USP 800	Blue incineration waste	regular	Pneumatic tube			blue incineration waste	Fetal risk has been demonstrated		FDA Pregnancy Category D	Topiramate can cause fetal harm when administered to a pregnant woman. Data from pregnancy registries indicate that infants exposed to topiramate in utero have an increased risk for cleft lip and/or cleft palate (oral clefts).	<ul style="list-style-type: none"> When compounding, crush tablets using dedicated Silent Knight and wear double gloves tested to ASTM 6978, a protective gown, and respiratory protection. In the repackaging process, if drawing up for a patient specific syringe, double gloves, gown, and eye/face protection will be worn. Self-sealing drug dispensing plug to be used to help prevent evaporation, spills and contamination if applicable. If spillage occurs, then deactivate, decontaminate and clean area while wearing single gloves and gown. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 and (if there is a potential for vomit or spit up) a protective gown and eye/face protection while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	topiramate tablet	Single glove	Baby blue bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Fetal risk has been demonstrated		FDA Pregnancy Category D	Topiramate can cause fetal harm when administered to a pregnant woman. Data from pregnancy registries indicate that infants exposed to topiramate in utero have an increased risk for cleft lip and/or cleft palate (oral clefts).	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.

Assessment of Risk - VCMC/SPH Formulary Drugs

AoR eligible?	Drug Name (generic)	Receiving and transport to storage PPE requirement	Storage	Manipulation/compounding	Pharmacy waste disposal	Finished dosage form storage	Transport to end user	Administration PPE requirement	Decontamination	Disposal	Pregnancy Category	Notes/Comments	NIOSH List Supplemental Information	Rationale for not requiring all 800 containment strategies	Alternative containment strategies and work practices (Pharmacy)	Alternative containment strategies and work practices (Nursing)	References
no	valganciclovir tablet	Single glove	Yellow Bin in segregated cabinet	NA	Trace: Yellow hazardous bin, Bulk: Black RCRA	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	Trace: Yellow hazardous bin, Bulk: Black RCRA	Category C	BBW, MSHG	MSHG - "Handle and dispose valganciclovir tablets according to guidelines for antineoplastic drugs because ganciclovir shares some of the properties of antitumor agents"	Since valganciclovir is a prodrug and is converted to ganciclovir (active drug) it is anticipated that valganciclovir is expected to have reproductive toxicity effects similar to ganciclovir. In animal studies, ganciclovir has caused maternal and fetal toxicity and embryo-fetal mortality in pregnant mice and rabbits as well as teratogenicity in rabbits at exposures 2 times the human exposure. Valganciclovir at the recommended dose may cause temporary or permanent female and male infertility.			
yes	valproate/valproic acid capsule	Single glove	regular	NA	Blue incineration waste	regular, pyxis	Pneumatic tube	single glove for intact tablets	Recover product and place in an appropriate container for disposal.	blue incineration waste	Fetal risk has been demonstrated	BBW	Black Box warning for teratogenicity; congenital malformations, including neural tube defects; teratogenic in multiple species; FDA Pregnancy Category D	Valproic acid is used to treat seizures and thought to mediate its effect through increasing gamma-aminobutyric acid (GABA), an inhibitory neurotransmitter. There is a Black Box warning for teratogenicity, congenital malformations, including neural tube defects, and teratogenic in multiple species. The greatest risk for malformations is during the first trimester. The risk is dose-dependent; however, a threshold dose below which no risk exists has not been determined.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not open capsule. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	valproate/valproic acid IV	Single glove	regular/segregated	Risk Assessment		regular/segregated	Pneumatic tube	Double gloving and a protective gown	Absorb with absorbent materials and dispose accordingly.	blue incineration waste	Category D	BBW	Black Box warning for teratogenicity; congenital malformations, including neural tube defects; teratogenic in multiple species; FDA Pregnancy Category D	Valproate sodium is used to treat seizures and thought to mediate its effect through increasing gamma-aminobutyric acid (GABA), an inhibitory neurotransmitter. There is a Black Box warning for teratogenicity, congenital malformations, including neural tube defects, and teratogenic in multiple species. The greatest risk for malformations is during the first trimester. The risk is dose-dependent; however, a threshold dose below which no risk exists has not been determined.	<ul style="list-style-type: none"> Follow Standard Operating Procedures for proper behavior in the sterile compounding area and aseptic technique. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering, maintaining or discontinuing IV lines. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	valproate/valproic acid syrup	Single glove	Baby blue bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Absorb the liquid with suitable material.	blue incineration waste	Fetal risk has been demonstrated		Black Box warning for teratogenicity; congenital malformations, including neural tube defects; teratogenic in multiple species; FDA Pregnancy Category D	Valproic acid is used to treat seizures and thought to mediate its effect through increasing gamma-aminobutyric acid (GABA), an inhibitory neurotransmitter. There is a Black Box warning for teratogenicity, congenital malformations, including neural tube defects, and teratogenic in multiple species. The greatest risk for malformations is during the first trimester. The risk is dose-dependent; however, a threshold dose below which no risk exists has not been determined.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. In the repackaging process, if drawing up for a patient specific syringe, single gloves will be worn. Self-sealing drug dispensing plug to be used to help prevent evaporation, spills and contamination if applicable. If spillage occurs, then deactivate, decontaminate and clean area while wearing single gloves and gown. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 and (if there is a potential for vomit or spit up) a protective gown and eye/face protection while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	voriconazole IV	Single glove	segregated	Risk Assessment		refrigerated segregated	Pneumatic tube	Double gloves, gown, eye/face protection(if there is potential for splashing), and CSTDs during IV administration	collect spilled material by a method that controls dust generation. A damp cloth or a filtered vacuum should be used to clean spills of dry solids. Clean spill area thoroughly (pfizer)	blue incineration waste	Category D	Infectious Disease consult required	FDA Pregnancy Category D	Voriconazole is an antifungal agent for candidiasis and aspergillosis. Exposure to voriconazole has the potential to cause fetal harm. In animal reproduction studies, oral voriconazole administration was associated with teratogenicity, embryotoxicity, increased gestational length, dystocia and embryomortality. Since its approval by the FDA and the EMA in 2002, only one report of voriconazole exposure during pregnancy has been reported. In the case study, the pregnant woman received oral voriconazole during the second and third trimesters of pregnancy. No adverse fetal/neonatal outcome was evidenced at birth or at a 6 month follow-up visit.	<ul style="list-style-type: none"> Follow Standard Operating Procedures for proper behavior in the sterile compounding area and aseptic technique. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering, maintaining or discontinuing IV lines. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	voriconazole susp	Single glove	Baby blue bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Carefully shovel or sweep up spilled material and place in appropriate container. Avoid generating dust. Soak up with inert absorbent material.	blue incineration waste	Category D	Infectious Disease consult required	FDA Pregnancy Category D	Voriconazole is an antifungal agent for candidiasis and aspergillosis. Exposure to voriconazole has the potential to cause fetal harm. In animal reproduction studies, oral voriconazole administration was associated with teratogenicity, embryotoxicity, increased gestational length, dystocia and embryomortality. Since its approval by the FDA and the EMA in 2002, only one report of voriconazole exposure during pregnancy has been reported. In the case study, the pregnant woman received oral voriconazole during the second and third trimesters of pregnancy. No adverse fetal/neonatal outcome was evidenced at birth or at a 6 month follow-up visit.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. In the repackaging process, if drawing up for a patient specific syringe, single gloves will be worn. Self-sealing drug dispensing plug to be used to help prevent evaporation, spills and contamination if applicable. If spillage occurs, then deactivate, decontaminate and clean area while wearing single gloves and gown. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 and (if there is a potential for vomit or spit up) a protective gown and eye/face protection while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	voriconazole tablet	Single glove	regular	NA	Blue incineration waste	regular/segregated	Pneumatic tube	single glove for intact tablets	Recover product and place in an appropriate container for disposal.	blue incineration waste	Fetal risk cannot be ruled out.		FDA Pregnancy Category D	Voriconazole is an antifungal agent for candidiasis and aspergillosis. Exposure to voriconazole has the potential to cause fetal harm. In animal reproduction studies, oral voriconazole administration was associated with teratogenicity, embryotoxicity, increased gestational length, dystocia and embryomortality. Since its approval by the FDA and the EMA in 2002, only one report of voriconazole exposure during pregnancy has been reported. In the case study, the pregnant woman received oral voriconazole during the second and third trimesters of pregnancy. No adverse fetal/neonatal outcome was evidenced at birth or at a 6 month follow-up visit.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.

Assessment of Risk - VCMC/SPH Formulary Drugs

AoR eligible?	Drug Name (generic)	Receiving and transport to storage PPE requirement	Storage	Manipulation/compounding	Pharmacy waste disposal	Finished dosage form storage	Transport to end user	Administration PPE requirement	Decontamination	Disposal	Pregnancy Category	Notes/Comments	NIOSH List Supplemental Information	Rationale for not requiring all 800 containment strategies	Alternative containment strategies and work practices (Pharmacy)	Alternative containment strategies and work practices (Nursing)	References
yes	warfarin tablet	Single glove	Baby blue bin with regular inventory	NA	RCRA (P-List)	regular, pyxis	Pneumatic tube	single glove for intact tablets	Recover product and place in an appropriate container for disposal.	RCRA (P-List)	Category D		Pregnancy category D	Warfarin crosses the placenta and may result in fatal hemorrhage to the fetus in utero. A pattern of major congenital malformations (warfarin embryopathy and fetotoxicity), fatal fetal hemorrhage, and an increased risk of spontaneous abortion and fetal mortality have occurred with warfarin use during pregnancy. Use is contraindicated during pregnancy except in women with mechanical heart valves who are at high risk of thromboembolism. In a retrospective review, a greater risk for complications during pregnancy was observed when the daily warfarin dose exceeded 5 mg in these patients.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. If crushing tablet, use Silent Knight and wear double gloves tested to ASTM 6978, a protective gown, and respiratory protection. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	zidovudine	Single glove	Gray Bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Category C	BBW	IARC Group 2B	Zidovudine, a structural analog of thymidine, competes with the natural substrate for incorporation into growing chains of viral RNA-dependent DNA, thereby inhibiting viral DNA replication. Zidovudine has a 100- to 300-fold greater affinity for inhibiting HIV reverse transcriptase than it does for inhibiting human DNA polymerase. Zidovudine has an IARC Group 2B classification meaning possibly carcinogenic to humans. It has a Black Boxed Warning where it has been associated with hematologic toxicity, including neutropenia and severe anemia, particularly in patients with advanced HIV-1 disease. Prolonged use of zidovudine has been associated with symptomatic myopathy.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Staff that may be exposed while caring for patients during their normal job duties will sign an Acknowledgement of Risk from after receiving training regarding the risks and proper use of PPE. Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6. Report on Carcinogens NTP
yes	zidovudine IV	Single glove	Orange Bin with regular inventory	Risk Assessment	Blue incineration waste	pass thru refrigerator	pneumatic tube	Double gloves, gown, eye/face protection(if there is potential for splashing)	Large Spills: Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Flush area with water. (GSK/viiv)	blue incineration waste	Category C	BBW	IARC Group 2B	Zidovudine, a structural analog of thymidine, competes with the natural substrate for incorporation into growing chains of viral RNA-dependent DNA, thereby inhibiting viral DNA replication. Zidovudine has a 100- to 300-fold greater affinity for inhibiting HIV reverse transcriptase than it does for inhibiting human DNA polymerase. Zidovudine has an IARC Group 2B classification meaning possibly carcinogenic to humans. It has a Black Boxed Warning where it has been associated with hematologic toxicity, including neutropenia and severe anemia, particularly in patients with advanced HIV-1 disease. Prolonged use of zidovudine has been associated with symptomatic myopathy.	<ul style="list-style-type: none"> Follow Standard Operating Procedures for proper behavior in the sterile compounding area and aseptic technique. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering, maintaining or discontinuing IV lines. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6. Report on Carcinogens NTP
yes	zidovudine syrup	Single glove	Gray Bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Flush area with water.	blue incineration waste	Category C	BBW	IARC Group 2B	Zidovudine, a structural analog of thymidine, competes with the natural substrate for incorporation into growing chains of viral RNA-dependent DNA, thereby inhibiting viral DNA replication. Zidovudine has a 100- to 300-fold greater affinity for inhibiting HIV reverse transcriptase than it does for inhibiting human DNA polymerase. Zidovudine has an IARC Group 2B classification meaning possibly carcinogenic to humans. It has a Black Boxed Warning where it has been associated with hematologic toxicity, including neutropenia and severe anemia, particularly in patients with advanced HIV-1 disease. Prolonged use of zidovudine has been associated with symptomatic myopathy.	<ul style="list-style-type: none"> In the repackaging process, if drawing up for a patient specific syringe, single gloves will be worn. Self-sealing drug dispensing plug to be used to help prevent evaporation, spills and contamination. If spillage occurs, then deactivate, decontaminate and clean area while wearing single gloves and gown. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 and (if there is a potential for vomit or spit up) a protective gown and eye/face protection while administering medication. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6. Report on Carcinogens NTP
yes	zidovudine tablet	Single glove	Gray Bin with regular inventory	follow USP 800	Blue incineration waste	patient cassette	Pneumatic tube	single glove	Recover product and place in an appropriate container for disposal.	blue incineration waste	Category C	BBW	IARC Group 2B	Zidovudine, a structural analog of thymidine, competes with the natural substrate for incorporation into growing chains of viral RNA-dependent DNA, thereby inhibiting viral DNA replication. Zidovudine has a 100- to 300-fold greater affinity for inhibiting HIV reverse transcriptase than it does for inhibiting human DNA polymerase. Zidovudine has an IARC Group 2B classification meaning possibly carcinogenic to humans. It has a Black Boxed Warning where it has been associated with hematologic toxicity, including neutropenia and severe anemia, particularly in patients with advanced HIV-1 disease. Prolonged use of zidovudine has been associated with symptomatic myopathy.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate "Caution: Hazardous Drug" auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not crush or cut tablet. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6. Report on Carcinogens NTP
yes	ziprasidone capsule	Single glove	Baby blue bin with regular inventory	NA	Blue incineration waste	patient cassette	Pneumatic tube	single glove		blue incineration waste	Category C			Animal studies have shown developmental toxicity, including possible teratogenic effects at doses similar to human therapeutic doses as well as an increase in the number of pups born dead and a decrease in postnatal survival at less than maximum recommended human dose. Two case studies reported on women taking ziprasidone during pregnancy. In one case, the woman was taking 120mg/day, which was lowered to 80mg/day during the pregnancy and finally further reduced to 40mg/day until child birth. She experienced a normal delivery and had a baby with a normal birth weight and cleft palate. It was not known whether the malformation was caused by ziprasidone or not. The other case was uneventful and resulted in a healthy baby.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Repackaging by using single gloves, dedicated counting tray, and spatula/tweezers. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear single gloves tested to ASTM 6978 while administering medication. Do not open capsule. Contact Pharmacy. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>.
yes	ziprasidone IM	Single glove	Baby blue bin with regular inventory	Risk Assessment	Blue incineration waste except meds on P or U disposal list		Pneumatic tube	single glove		blue incineration waste	Category D			Animal studies have shown developmental toxicity, including possible teratogenic effects at doses similar to human therapeutic doses as well as an increase in the number of pups born dead and a decrease in postnatal survival at less than maximum recommended human dose. Two case studies reported on women taking ziprasidone during pregnancy. In one case, the woman was taking 120mg/day, which was lowered to 80mg/day during the pregnancy and finally further reduced to 40mg/day until child birth. She experienced a normal delivery and had a baby with a normal birth weight and cleft palate. It was not known whether the malformation was caused by ziprasidone or not. The other case was uneventful and resulted in a healthy baby.	<ul style="list-style-type: none"> Dispensing in original manufacturer or repackaged container or unit dose package. No precaution needed. Medication will have appropriate reproductive risk auxiliary label. 	<ul style="list-style-type: none"> Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering medication. 	

Assessment of Risk - VCMC/SPH Formulary Drugs

AoR eligible?	Drug Name (generic)	Receiving and transport to storage PPE requirement	Storage	Manipulation/compounding	Pharmacy waste disposal	Finished dosage form storage	Transport to end user	Administration PPE requirement	Decontamination	Disposal	Pregnancy Category	Notes/Comments	NIOSH List Supplemental Information	Rationale for not requiring all 800 containment strategies	Alternative containment strategies and work practices (Pharmacy)	Alternative containment strategies and work practices (Nursing)	References
yes	zoledronic acid IV	Single glove	Baby blue bin with regular inventory	Risk Assessment	Blue incineration waste except meds on P or U disposal list		Pneumatic tube	single glove		blue incineration waste	Category D	<ul style="list-style-type: none"> Staff that may be exposed while caring for patients during their normal job duties will sign an Acknowledgement of Risk from after receiving training regarding the risks and proper use of PPE. 	Number of stillbirths increased and survival of neonates decreased in laboratory studies at low doses; FDA Pregnancy Category D	<p>During animal studies, increased stillbirths and decreased pup survival occurred when pregnant rats were given zoledronic acid greater than or equal to 0.2 times the human systemic exposure following a 4 mg IV dose beginning 15 days before mating and continuing through gestation. There are no human data regarding the use of zoledronic acid during pregnancy to determine a drug-associated risk. Because bisphosphonates, such as zoledronic acid, are incorporated into the bone matrix and may be gradually released over periods of weeks to year, there may be risk for fetal harm, including skeletal and other abnormalities, if a woman becomes pregnant after completing a course of bisphosphonate therapy. No abnormal hematologic or biochemical parameters were observed at birth and at a 12-month follow-up in an infant exposed to zoledronic acid during pregnancy.</p>	<ul style="list-style-type: none"> Women who are trying to conceive or are pregnant should not handle. Follow Standard Operating Procedures for proper behavior in the sterile compounding area and aseptic technique. 	<ul style="list-style-type: none"> Women who are trying to conceive or are pregnant should not handle. Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 and (if there is a potential for splashing) a protective gown and eye/face protection while administering medication. 	
yes	zonisamide cap	Single glove	Baby blue bin with regular inventory	Risk Assessment	Blue incineration waste except meds on P or U disposal list		Pneumatic tube	single glove	Use appropriate personal protective equipment (PPE). Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. For spills.. Soak up with inert absorbent material. Use clean non-sparking tools to collect absorbed material. Avoid breathing dust or spray mist.		Category D		Teratogenic in multiple miscellaneous animal species; FDA Pregnancy Category D	<p>Teratogenic in multiple miscellaneous animal species has been seen in laboratory studies. Teratogenic effects have been reported in animal studies of mice, dogs, and rats administered zonisamide during organogenesis. A variety of external, visceral, and skeletal malformations was observed in fetuses following maternal administration of zonisamide at doses and exposures similar to or lower than therapeutic levels in humans. There are no adequate or well-controlled studies of zonisamide in pregnant women; however, it may cause serious adverse fetal effects. Metabolic acidosis may develop in patients taking zonisamide. Metabolic acidosis during pregnancy (due to other causes) may result in decreased fetal growth, decreased fetal oxygenation, and fetal death. Monitor all pregnant women for metabolic acidosis during zonisamide therapy.</p>	<ul style="list-style-type: none"> Upon receipt product to receive appropriate alert label. Separate counting tray cleaned before and after for pharmacy repackaging. Women who are pregnant or may become pregnant should avoid handling crushed or broken tablets. 	<ul style="list-style-type: none"> Women who are pregnant or may become pregnant should avoid handling crushed or broken tablets. Nurses and medical staff at risk of exposure during drug administration to patients will wear gloves tested to ASTM 6978 while administering. 	1: Package insert. 2: Micromedex. 3: UpToDate. 4: USP<800>. 5: IARC Working Group on the Evaluation of Carcinogenic Risk to Humans. 6. Report on Carcinogens NTP



VENTURA COUNTY HEALTH CARE AGENCY

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Owner: Sul Jung: Associate Director of Pharmacy Services
Policy Area: Pharmacy Services
References:

PH.27.01 Hazardous Drug Training and Safety Program

Definition and Purpose

The Hazardous Drug Training and Safety Program ensures employee safety while working with, and around, Hazardous Drugs (HDs), within the pharmacy setting. All pharmacy staff must receive training, and demonstrate competency, based on their job functions, before independently handling HDs. Employee competency will be reassessed annually. Employees must be aware of potential opportunities for exposure to HDs in their daily tasks, and demonstrate competency in the use of pharmacy equipment designated for use with HDs.

Policy

- A. Hazardous drugs (HDs) are stored, prepared, labeled, packaged, transported, administered and disposed of under conditions that protect healthcare workers and patients. In addition, an HD safety program that incorporates administrative, engineering and work practice controls maintained to provide maximum protections to healthcare workers and patients.
- B. Any personnel who may come in contact with HDs during the normal course of their job duties will receive training on HD handling that is specific to their job duties.
- C. Compounding personnel must complete required training and competencies associated with non-HD compounding prior to completing training and competency requirements associated with hazardous drug compounding.
- D. Non-compounding persons performing environmental services in the containment secondary engineering control areas (C-SEC) must receive training in hand hygiene and garbing (including competency verification).

Procedures - Administrative Controls

- A. The Hazardous Drug List will be communicated to staff in training programs (see attachment).
- B. Safety Data Sheets (SDS) will be immediately available for every drug on the pharmacy hazardous drug list via the MSDS Online icon on each desktop.
- C. Prior to HD training, compounding staff must successfully complete:
 - 1. All non-hazardous training including safe aseptic manipulation practices.
 - 2. All non-hazardous compounding competency evaluations.

3. All required aseptic media fill sampling and gloved fingertip sampling.
 4. Competency Assessments on Hand Hygiene and Garbing.
 5. Aseptic Technique.
 6. Cleaning and Disinfecting.
- D. All employees that handle HDs must successfully complete training and competencies that include the following:
1. Overview of HDs including the NIOSH List.
 2. Review of the written policies that apply to the employee's job classification.
 3. Review of Waste disposal procedure.
 4. Review of Spill management procedures.
- E. Specific Hazardous Drug Sterile Compounding training, testing and competency evaluation will be successfully completed by employees who compound HDs.
1. All pharmacy staff must successfully complete the General Hazardous Drug Competency annually (DOES NOT INCLUDE HD Compounding Competency).
 2. Additional HD training must be received by compounding personnel and includes:
 - a. General compounding practices that are different than or in addition to compounding of non-HDs;
 - b. Negative pressure compounding techniques to be used inside a containment primary engineering control (C-PEC) such as a biologic safety cabinet.
 - c. Proper use of closed system drug-transfer devices (CSTDs).
 3. Housekeeping personnel who enter negative pressure HD buffer rooms to perform either daily or monthly cleaning duties, must review [Policy 106.013 Hazardous Substance Communication – Right to Know](#) in addition to completing the EVS pharmacy competency for Hand Hygiene and Garbing, and Cleaning and Disinfection. Competencies to be completed initially and annually (~~see attachment~~).

Hazardous Drug Risk Acknowledgement

- A. At the completion of General HD training but before actual HD handling/compounding, *All* pharmacy staff who may handle or compound HDs must read and sign the HD Risk Acknowledgement (see attachment).
- B. Alternate Duty - If requested, it is recommended that workers be given the option of alternate duty under the following circumstances:
 1. Females who are pregnant,
 2. Females who are breastfeeding,
 3. Males or Females actively trying to conceive a child.

Environmental Surveillance

- A. Environmental surveillance of the compounding environment may be considered to evaluate and verify containment and effectiveness of controls.
 1. If contamination is found, based on the level of contamination, the decision may be made to perform additional cleaning and evaluate potential change to engineering, work practice or administrative

controls. This would be followed by resampling to determine effectiveness of actions.

Treatment of Employees with Direct Eye or Skin Exposure to Hazardous Drugs

- A. Employees will be instructed to call for help.
- B. Contaminated clothing must be removed immediately.
- C. Supervisor will be contacted immediately.
- D. A safety data sheet for the HD will be obtained for instructions on exposure.
- E. If the eye(s) are affected, they must be flushed with water or normal saline for at least 15 minutes.
- F. If skin is affected, it must be washed with soap and water and rinsed thoroughly.
- G. Employee will obtain medical attention.
- H. The Supervisor is responsible for completing the RM75 – Injury First Report (available online). This step is to be completed within 24 hours of injury.

All revision dates:

11/22/2022, 11/13/2019

Attachments

Attachment A: HD Risk Acknowledgment

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	11/22/2022
Pharmacy Services	Sul Jung: Associate Director of Pharmacy Services	11/22/2022

**Ventura County Medical Center – Department of Pharmacy Services
Competence Assessment – Acknowledge the Risks of Handling Hazardous Drugs**

Name:	Date:
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<p>“Compounding personnel... shall confirm in writing that they understand the risks of handling hazardous drugs.”¹</p> <p>“All employees will be oriented regarding hazardous substances, and their Right to Know. This will occur at new employee orientation and with annual updates.”²</p>	<p>I confirm that I have been informed about risks of handling hazardous drugs:</p> <p><input type="checkbox"/> I have read the NIOSH Alert³ warning: “Working with or near hazardous drugs in health care settings may cause skin rashes, infertility, miscarriage, birth defects, and possibly leukemia or other cancers.”</p> <p><input type="checkbox"/> I have read the attached NIOSH List of Antineoplastic and Other Hazardous Drugs in Healthcare Settings, 2016.</p> <p><input type="checkbox"/> I have read attached the NIOSH Alert, “Preventing occupational exposures to antineoplastic and other hazardous drugs in health care settings”</p> <p><input type="checkbox"/> Hazardous drugs shall be handled with caution at all times using appropriate chemotherapy gloves during receiving, distribution, stocking, inventorying, preparation for administration, and disposal.</p> <p><input type="checkbox"/> Appropriate personnel protective equipment (PPE) shall be worn when compounding. PPE should include gowns, face masks, eye protection, hair covers, shoe covers or dedicated shoes, double gloving with sterile chemo-type gloves, and compliance with manufacturers’ recommendations.</p> <p><input type="checkbox"/> If I am pregnant or breast-feeding, or trying to conceive or breast-feed, I may ask the supervisor to be assigned alternate duties.</p>
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_____ Employee Signature	_____ Date	_____ Supervisor Signature	_____ Date
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¹ The United States Pharmacopeial Convention (USP). Chapter 797, Revision Bulletin 2008. Pharmaceutical compounding – sterile preparations. Page 14: Requirement for “compounding personnel of reproductive capability.”

² Ventura County Medical Center Policy Hazard Communication – Right to Know 106.13

³ NIOSH Alert. Preventing occupational exposures to antineoplastic and other hazardous drugs in health care settings. Department of Health and Human Services, centers for Disease Control and Prevention, National Institute for Occupational Safety and Health.

<http://www.cdc.gov/niosh/docs/2004-165>



**VENTURA COUNTY
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PH.27.02 Hazardous Drug Storage, Handling, Labeling, and Transport

Definition and Purpose

This policy addresses the general aspects of hazardous drug (HD) handling. HD handling includes receiving, storage, labeling, packaging and transport activities that are not directly associated with compounding activities. For the purposes of this policy, HDs are those substances which appear in the NIOSH List of Antineoplastic and Other Hazardous Drugs in Healthcare Settings, 2016 as well as any subsequent updates to the NIOSH HD list as they become official. VCMC Pharmacy may choose to exempt some dosage forms of if an Assessment of Risk is performed and documented.

Policy Statements

- A. HDs will be received, stored, labeled, packaged and transported using methods that protect employees, the surrounding environment and others who may encounter them in the healthcare environment.
- B. Antineoplastic HDs will be stored separately from non-hazardous drug inventory.
- C. HDs not in their final dosage form will be stored in a room that is negative pressure between 0.01 and 0.03 inches of water column relative to all adjacent areas, and is vented to the outside with at least 12 air changes per hour (ACPH).
- D. Any personnel who may be expected to handle HDs will wear appropriate personal protective equipment (PPE) as defined in policy. Activities include: receiving, distribution, stocking, inventory control, order picking, compounding, packaging for distribution or disposal, and cleaning.

Procedures

General Handling of Hazardous Drugs

- A. Refer to policy PH.27.04 Hazardous Drug Garbing and Compounding for detailed instructions of the use of PPE in compounding situations and policy PH.27.05 Decontamination, Spill and Waste Management for use of PPE in HD Spill Cleanup.
- B. When handling antineoplastic HDs during receiving, personnel will don a chemotherapy impervious gown and at least 1 pair of gloves that have been tested to ASTM 6978.
- C. Hands must be washed before and after the use of gloves.

Receiving Hazardous Drugs

General receiving procedures:

- A. Suppliers and distributors should be sending antineoplastic HDs in a container separate from other drugs and in a plastic covering that is impervious to liquids.
- B. HDs will be unpacked from shipping containers in an area that is neutral/normal or negative pressure to the adjacent areas.
- C. A spill kit must be accessible in the receiving area.
- D. Designate a specific area or counter for antineoplastic HD receiving. A disposable, plastic-backed preparation absorbent mat should be used on which to place the HD containers when they are unpacked from the tote.
- E. Those receiving deliveries with HDs in them, must first visually inspect the delivery to verify that there are no signs of damage such as visible stains from leaking containers or sounds of broken glass.
- F. Upon receipt, antineoplastic HDs shall remain in the sealed transport bag for transport to the negative pressure room.
- G. As these drugs are checked into inventory they will be moved directly to the HD storage area.
- H. When receipt is complete, fold the disposable plastic-backed preparation mat inward and place in yellow trace waste, then decontaminate the surface of the receiving counter with a designated decontamination / cleaning agent.
- I. Carefully remove gloves turning them inside out and not touching the contaminated portion and discard in yellow trace waste, then remove the chemo gown by slowly turning inside out and place in the yellow trace waste.
- J. Wash hands.

Summary of Requirements for Receiving and Handling Damaged Hazardous Drug Shipping Containers

A. If the shipping container appears damaged

- 1. Notify supervisor.
- 2. Seal container without opening and contact the supplier
- 3. If the unopened package is to be returned to the supplier, enclose the package in an impervious container and label the outer container "Hazardous"
- 4. If the supplier declines return, double bag the damaged goods. Dispose of in a black RCRA U-Listed waste container.
- 5. Perform any required clean up per [EVS.39 Management of Chemotherapy Spills](#).

A. If a damaged shipping container must be opened

- 1. Notify supervisor to determine if there is product in the tote that must be salvaged.
- 2. Seal the container in an impervious container.
- 3. Transport it to a C-PEC and place on a plastic-backed preparation mat.
- 4. Open the package and remove undamaged items.
- 5. Wipe the outside of the undamaged items with a disposable wipe.
- 6. Enclose the damaged item(s) in an impervious container and label the outer container "Hazardous".
- 7. If the supplier declines return, dispose of as hazardous waste.

8. Deactivate, decontaminate, clean and disinfect the C-PEC (see Deactivating, Decontaminating, Cleaning, and Disinfecting) before returning to any sterile compounding activity.
9. Damaged packages or shipping cartons must be considered spills that must be reported by Notification Form, and managed per policy PH.27.05 Decontamination, Spill and Waste Management.
10. Segregate HDs waiting to be returned to the supplier in a designated negative pressure area.

Storage of Hazardous Drugs

- A. Access to areas where HDs may be encountered will be limited to authorized staff only.
- B. Specific labels have been adopted by VCMC Pharmacy and are used to designate HDs which will be affixed to shelves, drawers or bins where HD are stored.
- C. Bins, drawers or containers used to routinely store HDs will be configured to reduce the risk of breakage and facilitate spill containment.
- D. Antineoplastic HDs that require further manipulation (other than counting or repackaging final dosage forms are stored separately from non-HDs. These HDs will be stored in the negative pressure buffer area designated for HD compounding.
- E. Non-antineoplastic, reproductive risk only and final dosage forms of antineoplastic drugs may be stored with regular inventory.
- F. HDs that require refrigeration will be stored separately from non-HDs in a refrigerator in the negative pressure area dedicated for HD storage.

Packaging Hazardous Drugs

- A. VCMC Pharmacy uses strategies to reduce the risk of exposure to HDs during administration which include:
 1. HD labeling,
 2. Appropriate use of PPE,
 3. Proper disposal of waste.
- B. VCMC Pharmacy selects and uses packaging containers and materials that have been shown to maintain the physical integrity, and stability.
- C. Packaging materials selected also protect the HD from damage during transport.
- D. HDs that do not require manipulation other than counting or repackaging final dosage forms may be prepared outside of a C-PEC and C-SEC or C-SCA unless otherwise indicated by the manufacturer or there are visible signs of exposure hazards (e.g., dust) present.
- E. HDs that do not require manipulation other than counting or repackaging final dosage forms may be prepared outside of a C-PEC and C-SEC unless there are visible signs of exposure hazards (e.g., dust) present.
- F. If HD dosage forms require manipulation such as crushing tablet(s) or opening capsule(s) for a single dose, personnel must don appropriate PPE and use a plastic pouch to contain any dust or particles generated.
- G. Labels that have been adopted by the organization to be used to designate HDs will be affixed to the HD compounded sterile product (CSP) container itself. "Caution: Hazardous Drug".

Transport of Hazardous Drugs

- A. Compounded HDs in final containers for patient administration will be placed inside a sealed transport bag that is labeled prominently "Caution Chemotherapy". Transport bags will also have labeling to indicate use of safety precautions and safe disposal.
- B. HDs are transported in containers that reduce the risk of damage or breakage.
- C. Pneumatic tube systems are not used to transport liquid HDs or antineoplastic HDs.
- D. Personnel involved in the transport of HDs will be trained in transport and spill procedures.
- E. HD spill kits will be affixed to the HD delivery tote used to transport HD CSPs.

All revision dates:

11/13/2019

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	11/22/2022
Pharmacy Services	Sul Jung: Associate Director of Pharmacy Services	11/22/2022



VENTURA COUNTY
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PH.27.03 Hazardous Drug Garbing, and Compounding

Definition and Purpose

This policy communicates and establishes work practice requirements that specifically apply to activities associated with garbing and compounding hazardous drugs (HDs). It builds upon policy already established related to USP <797>.

Policy Statements

- A. Containment Primary Engineering Controls (C-PECs) and Containment Secondary Engineering Controls (C-SECs) will be used to protect and safeguard the sterility of compounded sterile products (CSPs) and the safety of workers handling HDs.
- B. Specifically designed Personal Protective Equipment (PPE) must be used during the handling of HDs.
- C. Specific compounding techniques are used when compounding HDs to minimize the risk of contamination of the compounding area and CSP final packaging with HDs.
- D. Only trained, authorized compounding personnel may perform deactivation, decontamination, cleaning, and disinfection of the inside surfaces of C-PECs.

Procedures - Personal Protective Equipment

- A. Use of PPE for preparation of HDs shall include chemo impervious gowns, gloves that shall be sterile and ASTM D6978-05 rated, and double shoe covers in addition to sterile compounding garb. PH.26.04 Sterile Compounding Attire policy must be followed along with the following prior to entering the negative pressure hazardous compounding room in the clean room suite.
 - 1. A chemo impervious gown shall be worn on top of the regular gown. Gowns worn during compounding of HDs must be the type that close in the back, have no seams or sealed seams to prevent accidental contamination of clothes.
 - a. Gowns must be changed every 3 hours during continuous compounding and immediately if they become damaged or contaminated.
 - 2. Double shoe covers shall be donned as personnel enters the negative pressure hazardous compounding room from the ante room. Outer shoe covers ~~shall~~should be made of water resistant materials.
 - 3. Gloved hands shall be cleansed using waterless alcohol based cleanser.
 - 4. A second pair of sterile, ASTM D6978-05 rated gloves shall be donned over the cuff of the chemo gown.

5. The process to exit the negative pressure hazardous compounding room in the clean room suite is as follows in order:
 - a. Remove the outer pair of sterile chemo gloves and discard in the hazardous waste container.
 - b. Remove the chemo impervious gown and discard in the hazardous waste container.
 - c. Remove the outer shoe covers while exiting and stepping over the line of demarcation between the negative pressure hazardous compounding room and the ante room. Discard in the hazardous waste container.
 - d. Hands must be washed with soap and water after removing gloves.
6. Additional PPE
 - a. If there is a possibility of exposure from splashing, then goggles must be worn (eye glasses and safety glasses are not compliant with OSHA requirements)
 - b. Certain drugs have been shown to volatilize (forming a vapor) in room air during normal handling: cisplatin, cyclophosphamide, etoposide and fluorouracil (Kiffmeyer, T). Other drugs may also volatilize however they have not been studied.
 - c. Respiratory protection is recommended for staff who perform the following activities where there is potential to be exposed to HD vapors:
 - a. Workers trained to perform spill management.
 - b. Workers who are responsible for the deactivation, decontamination, cleaning and disinfection of the area under the deck (work surface) of the C-PEC since this requires opening the C-PEC.
7. Staff performing functions that require respiratory protection must be fit-tested and trained in the use of either:
 - a. A NIOSH approved, full-face, dual-chamber respirator (with cartridges that filter both particles and vapors);
 - b. A NIOSH approved, half-face, dual chamber respirator (with cartridges that filter both particles and vapors) AND goggles;
 - c. A NIOSH approved Powered Air-Purified Respirator (PAPR)
 - d. Refer to the policy on Hazardous Drug Decontamination, Spill and Waste Management (PH.27.05 Decontamination, Spill and Waste Management).
8. Material Handling Considerations in C-PECs during HD compounding
 - a. Sanitize items needed with sterile 70% IPA before transferring them into the C-PEC.
 - b. Place only *required* items for compounding inside the C-PEC and arrange them in such a manner as not to impede the flow of first air. Sterile plastic backed absorbent pads may be used.
 - c. Small Sharps Disposal Units will be kept within the C-PEC for use in HD compounding. They will be positioned in such a way and be of a size as to minimize the disruption of first air and reduce potential turbulence.
 - d. Non-sterile HDs that require manipulation will be prepared in the C-PEC. All cleanroom procedures will be followed to maintain the cleanroom environment. The C-PEC must be terminally cleaned prior to being used for compounding sterile preparations.
 - e. All items used inside of the C-PEC must be considered contaminated and therefore must be placed inside of an appropriate container or bag which is sealed and wiped down before it is removed from

the C-PEC for disposal with other hazardous waste.

- f. A plastic-backed preparation mat should be placed on the work surface of the C-PEC. The mat should be changed immediately if a spill occurs and regularly during use, and should be discarded at the end of the daily compounding activity.
- g. Surface decontamination of the work area will be accomplished periodically throughout the day and between batches of different HDs.
- h. After decontaminating the deck between batches of different HDs, once dry, the deck must be disinfected with sterile 70% IPA.

9. Use of Closed System Drug-Transfer Devices (CSTDs)

- a. Use of a CSTD in compounding is strongly encouraged by USP Chapter <800>.
- b. When CSTDs are used for compounding, they will be used within the ISO Class 5 environment.
- c. CSTDs must be placed on CSPs for HD administration to reduce risk of HD spill at point of care.
- d. IV sets will be attached inside the C-PEC in a manner that protects the tubing set from HD contamination.
- e. Prime the tubing with the solution before adding the HD to the bag.
- f. CSTDs must be placed on CSPs for HD administration to reduce risk of HD spill at point of care.

10. Quality reviews required at each step of preparation:

- a. The individual compounding the HD prepares the CSP solution and syringe for pharmacist check before injecting the drug into the diluent solution.
- b. Pharmacist checks right solution, right drug, right dose, right tubing with CSTD attached, and confirms tubing is primed with solution.
- c. HD is injected into the IV bag. The individual checking the dose inspects final product for clarity, and particulate matter.
- d. All intrathecal chemotherapy are prepared with preservative-free drug and diluents and ~~are given an independent double check~~ is performed.
- e. It is recommended that the labeling and final packaging occur immediately outside of the C-PEC. Compounders must only be working on one patient CSP or one batch at a time so the components, labels and containers for other batches must not be present on the work surface.
- f. Pharmacist attaches medication label along with any auxiliary labels.
- g. CSP is placed in transport bag and sealed.
- h. Documentation is completed on dispensing label and compounding worksheet.

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Attachments

No Attachments

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VENTURA COUNTY
HEALTH CARE AGENCY

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PH.27.04 Decontamination, Spill, and Waste Management

Definition and Purpose

Hazardous Drugs (HDs) may pose serious health risks to employees that handle them. The purpose of this policy is to define the activities necessary to properly decontaminate areas used for hazardous drug (HD) compounding as well as provide instructions on proper spill management and disposal of HDs.

Policy Statements

HD residues are decontaminated prior to cleaning and disinfection on a regular basis as described in this document. For the purposes of this policy, decontamination means the transfer of chemically active or inactive hazardous drug residues from the target surface to a wipe which is subsequently disposed in the appropriate HD trace waste container for disposal.

To obtain an Safety Data Sheet (SDS) for HDs utilize the MSDS Management (vendor name) icon on any desktop computer and enter the name and manufacturer of the drug.

Persons who handle HDs must be knowledgeable of the spill management procedures and have access to the required supplies and equipment to carry out these actions. Spill management is part of an institution-wide safety program and is developed in conjunction with other departments and disciplines.

Procedures

A. Deactivation, Decontamination, Cleaning and Disinfection

1. Deactivation renders HD surface contamination inert or inactive. However, there is no single agent that can chemically deactivate all types of HD residue. The SDS for each HD may specify chemical agents that can be used to deactivate them, such as sodium hypochlorite solution or peracetic acid/hydrogen peroxide solution.
2. Decontamination focuses on physically removing surface contamination/HD residue with a surfactant agent and transferring it to sterile, lint-free, absorbent, disposable materials.
3. Cleaning focuses on removing contaminants from surfaces using water, detergents, surfactants, and solvents or other chemicals.
4. Disinfection, which is intended to inhibit or destroy microorganisms, must occur in areas that are required to be sterile.
5. Decontamination, cleaning and disinfection of the Containment Primary Engineering Control (C-PEC)

must occur at least daily (when used), any time a spill occurs, after certification, anytime non-sterile HDs are prepared in the C-PEC and if operational interruption of the C-PEC occurs.

6. Decontamination, cleaning and disinfection of the surfaces under the work tray of the C-PEC will be performed at least ~~weekly~~monthly.
 - a. When deactivating, decontaminating, and cleaning the area under the work tray of a C-PEC.
7. Decontamination of the floor and high touch areas outside of the C-PEC but inside the Containment Secondary Engineering Control (C-SEC) will occur daily with a detergent cleaning agent.
 - a. Decontamination will only occur when compounding is not taking place.
8. All wipes used for cleaning must be placed in a sealed bag prior to being discarded in either:
 - a. Yellow trace waste container (all other wipes).
 - b. Black Resource Conservation and Recovery Act (RCRA) container (wipes used for spill cleanup only)

B. HD Spill Management

1. Spill kits must be kept in areas where HD are handled such as inventory receiving area; inventory storage area; controlled compounding environment and patient care areas.
 - a. After a Spill Kit is used it will be immediately restocked.
2. The management of the spill (e.g., decontamination, deactivation, and cleaning) may be dependent on the size and type of spill. Please refer to EVS.39 Management of Chemotherapy Spills.
3. All personnel who may be required to clean up a spill of HDs must receive proper training in spill management and the use of personal protective equipment PPE and NIOSH-certified respirators.
4. Spills must be contained and cleaned immediately only by qualified personnel with appropriate PPE. Qualified personnel must be available whenever HDs are being handled.
5. Personnel who are potentially exposed during the spill or spill clean-up or who have direct skin or eye contact with HDs require immediate evaluation.
6. The trained individual who cleans the spill is responsible for ~~all HD Spill Management and~~ completing documentation and notification forms.
7. Surgical masks and N95 and N100 respirators do not provide any protection from vapors. Use of appropriate full-facepiece, chemical cartridge-type or Powered Air Purifying Respirators (PAPR) may be required if there is known or suspected airborne exposure to vapors or gases.
8. Spills occurring inside of a C-PEC.
 - a. When notified of a spill, take respiratory/eye protection (PAPR or full-face respirator) as well as spill kits from their designated locations and bring to the location of the spill.
 - b. If the HD is a liquid, place an absorbent towel gently on top of the liquid to prevent splashing of HD liquid.
 - c. If HD is a solid or powder, cover and wipe with a low-linting wipe that has been moistened with sterile water.
 - d. Place saturated/contaminated wipes into hazardous waste bag contained in spill kit.
 - e. Clean up any broken glass fragments and place into the HD sharps container.
 - f. Place any contaminated non-sharps supplies into the hazardous waste bag contained in the

spill kit which will be deposited into a RCRA container

- g. Once the visually evident spill has been contained, wipe the area thoroughly with a low-linting wipe moistened with sterile water from the areas of lesser concentration to the areas of highest concentration of HD.
- h. Then follow by decontaminating the area with the designated agent.
- i. Any wipes used for the spill decontamination along with the spill itself must be disposed in a black RCRA U-Listed container. All other supplies and PPE may be disposed in the trace yellow receptacles.
- j. Terminally clean the C-PEC with the designated germicidal detergent/sporicidal solution. Followed by disinfection with sterile alcohol 70%.
- k. Place wipes used in the cleaning process into an sealed bag, then dispose of in yellow trace waste.

C. Disposal of HD Waste

- 1. All items used in the preparation of HDs are considered contaminated and are discarded in the appropriate hazardous waste container.
- 2. Hazardous waste containers are labeled with a hazardous waste sticker. Yellow bags and yellow sharps containers are utilized for trace waste whereas black RCRA containers are utilized for HD Bulk waste and spill disposal.
- 3. Needles and other sharps are discarded in yellow sharps containers only.
- 4. Empty vials and other non-sharps items used in HD preparation are discarded in yellow sharps container.
- 5. All PPE used in handling of HDs will be disposed of as trace HD waste.
- 6. At least one hazardous waste receptacle will be located in each area where HDs.
- 7. When containers are full, they will be sealed and removed from pharmacy for disposal.
- 8. Appropriate disposal of HD waste is handled by a contracted HD waste disposal company.

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Attachments

No Attachments

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V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

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References:

PH.35 Drug Formulary

POLICY:

The Pharmacy & Therapeutics (P&T) Committee shall be responsible for developing and maintaining the drug formulary for Ventura County Medical Center (VCMC) and Santa Paula Hospital (SPH). The drug formulary is the list of drugs and diagnostic agents routinely stocked by the Department of Pharmacy Services. Drugs and diagnostic agents are selected on the basis of objective evaluation of their therapeutic merits, safety and cost. Duplication of therapeutically or generically equivalent agents is avoided whenever possible.

Use of restricted formulary drugs and non-formulary drugs shall follow a defined process.

PROCEDURE:

Definitions

Restricted formulary drugs: Medications that are believed to have limited applicability in routine use at VCMC or SPH.

Non-formulary drugs: Any medication that has not been approved by the P&T Committee to the drug formulary and is not regularly carried by the Department of Pharmacy Services.

Formulary Addition Requests

- A. Members of the Medical Staff and any pharmacist may request the addition of drugs and pharmaceuticals to the hospital drug formulary.
- B. The requestor may initiate formulary addition procedures by completing the formulary addition request form (Attachment A: Formulary Addition-Deletion-Restriction Request Form). The requestor should submit the completed form to the Director of Pharmacy Services at least fourteen days prior to the next scheduled P&T Committee meeting. Incomplete forms shall be returned to the requestor.
- C. The Director of Pharmacy Services or designee shall have prepared a clinical pharmacy drug review of the requested agent. The drug review shall be included in the P&T Committee agenda packet for review at the P&T Committee.
- D. The requestor, or a designated representative, shall attend the P&T Committee meeting to present the formulary addition request in order for the request to be considered.

Use of Restricted Formulary Drugs

- A. Restricted formulary drugs are generally stocked in the VCMC & SPH pharmacies. Orders for restricted formulary drugs shall be screened by the pharmacist. Upon receipt of a provider's order, the pharmacist shall:
1. Determine if the clinical use of the requested drug is included as an indication on the list of restricted formulary drugs.
 2. Dispense the medication, if the indication is present. If the indication is not present, the pharmacist shall alert to provider and if appropriate, make recommendations for alternative agents, or to clarify the drug's indication.
 3. Contact the Director of Pharmacy Services or designee if the pharmacist's recommendations are unsatisfactory.
- B. Restricted Antimicrobials Approval Process
1. Restricted antimicrobials require Infectious Disease (ID) approval and/or ID consult before they can be dispensed by the Pharmacy.
 2. ID physician, Antimicrobial Stewardship Program (ASP) pharmacist, or another member of the Antimicrobial Stewardship Program Committee shall assume responsibility for approving the use of restricted agents.
 - a. Monday through Friday from 8:00 a.m. to 4:00 p.m., contact the ASP Pharmacist.
 - b. Saturday and Sunday from 8:00 a.m. to 8:00 p.m. or Monday through Friday 4:00 p.m. to 8:00 p.m., contact the ID physician.
 3. During off hours (8:00 p.m. to 8:00 a.m.), restricted antimicrobials may be ordered prior to ID approval.
 - a. Only doses until 8:00 a.m. may be ordered and dispensed.
 - b. Criteria for use shall be indicated on the order and shall follow the approved indication for use. See Attachment B Restricted Antimicrobials Criteria for Use.
 - c. The ordering provider and/or day provider shall contact the ID physician or ASP pharmacist the following morning to obtain formal approval.
 4. For orders placed between 8:00 a.m. and 8:00 p.m., the pharmacist shall verify that the ID physician or ASP pharmacist has approved the use of the restricted antimicrobial.
 5. For orders placed between 8:00 p.m. and 8:00 a.m., upon receiving the order for a restricted antimicrobial and if no approval has been provided, the pharmacist shall verify that the criteria for use has been met. The following day, the Department of Pharmacy Services shall ensure formal approval has been granted to continue dispensing the restricted antimicrobial.
- C. All action taken in the disposition of the request for restricted drug shall be recorded in the clinical intervention screen in the electronic health record (EHR) for tracking purposes.
- D. The P&T Committee shall review the restricted drug formulary list at least once annually to update criteria.
- E. All requests for restricted drugs shall be reviewed by the P&T Committee and may be forwarded to the Medical Executive Committee if needed.

Use of Non-Formulary Drugs

- A. Non-formulary drugs are generally not stocked in the VCMC or SPH pharmacies. It may take up to 24 hours or more to obtain a non-formulary drug.
- B. All requests for non-formulary drugs shall be communicated by the provider to the Department of Pharmacy Services by using the "template non-formulary" or "TNF" entry in the EHR.
- C. The pharmacist shall ensure that providers complete the "template non-formulary" or "TNF" order in its entirety, including:
 - 1. Drug name
 - 2. Drug regimen (including dose, route, frequency and PRN indication for PRN orders)
 - 3. Condition being treated
 - 4. Duration of therapy
 - 5. Comparable formulary drugs
 - 6. Reason for use instead of formulary drugs
- D. Upon review of provider's order for a non-formulary medication, the pharmacist shall:
 - 1. Determine the availability of the drug and dosage form.
 - 2. Determine the appropriateness of the rationale for use of requested non-formulary drug in lieu of comparable formulary drugs.
 - 3. If deemed inappropriate (or if the pharmacist is unsure) and the provider continues requesting the non-formulary drug after considering formulary alternatives suggested by the pharmacist, the matter is to be referred to the Pharmacy Supervisor, or the Director of Pharmacy Services. In their absence, the Medical Director of the service should be consulted.
 - 4. Drug information such as indication, dosage and adverse effects for the non-formulary medication is available using the hospital's online drug references.
- E. All action taken in the disposition of the request for non-formulary drug should be recorded as a pharmacy clinical intervention. This should include, but not limited to, the pharmacist(s) and provider(s) involved, drug dispensed, including dose and amount, patient information reviewed and ultimate disposition of the request with explanations.
- F. The Director of Pharmacy Services or designee shall receive a daily report of non-formulary medications dispensed the previous day. This is to ensure that the patient is charged appropriately for the medication.
- G. All non-formulary drug requests shall be reviewed quarterly by the P&T Committee.
- H. In-house evaluation of non-formulary new drug products are permitted with approval of the P&T Committee.
 - 1. The sponsoring attending physician shall petition the P&T Committee to identify the drug to be evaluated, the source and cost of the agent, if any, and the desired duration of the trial (usually 60-90 days).
 - 2. Upon approval, the Department of Pharmacy Services shall make arrangements with the drug manufacturer representative for drug acquisition.
 - 3. The Department of Pharmacy Services shall dispense the agent by prescription from only those physicians named in the petition as evaluators.

4. Upon completion of the trial period, the sponsoring physician shall submit to the P&T Committee a drug evaluation, along with pertinent objective data collected during the evaluation period.
 5. If the sponsoring physician wishes to have the drug considered for addition to the formulary, a request for formulary addition shall be completed and submitted to the P&T Committee.
 6. The Department of Pharmacy Services shall evaluate the medical literature on requested drugs and present its findings to the P&T Committee. The P&T Committee shall determine whether the drug should or should not be added to the drug formulary at that time.
- I. Non-formulary drugs shall be stored separately from formulary drugs.
- J. Any substance or analog of a substance listed by the Drug Enforcement Administration as a Schedule I controlled substance shall not be permitted for use.

All revision dates: 11/13/2019, 5/15/2019, 4/1/2016, 12/1/1989, 11/1/1989

Attachments

- A. Formulary Addition-Deletion-Restriction Request Form

Approval Signatures

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Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
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VENTURA COUNTY
HEALTH CARE AGENCY

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References:

PH.72 Staff Authorized to Administer Medications

POLICY:

To state which Ventura County Medical Center/Santa Paula staff have authority to administer medications.

PROCEDURE:

- I. All medications are to be administered by appropriate licensed staff or by non-licensed staff under the supervision of licensed staff as stated by applicable state and federal laws, regulations and policies related to medication administration, in conjunction with approved Medical Staff rules and regulations.
- II. Administration of specific medications may be restricted to specific areas or staff as determined by the Pharmacy & Therapeutics Committee.
- III. Before administering medications, the health care professional approved for medication administration shall adhere to Policy 100.025 Medications: Ordering, Administration and Documentation.
- IV. Staff shall be evaluated and deemed competent to administer medications.
- V. Current medication administration privileges are as follows:
 - A. Licensed Vocational Nurses - all medications except intravenous medications
 - B. Nuclear Medicine Technologists - isotopes
 - C. Registered Nurses - all medications
 - D. Respiratory Therapists - inhalation medications
 - E. Physical Therapists - limited topical medications
 - F. ~~Physicians~~ Licensed Independent Practitioners - all medications
 - G. Physician Assistants - all medications
 - H. Psychiatric Technicians - all medications except intravenous medications
 - I. Radiologic Specialists - contrast agents
 - J. Radiologic Technicians - oral contrast media

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PH.92 Automated Dispensing Cabinet (ADC) Usage and Documentation

POLICY:

This document is directed to all Ventura County Medical Center/Santa Paula Hospital staff using the automated drug cabinet system for documentation and medication administration.

Definition:

Pyxis [ES](#) Medstation System: A computerized storage and dispensing device which is utilized for dispensing controlled substances and floor stock medication. The Pyxis [ES](#) Medstations work in coordination with the electronic health record (EHR) and the Pharmacy [Pyxis Console](#) [Healthsight Viewer](#) to allow for efficient dispensing of medications and monitoring of all transactions. Procedures are designed to provide safe and accurate provision of medication, secure storage, accurate accountability for controlled substances and other drugs, accurate patient billing, and compliance with State and Federal regulations.

PROCEDURE:

- I. ~~Access to the Pyxis Medstation:~~
 - A. ~~Nurses, respiratory therapists and physicians requiring Pyxis Medstation access shall complete the "Pyxis Medstation 4000 Identification/Password Assignment Statement" form (see Attachment A). Completed forms shall be submitted to the Clinical Nurse Manager. The Clinical Nurse Manager shall determine where Pyxis Medstations will be accessible and which privileges will be granted. The Clinical Nurse Manager shall review and submit the completed form to the Pharmacy Department for permanent Logon identification (ID) creation. Contract staff will receive a permanent Logon ID with an expiration date coinciding with the contract end date. Pharmacists and pharmacy technicians also have access to Pyxis Medstation as designated by the Pharmacy Department. Permanent Logon ID shall be the same as the user's electronic health record (EHR) username for new accounts. Permanent Logon IDs created prior to July 1, 2013 may use first initial of the users position (i.e., pharmacist = P, nurse = N) followed by the user's initials (i.e., P.GB, N.RT). Refer to Pyxis Medstation 4000 System Console User Guide for more information on user privileges.~~
 - B. ~~New users shall complete the Pyxis Medstation tutorial prior to receiving the permanent Logon ID and initial password. The "Certificate of Pyxis Tutorial Completion" will be generated and shall be attached to the "Pyxis Medstation 4000 Identification/Password Assignment" form prior to submission to the Pharmacy Department.~~

- ~~C. The initial password will be "password" and shall be changed by the user when the system is first accessed. The new permanent password must be six to eight characters long. The system will prompt the user to scan their fingerprint, which shall serve as the user's biometric identification (BioID) password. If the biometric identification scan is not successful, the employee shall use a password instead.~~
- ~~D. In the event the password is forgotten or the Pharmacy assigned password is lost, the user shall call the Pharmacy Department to request a password reset. The Pharmacy Department shall reset passwords only for existing user accounts and with verification of the user. If there is no existing user account, steps A, B & C in this section must be completed.~~
- ~~E. Authorization for temporary privileges may be assigned by the nurse manager/nursing supervisor or by the pharmacy system manager or designee.
 - ~~1. Temporary nurses and registry nurses may be assigned privileges to the Medstation by the nurse manager or nursing supervisor provided the user completes the Pyxis Medstation tutorial.~~
 - ~~2. The temporary privileges granted to temporary or registry nurses last 24 hours.~~
 - ~~3. Traveling nurses will have access to the Medstation as near as possible to match the traveling nurse's contract.~~~~
- ~~F. Upon termination of the user, the Clinical Nurse Manager or Human Resources shall notify the Pharmacy Department and the user's Logon ID shall be removed from the system.~~
- ~~G. If the user does not log off the Medstation upon completion of the transaction, the Pyxis Medstation will log off the user after 30 seconds.~~

Access to the Pyxis ES Medstation:

- A. Nurses (RN, LVN, Psychiatric technician, student), respiratory therapists, licensed independent practitioner (LIP), pharmacist, pharmacy technicians, radiology technicians, and contract staff may be granted access to Pyxis ES Medstation.
- B. Department manager/Clinical Nurse Manager (CNM) or their designee shall request permanent Logon identification (ID) creation through the Information Technology (IT) department for hospital wide Active Directory. Contract staff or student must have contract end date submitted to IT. Once ID is created by IT, the user must complete the online tutorial via hospital learning software platform and complete "Pharmacy Pyxis ES Medstation Assignment Statement" form (see Attachment A) to be submitted to the pharmacy department.
- C. The department manager/CNM or their designee shall review, sign, and submit the completed form to the Pharmacy Department for proper assignment of roles and access.
- D. Upon first logon to Pyxis ES Medstation, the system will prompt the user to scan their fingerprint, which shall serve as the user's biometric identification (BioID) password. If the biometric identification scan is not successful, the employee shall use a password instead.
- E. In the event the password is forgotten or lost, the user shall call the IT department (Helpdesk support: 805-677-5119) to request a password reset. If there is no existing user account, steps A-D in this section must be completed.
- F. Upon termination of the user, the department manager/CNM or Human Resources shall notify the IT department for removal from AD.
- G. If the user does not log off the Medstation upon completion of the transaction, the Medstation will log off the user after 30 seconds.

II. Pyxis ES Medstation Medication Stock:

- A. Non-profile Pyxis ES Medstations list medications available within the device for removal. Non-profile stations are limited to the Emergency Department, GI Lab, Operating Rooms, Post-Anesthesia Care Unit, Nuclear Med, Interventional Radiology, Adult and Pediatric Oncology, and the Crisis Stabilization Unit.
- B. Profile Pyxis ES Medstations operate on an interface with the EHR to display the list of ordered medications for each patient.
 - 1. Inventory may be modified to accommodate active medication orders for patients residing in that patient care unit. This requires ongoing loading and unloading of medications as patient's therapy changes or that patient care unit's patient population changes. Par levels are set according to reasonable doses dispensed.
 - 2. As new ~~physician~~ orders are initiated, Pharmacy staff will verify the needed medication is available in the ~~Pyxis~~ Medstation that services that patient's location. If the medication is not loaded in that ~~Pyxis~~ Medstation, the Pharmacy will send doses for administration.
 - 3. The following medications will be handled through the Medstation: Injectable drugs, limited pre-mixed solutions, capsules, tablets, suppositories, and controlled drugs.

~~Unused medications will be returned to the return bin located on each Medstation within one (1) hour from the time of removal. Bulky items may be returned to the original pockets.~~

~~All controlled substances shall require blind count verification for each transaction.~~

- C. The Pharmacy Department is responsible for loading, unloading, and refilling all medications within the devices. The outdate tracking function shall be utilized to manage drug expiration dates. Items close to expiration shall be replaced.

~~For more information, see policy [PH.94 Pyxis Medstation Inventory Management](#).~~

D. Assigning, Loading or Unloading a Medication to Pyxis Medstation Inventory

- a. Assignment of a new medication to a Pyxis Medstation's inventory shall only be done by the Pyxis System Administrators designated by the Pharmacy Director.
- b. Pharmacy technicians and pharmacist may load and unload medication. Use BD Pyxis Medication ES Station Quick Reference Guide* for full details.

E. Stock Replenishment

- a. Refills reports shall be printed at least once daily for Pyxis Medstations.
- b. Gather medications based on the delivery portion of the report, which list all medications and quantities needed to restock each unit specific Pyxis Medstation.
 - i. Do not overfill above assigned maximum quantity to prevent jamming of cubies.
- c. Package medications for each Pyxis Medstation in a separate bag.
- d. To provide a double check, the pharmacy technician shall pull the medications to refill the Pyxis Medstation and a pharmacist shall check the medications and quantity pulled against the delivery report before the technician delivers the medications to the Pyxis Medstations.
- e. For CardinalASSIST medications, pharmacists shall double check prior to delivery of CardinalASSIST to Pyxis Medstations.
- f. Deliver medications and refill the Pyxis Medstation*.

- i. Use the barcode for medication refilling process.
- ii. If the medication barcode is unreadable, return medication to pharmacy, where a pharmacist shall enter the new barcode into the Pyxis Healthsight Viewer.

III. Patients and Temporary Patients:

- A. Patient information for the Pyxis ES Medstation is obtained via an interface with the EHR. If the patient is not listed in the Pyxis ES Medstation, contact the Admitting Department to ensure the admission or transfer function is complete.
- B. A temporary patient may be added to the system.
 1. To enter a temporary patient, go to ~~the~~ "Remove All available patients" function tab and select "Add Patient temporary patient." The user shall accurately enter the patient's last name, first name, and the financial identification number (FIN) or medical record number (MRN).
 2. Temporary patients will be kept on the system for 362 hours.
 3. If the patient was transferred from another inpatient location, the orders shall display within 2-5 minutes.
 4. Patients entered as John or Jane Doe will be added as temporary patients-patient
- C. Pharmacy will reconcile temporary patients.

IV. Removing Medications:

- A. Remove medications for only one patient at a time.
- B. Accuracy of the recorded quantity of medications removed from the Pyxis Medstation is required for accurate patient billing and accurate inventory count of the medication.
- C. Removal of controlled substances shall require the user to complete an inventory count and record the count in the Pyxis Medstation prior to removal of the controlled substance. This is also known as a "Blind Count." If the count is inaccurate, the Pyxis Medstation will fire a red "Please Recount" alert. A second blind count shall be performed. If the inventory count is inaccurate a second time, a discrepancy is created (see Section VIII, Resolution of Controlled Substance Discrepancies).
- D. ~~If expired medications are present in the pocket, an "Outdate Med" icon will appear on the screen to alert the user. Carefully check the entire pocket for expired items; remove expired items and return expired items to the Pharmacy Department.~~ At the time of medication removal, ensure the medication is not expired prior to administration.
- E. If the drawer/door opens and no medications are available in the pocket for removal, ~~double check that you are accessing the correct pocket number as displayed on the screen. If no items are present,~~ cancel the transaction and notify the Pharmacy Department.
- F. Never remove items from the Pyxis Medstation to dispense to patients as discharge medications. All discharge medications require a prescription and shall be dispensed according to State Regulations.

V. Override Medications (Profile Stations Only):

See policy [PH.96 Medication Override from Automated Dispensing Cabinets](#).

VI. Returning Medications:

- A. ~~Drugs removed from the Pyxis Medstation that are not administered to the patient shall be returned to the Return Bin by selecting the Return function. Bulky items may be returned to the original pocket. Expiration dates must be verified for items returned to the original pocket.~~ Unused

medications will be returned to the return bin located in each Medstation within one (1) hour from the time of removal. Scanning of medication is required. Bulky items may be returned to the original pockets. Unused refrigerated medications shall be returned to the pharmacy via external return bin.

- B. Witness will not be required for return of non-controlled substance medication into the return bin.

~~Refrigerated items shall be returned back to the refrigerator.~~

- C. Do not return opened patient controlled analgesia (PCA) syringes, used multi-dose containers, or any medication taken out of its original container. These must be discarded; controlled substance waste shall be documented in the ~~Pyxis~~-Medstation (See Section VII, Wasting Controlled Substances).

- D. A witness ~~is~~and scanning of medication are needed for return transactions involving controlled substances. A witness must be a licensed health care professional with an existing user account.

- E. The pharmacy technicians shall remove the medications from the Return Bin daily and either replaced back into ~~Pyxis~~-Medstation inventory if usable (via scanning) or returned back to the pharmacy if unusable.

a. Pharmacy technician shall verify the quantity of each item in the Return Bin and document quantity found.

b. For controlled substances, when the expected count and actual count do not match, it will create a discrepancy. Notify supervisor or controlled substance surveillance personnel as soon as possible.

VII. Wasting Controlled Substances:

- A. Full or partial doses of controlled substances not administered to the patient shall be wasted and documented in the ~~Pyxis~~-Medstation by using the Waste function.
- B. Controlled substance waste will be rendered unusable by dumping into a controlled substance waste container and removed from the medication area in a timely manner.
- C. Wasting and documentation of waste requires a witness, who must observe the wasting and cosign in the ~~Pyxis~~-Medstation with the nurse administering the medication. The witness must be a licensed health care professional with an existing user account.
- D. The amount used is documented and the ~~Pyxis~~-Medstation calculates the amount wasted from the total dose. Some drugs waste in mg and other in mL; unit of measure is indicated by the system during the removal process.

VIII. Resolution of Controlled Substances Discrepancies:

See policy [PH.98 Automated Dispensing Cabinet Controlled Substance Discrepancy Resolution](#).

IX. System Maintenance:

- A. ~~Pyxis medstations~~Medstations shall be plugged in to outlets with emergency power or an uninterruptable power supply device.
- B. Inventory Quantities
1. Ideal inventory quantity for each ~~Pyxis~~-Medstation is a three (3) day minimum inventory.
~~Inventory~~
 1. ~~Transaction slips shall print upon completion of inventory count.~~
- C. Refill

1. ~~Pyxis~~-Medstations shall be refilled at least once daily by the Pharmacy Department.
~~The Pharmacy Department shall be responsible for refilling the Pyxis Medstations.~~
2. Pharmacists are responsible for checking all medications from Pyxis refill lists and CardinalASSIST prior to refilling medications into ~~Pyxis~~ Medstations.
3. Stock out bulletin/stock low bulletin shall be managed by the Pharmacy Department.
~~The Pharmacy technician shall be responsible for removing the return medications from the return bins daily.~~

D. Load/Unload Medications

1. ~~Pharmacists and Pharmacy technicians~~Only system administrators will have privileges to ~~load and unload~~assign both non- controlled and controlled substance medications.
~~The Director of Pharmacy or Pharmacy Supervisor have access to unload and load controlled substances.~~
2. Authorization to change medications from the ~~Pyxis~~-Medstation shall be done by the ~~Director of Pharmacy or Pharmacy Supervisor~~system administrators.
3. Nursing or ~~physician~~LIP staff may request changes in the inventory quantity and medication changes by writing to the Director of Pharmacy or Pharmacy Supervisor.
4. Pharmacy staff shall remove and handle expired medications at least once daily and return expired medications to the Pharmacy Department.
5. Outdated tracking will be used for all medications.

~~Reports~~

1. ~~Pharmacy shall review, sign and file all appropriate reports generated from the console.~~
2. ~~Nursing staff, the Clinical Nurse Manager and pharmacists shall follow up on all discrepancy reports in a timely manner.~~
3. ~~Discarded reports shall be shredded to comply with the Health Insurance Portability and Accountability Act (HIPAA).~~
4. ~~Nursing staff may run various reports at the Pyxis Medstation.~~
5. ~~The Clinical Nurse Manager or designee may request special reports generated by the Pharmacy Department. See policy PH.93 Pyxis Reports for more information.~~

E. Management of recalled medication

1. Pharmacy should block the use of medication at the Pyxis Medstation in the event of a medication recall.
2. Any recalled medication may be removed by using the Inventory function.

F. Reports

1. See policy PH.93 Pyxis Reports for more information.

G. Failed Drawer

1. The most common type of ~~Pyxis~~-Medstation failure occurs when one of the drawers fails to close completely because the medication package extends above the pockets. A Failed Drawer icon will appear on the ~~Pyxis~~Medstation screen.

2. Attempt to recover the drawer by selecting ~~the~~ "More" from the main screen then select "Recover DrawerStorage Space" option and follow the on the main menu and follow the on-screen prompts. At the completion of the procedure, ~~they~~the system will state if the drawer is functional.
3. If the "Recover DrawerStorage Space" procedure does not correct the problem, the system will state the drawer needs maintenance. Contact the Pharmacy Department for further assistance.

H. Archiving of Data

- ~~1. The Pharmacy Department shall archive Pyxis Medstation data on a regular basis.~~
- ~~2. Archived data shall be maintained for at least three (3) years.~~
- Pyxis activity data shall be kept for at least three (3) years on BD Knowledge Portal.

I. Interface Outage

1. In the event of the EHR-Pyxis interface is out for more than 30 minutes, all medications stored in the ~~Pyxis~~ Medstations shall be accessible as override medications. This is known as Pyxis Critical Override.
2. The Pharmacy Department shall notify the ~~Clinical Nurse Manager~~CNM or the nursing supervisor in the event of a Pyxis Critical Override.
3. The ~~Pyxis~~ Medstation patient profiles will not be updated during interface outages.
4. Nurses must use caution when selecting drugs for removal from this expanded override list to ensure they have the correct drug, dose, and dosage form.
5. Once the EHR-Pyxis interface is restored, the Pharmacy staff shall turn off the Pyxis Critical Override.

J. Troubleshooting Problems

1. ~~Each~~A "BD Pyxis Medstation shall have a ES System Quick Reference Guide." Pyxis System 4000 Station Quick Reference Guide is available for viewing on the Main home page under " located on the machine to assist in problem resolution Help" icon.
2. In the event the problem cannot be resolved, the user should contact the Pharmacy Department.
3. The Pharmacy Department is responsible for contacting Pyxis service personnel.
4. Pyxis Medstations utilize emergency power outlets and uninterrupted power supply devices. In the event a Pyxis Medstation cannot be accessed during a power outage, contact the Pharmacy Department.

K. Care of the ~~BioID and~~ Touchscreen and BioID

~~Clean the BioID with a mild detergent solution and a soft cloth. Do not clean the BioID with alcohol, ammonia, or acetone-based solutions as it causes the lens to crack.~~

1. Clean the touchscreen and BioID with ~~a mild detergent solution and a soft cloth~~an alcohol pad and allow to air-dry.
2. If the touchscreen requires recalibration, contact the Pharmacy Department.

L. Help/Support

1. For more information regarding the operation of the Pyxis ES Medstation ~~4000~~, refer to the "BD Pyxis Medstation ES System 4000 Station-Quick Reference Guide."

2. If further assistance is required, contact the Pharmacy Department at ~~652-6220~~[805-652-6220](tel:805-652-6220) (VCMC) or ~~933-8636~~[805-933-8636](tel:805-933-8636) (SPH).

All revision dates:

12/30/2022, 2/9/2022, 3/4/2020, 2/15/2018, 3/1/2015, 10/1/2008

Attachments

[Attachment A: Pyxis ES Medstation Assignment Statement Form](#)

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	12/30/2022
Pharmacy Services	Sul Jung: Associate Director of Pharmacy Services	12/30/2022

COPY



VENTURA COUNTY HEALTH CARE AGENCY

Origination: 10/1/2004
Effective: Upon Approval
Last Approved: N/A
Last Revised: 12/31/2022
Next Review: 3 years after approval
Owner: Sul Jung: Associate Director of Pharmacy Services
Policy Area: Administrative - Operating Policies
References:

PH.98 Automated Dispensing Cabinet Controlled Substance Discrepancy Resolution

POLICY:


Ventura County Medical Center and Santa Paula Hospital requires ~~Pyxis Medstation~~ automatic dispensing cabinet (ADC) users to resolve all discrepancies which they identify prior to the end of the work shift and to document this resolution. The following procedure ensures a consistent means for documenting the resolution of controlled substance discrepancies.

PROCEDURE:

- A. ~~Pyxis Medstations~~ ADC require that the user perform an inventory count of any Schedule II, III, IV or V medication prior to removal. If the actual inventory count does not match the expected ~~Pyxis Medstation~~ inventory count after two consecutive attempts, a controlled substance discrepancy is created.
- B. To avoid a delay of medication administration to the patient, the discrepancy can be resolved after the medication is administered. The ~~nurse~~ user discovering the discrepancy ~~and the prior nurse~~ shall be responsible for starting the resolution process within one hour as soon as possible. The discrepancy shall be resolved by the change of shift. See Policy PH.88 Controlled Substance for further discrepancy resolution process.
- C. ~~A-Discrepancy Report shall~~ details should be ~~printed~~ reviewed, which lists the name of the last user who accessed the medication. From the **Main Menu**, select ~~Report Menu, then Discrepancies~~, then ~~Undocumented Discrepancies~~, select line item of the unresolved discrepancy for details.

~~An Activity Report is also available. If needed, print an Activity Report for that medication. This report will provide access information for the specific medication for the last 32 hours. From the Main Menu, select Report Menu, then Activity. Call the Pharmacy Department for a drug-specific activity report if activity information beyond 32 hours is needed.~~
- D. Resolve the discrepancy with a witness prior to the end of the shift. Use the information from the ~~Activity Report~~ details of the transaction history to note unusual ~~entries~~ activities. ~~Ask coworkers whose names are listed~~ Review the medication administration record (MAR) for patients on the ~~Activity Report~~. ~~Review MAR's for patients on the~~ specific medication.
- E. Record the resolution ~~with the Document Discrepancies process on the Pyxis Medstation~~ within the ADC.
 1. From the Main Menu, select ~~Document Discrepancies~~.

2. Select discrepancy to document.
3. Select ~~Other for the discrepancy and~~ Resolve to enter the reason for the discrepancy.
4. Resolution of each controlled substance discrepancy shall require a witness.
 - a. The witness shall ~~enter~~ sign-in using their logon ID and BioID, ~~then selects Accept to complete the transaction.~~

F. The unit charge nurse should ~~print a Discrepancy Report~~ log-on to ADC to check for pending discrepancies at the end of every shift ~~for each Pyxis Medstation~~ ().

1. From the Main Menu, select ~~Report Menu, then select Discrepancies-~~
2. Review and resolve any discrepancies listed ~~on the Discrepancy Report.~~

G. If the discrepancy is not resolved before change of shift, the Clinical Nurse Manager or nursing supervisor shall be involved in resolving the discrepancy.

H. If the discrepancy is not resolved by the Clinical Nurse Manager, the Pharmacy Department shall be notified.

I. If no resolution is obtained, then an incident report ~~may~~ should be generated. The nurse manager and pharmacy department ~~may agree to inactivate~~ will address user ~~accounts of the involved staff if a discrepancy remains unresolved >36 hours~~ access based on policy PH.89 Controlled Substance Surveillance.

J. Users with frequent discrepancies may have controlled drug access privileges removed and disciplinary actions taken up to and including termination.

All revision dates:

12/31/2022, 3/1/2015, 8/1/2011, 8/1/2008

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	12/30/2022
Pharmacy Services	Sul Jung: Associate Director of Pharmacy Services	12/30/2022

Current Status: *Pending*

PolicyStat ID: 12686617



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 1/1/2008
Effective: Upon Approval
Last Approved: N/A
Last Revised: 9/1/2016
Next Review: 3 years after approval
Owner: Lizeth Barretto: Chief Operating Officer, Ambulatory Care
Policy Area: Ambulatory Care - Patient Care Services
References:

AC.21 Amniotic Fluid Ultrasound Scanning and Fetal Monitoring

POLICY:

To provide guidelines for Ambulatory Care nursing staff when assisting with ultrasound scanning of amniotic fluid in conjunction with fetal monitoring.

PROCEDURE:

Indications:

As ordered by a physician for:

- Oligohydramnios.
- Pregnant patients who are being evaluated for a post-term gestation.
- To establish oligohydramnios at any stage of gestation.

Equipment:

- Ultrasound machine
- Ultrasound gel – single use
- Towel
- Patient labels
- Antepartum Fetal Monitoring Form

Essential Steps:

Preparation of patient:

1. Explain procedure to patient.
2. Protect clothing with towel.
3. Expose abdomen and provide privacy.

Preparation of equipment:

1. Turn on ultrasound machine.
2. Enter patient's name and chart number.
3. Apply ultrasound gel to abdomen.

4. Scan for adequate fluid pocket.
5. Freeze picture by pressing "freeze key."
6. Use caliper button on machine to measure the amount of fluid. Fluid pocket must measure at least 3 cm vertically.
7. Take picture by pressing print button.
8. Clear picture from screen by pressing "freeze button."
9. Deliver image to provider.

Departmental Notification:

Attending physician must read picture and approve before patient can be discharged home.

Documentation:

1. Document results/recommendations in the Electronic Health Record (EHR).
2. Document patient education in the EHR, including any need for follow-up care.

Infection Control:

1. All health care workers are required to use appropriate Personal Protective Equipment (PPE) to prevent exposure when contact with blood or other bodily fluids, hazardous medications, chemicals, or gases/ vapors is anticipated. Gloves will be worn for touching blood and body fluids, mucous membranes, or non-intact skin of all patients and for handling items or surfaces soiled with blood or body fluids. Gloves will be changed and hand hygiene performed after contact with each patient and patient environment. Masks, protective eye wear or face shields, and gowns/aprons will be worn during procedures that are likely to generate droplets or splashes of blood or other body fluids. Hands and skin surfaces will be washed immediately and thoroughly if contaminated with blood or other body fluids.
2. Refer to current policies and procedures for proper handling, cleaning, disinfecting, and sterilization of reusable equipment and devices.

All revision dates:

9/1/2016

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Executive Committee	Tracy Chapman: VCMC - Med Staff	pending
Ambulatory Care Medical Director, Specialty Care	Theresa Cho: Chief Executive Officer, Ambulatory Care	12/6/2022



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 2/1/2005
Last Approved: N/A
Last Revised: 11/1/2013
Next Review: 3 years after approval
Owner: Kristina Swaim: Clinical Nurse
Manager, OB
Policy Area: OB Nursing
References:

OB.36 Fetal Fibronectin Specimen Collection for Enzyme Immunoassay

POLICY:

To provide guidelines for the Medical Team to obtain a vaginal swab for fetal fibronectin enzyme immunoassay via sterile speculum examination to assist in assessing the patient's risk for preterm delivery.

PROCEDURE:

- A. A specimen collected for fetal fibronectin enzyme immunoassay may, according to the physician's order, be transported to the Laboratory for immediate processing, or may be held in the Laboratory specimen refrigerator for up to 72 hours for a physician's order for processing at any point within that time limit should the patient's signs and symptoms continue or recur.
- B. Fetal fibronectin specimen collection for enzyme immunoassay requires knowledge of the process:
 1. Obtaining a vaginal swab for fetal fibronectin immunoassay
 2. Indications, contractions
 3. Patient screening
 4. The benefits
 5. Sampling technique
 6. Interpretation of results

GUIDELINES:

- C. Obtain a physician order to obtain specimen for eligible patients. NOTE: Specimen must be obtained PRIOR to performing a vaginal examination. Criteria for eligibility include:
 1. Gestational age between 24 and 34 6/7 weeks
 2. Signs and symptoms of preterm labor, such as:
 - a. Uterine contractions with or without pain
 - b. Menstrual – like cramping, dull backache and/or pelvic pressure
 - c. Vaginal spotting or light bleeding during the second or third trimester
 - d. Intermittent abdominal pain with or without diarrhea

- e. Any change in vaginal discharge (amount, color or consistency)
3. Intact amniotic membranes
- D. Patients who are not eligible for fetal fibronectin enzyme immunoassay or for whom the effectiveness of the test has not been established include those who:
 1. have ruptured membranes
 2. are known to be dilated > 3cm
 3. are experiencing moderate or heavy vaginal bleeding
 4. have cancer of the reproductive tract
 5. have a cerclage in place
 6. have a placenta previa or an abruption placentae
 7. have engaged in sexual intercourse within the last 24 hours
 8. have within the past 24 hours experienced manipulation of the cervix, such as a digital cervical examination, a vaginal probe ultrasound, a Pap smear and/or collection of vaginal specimens for culture.
 9. have within the past 24 hours douched or used other vaginal solutions, lubricants, creams or medications
- E. Explain procedure to the patient. Provide for privacy.
- F. Fetal fibronectin specimen collection for enzyme immunoassay
 1. Speculum Collection Method for FFN Testing
 - a. Assemble equipment: sterile speculum and gloves, small sterile basin, saline water for lubricant, fetal fibronectin collection kit and biohazard bag.
 - b. Wash hands
 - c. Position patient for sterile speculum exam in dorsal lithotomy position with foot of labor bed removed or with buttocks elevated on large folded blanket or inverted bed pan. Drape patient to ensure privacy.
 - d. Open the fetal fibronectin collection kit, which contains a sterile Dacron swab for specimen collection and a transport tube containing extraction buffer. Open small sterile basin and pour sterile saline or sterile water into it to lubricate the speculum. Open the sterile speculum package, maintaining sterility. Don gloves and lubricate the speculum with a sterile saline or sterile water. NOTE: Sterile saline and sterile water are the ONLY lubricants which may be used for specimen collection for fetal fibronectin enzyme immunoassay. A dry speculum may also be used.
 - e. Insert the sterile speculum per procedure. (See procedure, Sterile Speculum Examination). Visualize the cervix and observe for leakage of amniotic fluid, cervical dilation, and any abnormalities. If there is leakage of amniotic fluid from the cervical os and/or the cervix is obviously dilated > 3cm, the patient is not a candidate for fetal fibronectin enzyme immunoassay: do NOT collect the specimen.
 - f. There are two sites which may be used for specimen collection: either outside the cervical os or the posterior vaginal fornix. Visualize both sites and select the one to be used prior to inserting the Dacron swab for specimen collection to avoid contaminating the swab with mucus and/or

blood. Avoid collecting the specimen from a site where blood is present.

- g. Collect the specimen by placing the tip of the Dacron swab from the collection kit either on the outside of the cervical os or into the posterior vaginal fornix and lightly rotating it across the cervix or the fornix for 10 seconds to permit absorption of the fetal fibronectin. Use a gentle sweeping and twisting motion, avoid aggressive sampling. If sampling from the cervix, keep the swab on the outside of the cervix, do not place it into the os. The Dacron swab from the collection kit is the ONLY swab which may be used for sample collection; any other swab will invalidate the test results.
- h. Remove the Dacron swab and place the tip with the vaginal swab in the extraction buffer in the specimen tube from the fetal fibronectin enzyme immunoassay collection kit. Break the shaft of the Dacron swab even with the top of the specimen tube (a guide mark indicates the correct place to break the shaft). Align the end of the swab shaft with the hole inside the specimen tube cap and push the cap down tightly to seal the tube.
- i. Remove the speculum, remove gloves and assist the patient to comfortable position. Wash hands.
- j. Label the specimen tube properly with patient and collector identification, and date and time of collection. According to the physician's order, transport the specimen to the Laboratory either for testing or to be held in the specimen refrigerator for 72 hours.
- k. Continue with the assessment of the patient for preterm labor following the specimen collection, including performing a digital vaginal examination if appropriate. If the membranes are ruptured or the patient's cervix is dilated > 3cm, discard the fetal fibronectin specimen and notify the physician. Otherwise, consult with the physician as appropriate regarding the patient's management, notifying him or her of any abnormalities or changes in the condition of the patient or fetus.

2. Non-Speculum Collection Method for FFN Testing -- "blind FFN"

- a. Assemble equipment: gloves, fetal fibronectin collection kit and biohazard bag.
- b. Wash hands.
- c. Position patient in dorsal lithotomy position. Drape patient to ensure privacy.
- d. Open the fetal fibronectin collection kit, which contains a sterile Dacron swab for specimen collection and a transport tube containing extraction buffer.
- e. Do not use gel as lubricant. Using sterile gloves, spread labia. Insert Dacron swab into posterior vaginal fornix. Leave for approximately 30 seconds.
- f. Remove the Dacron swab and place the tip with the vaginal swab in the extraction buffer in the specimen tube from the fetal fibronectin enzyme immunoassay collection kit. Break the shaft of the Dacron swab even with the top of the specimen tube (a guide mark indicates the correct place to break the shaft). Align the end of the swab shaft with the hole inside the specimen tube cap and push the cap down tightly to seal the tube.
- g. Remove gloves and assist the patient to comfortable position. Wash hands.

Label the specimen tube properly with patient and collector identification, and date and time of collection. According to the physician's order, transport the specimen to the laboratory either for testing or to be held in the specimen refrigerator for 72 hours.

Continue with the assessment of the patient for preterm labor following the specimen collection, including performing a digital vaginal examination if appropriate. If the membranes are ruptured on the patient's cervix is dilated > 3cm, discard the fetal fibronectin specimen and notify the physician. Otherwise, consult with the physician as appropriate regarding the patient's management, notifying him or her of any abnormalities or changes in the condition of the patient or fetus.

DOCUMENTATION

- A. Document on the Progress Notes, Electronic Health Record (EHR) (as appropriate) the assessment of the patient's eligibility for the fetal fibronectin enzyme immunoassay, the time and results of the sterile speculum examination, the collection of the fetal fibronectin specimen, the identification of the collector and the disposition of the specimen. Document any difficulty encountered and any unsuccessful attempts at specimen collection.
- B. Document patient/family teaching.

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AU Stafford IP; Garite TJ; Dildy GA; Colon-Lucach A; Williams CA; Bobritchi B; Lapointe J; Bloch DAS Am J Obstet Gynecol. December 2013, Issue 6.

All revision dates:

11/1/2013, 7/1/2010, 2/1/2005

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Staff Committees: Family Medicine & OB	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Sherri Block: Interim Chief Nursing Officer	7/12/2022
Policy Owner	Kristina Swaim: Clinical Nurse Manager, OB	7/12/2022



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 4/1/2014
Last Approved: N/A
Last Revised: 5/15/2019
Next Review: 3 years after approval
Owner: Kristina Swaim: Clinical Nurse
Manager, OB
Policy Area: OB Nursing
References:

OB.50 Management of the Patient in Second Stage of Labor

POLICY:

To state the procedure for managing the patient in the second stage of labor. The second stage of labor begins at complete cervical dilation and ends with the birth of the baby.

PROCEDURE:

Physicians and nurses will follow the VCMC/SPH Nursing Care and Management of the Second Stage of Labor Algorithm (see Attachment A and B).

Equipment

- A. Fetal Monitor
- B. VCMC/SPH Nursing Care and Management of the Second Stage of Labor Algorithm

Documentation

Document care given and responses in patients Electronic Health Record (EHR)

Document Following Policy OB.45

REFERENCES:

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CMQCC California Maternal Quality, Algorithm for the Management of Second Stage of Labor 2018

ATTACHMENTS:

Attachment A - Second Stage of Labor Algorithm

Attachment B-Practice Advisory Guidelines

All revision dates:

5/15/2019, 4/1/2014

Attachments

Algorithm for the Management of Second Stage of Labor (CERVIX 10 cm) APPENDIX A.pdf

Approval Signatures

Step Description	Approver	Date
Medical Staff Committees: Family Medicine & OB	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Sherri Block: Interim Chief Nursing Officer	7/12/2022
Policy Owner	Kristina Swaim: Clinical Nurse Manager, OB	7/12/2022



V E N T U R A C O U N T Y
H E A L T H C A R E A G E N C Y

Origination: 2/1/2012
Last Approved: N/A
Last Revised: 3/29/2022
Next Review: 3 years after approval
Owner: Kristina Swaim: Clinical Nurse
 Manager, OB
Policy Area: OB Nursing
References:

OB.68 Newborn Pulse Oximetry Screening

POLICY:

To detect critical congenital heart defects. The Advisory Committee on Heritable Diseases in Newborns and Children, which advises the ~~federal~~Federal Health and Human Services (HHS) Secretary, has recommended that pulse oximetry screening for Critical Congenital Heart Disease (CCHD) be added to the uniform screenings for newborns.

The post-partum unit at Ventura County Medical Center/Santa Paula Hospital shall perform routine pulse oximetry screening using motion-tolerant pulse oximeters that report functional oxygen saturation cleared by the FDA for use in newborns. Screening should be based on the recommended screening algorithm and be performed by qualified personnel (e.g., nurses) who have been educated in the use of the algorithm and trained in pulse oximetry of well newborns, not in intensive care.

Screening in the post-partum unit is not to begin until 24 hours of life (or as late as possible if earlier discharge is planned), and be completed on the second day of life. Earlier screening can lead to false positive results because of the transition from fetal to neonatal circulation and the stabilization of systemic oxygen saturation levels. A later screening can also miss an opportunity for intervention for defects that are impacted by the closing of the ductus arteriosus (see Attachment A).

PROCEDURE:

- A. Prepare baby for screening; baby to be alert and quiet. Use disposable or reusable infant sensor/probes. Same sensor/probe may be used for repeated tests. If reusable probe is used, clean after each use.
- B. Follow the attached algorithm. Place pulse-ox probe on Right Hand (RH) or either Foot (F) either in parallel or in direct sequence. If $\geq 95\%$ and $\leq 3\%$ difference between RH and F, the test is negative and a "pass" result is given and screening is complete.
- C. If $< 90\%$ in RH or F, the test is positive and a "fail" result is given. Physician is to be notified immediately and baby is referred for clinical assessment and possible echocardiogram. Pulse oximeter screening should NOT be repeated for these infants.
- D. If $90\% - 94\%$ in RH or F or $> 3\%$ difference between RH and F, repeat screen in one (1) hour. If screening is $\geq 95\%$ in RH or F and $\leq 3\%$ difference between RH and F, the test is negative; it is a "pass" and screening is complete. If second screening is $90 - 94\%$ in RH and F or $> 3\%$ difference RH and F, repeat screen in one (1) hour. If third screening is $\geq 95\%$ in RH or F and $\leq 3\%$ difference between RH and F, the test is negative; it is a "pass" and screening is complete. If third screening is $< 90\%$ in RH and F, the test is

positive; notify physician. If third screening is 90-94% in RH and F or >3% difference between RH and F, the test is positive; notify physician.

DOCUMENTATION

Document findings in the electronic health record.

Inform parents of results.

ATTACHMENTS:

Attachment A - CHD Algorithm

All revision dates:

3/29/2022, 5/24/2019, 5/15/2019, 11/1/2013

Attachments

Attachment A - CHD Algorithm.pdf

Approval Signatures

Step Description	Approver	Date
Medical Staff Committees: Family Medicine & Pediatrics	Tracy Chapman: VCMC - Med Staff	pending
Nursing Administration	Sherri Block: Interim Chief Nursing Officer	7/12/2022
Policy Owner	Kristina Swaim: Clinical Nurse Manager, OB	7/12/2022



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 8/12/2020
Last Approved: N/A
Last Revised: 11/8/2021
Next Review: 3 years after approval
Owner: Kristina Swaim: Clinical Nurse
Manager, OB
Policy Area: OB Nursing
References:

OB.72 Nitrous Oxide Use During the Intrapartum/ Immediate Post-Partum Period

Policy:

Nitrous oxide may be self-administered by inhalation for analgesia to patients who meet eligibility criteria and have provided consent during labor and/or the immediate post-partum period.

Definition:

Nitrous oxide inhalation is one form of labor analgesia. The administration of nitrous oxide for labor analgesia requires setting up the apparatus/equipment and instructing women how to use the device for self-administration of inhalation analgesia.

Procedure:

I. Background Information

- A. Supervision: Following a period of training and supervision to establish competency, no ongoing direct supervision would be required. However, an anesthesiologist will be readily available for consultation or assistance.
- B. Indications: Peripartum women experiencing pain admitted to the hospital.
- C. Precautions/Contraindications: Patients who:
 1. Cannot physically hold her own face mask.
 2. Have impairment of consciousness or who are intoxicated with either drugs or alcohol.
 3. Have received intravenous opioids within the last 2 hours or intramuscular opioids within the last 4 hours
 4. Have known vitamin B12 deficiency.
 - a. Risk factors for vitamin B12 deficiency include but are not limited to: pernicious anemia, atrophic gastritis, history of gastric bypass or similar surgery, Crohn's disease, celiac disease, Grave's disease, lupus erythematosus, or history of alcohol abuse. If a women's vitamin B12 level is adequate from replacement therapy, nitrous oxide is an appropriate analgesic option.
 5. Have impaired oxygenation defined as oxygen saturation consistently less than 95% on room air.
 6. Have hemodynamic instability defined as systolic blood pressure consistently less than 100 mmHg.

7. Have a Category III fetal heart rate tracing, or category II fetal heart tracing requiring intrauterine resuscitation measures in the last 30 minutes. If tracing improves to a category I or category II not requiring resuscitation measures, nitrous oxide may be initiated or resumed.
8. Patients receiving intravenous magnesium sulfate for preeclampsia.
9. Are known to be COVID-19 positive or COVID-19 unknown

II. Equipment

- A. Nitrous oxide delivery system
 1. Set up and administered by manufacturer's guideline (50/50 concentration with oxygen).
- B. Nitrous oxide
- C. Oxygen
- D. Disposable face mask
- E. Note: Nitrous oxide delivery system and tanks shall be stored in a secure location when not in use.

III. Set-Up and Administration of Nitrous Oxide for Women in Labor

- A. Pre-Treatment Evaluation:
 1. Assessment of patient suitability (mother and fetus) to determine if nitrous oxide is an appropriate choice of analgesia and confirm absence of contraindications. This includes maternal vital signs including blood pressure, heart rate and oxygen saturation along with fetal heart rate monitoring.
- B. Patient Consent:
 1. Written consent shall be obtained by an OB Licensed Independent Practitioner (LIP).
- C. Set-up (if applicable):
 1. Ensure equipment is properly connected and operating.
 2. Ensure gas tanks have adequate supply.
- D. Patient Preparation:
 1. Inform patient of potential side effects: Nausea, vomiting, dizziness and fatigue.
 2. The patient shall not ambulate without assistance once nitrous oxide has been initiated.
 - a. Patient may ambulate without assistance 15 minutes after discontinuation of nitrous oxide.
 3. Instruct the patient on self-administration: Placement of mask to create seal; timing of breathing for maximum analgesic effect; only patient is allowed to hold mask.
- E. Administration:
 1. Patient holds mask over nose and mouth creating a sufficient seal to activate a second-stage regulator to open flow of nitrous oxide at 50% in nitrous concentration and 50% oxygen.
 2. Following initiation of nitrous oxide orders and administration, additional opioids, sedatives or medications known to commonly cause sedation are to be ordered and given only under the direct supervision of an anesthesiologist.
 - a. Patients may receive a dose of intravenous opioids 15 minutes after discontinuation of nitrous oxide.
- F. Monitoring:

1. Patient is to be monitored/assessed at the bedside for the first 15 minutes after administration by an OB LIP or registered nurse, then routine monitoring/assessment is implemented. A LIP shall be available and/or on hospital campus during the time nitrous oxide is being administered.

G. Termination of Treatment:

1. Use of nitrous oxide is discontinued whenever patient wishes or when need for analgesia is no longer present.

H. Exposure: Equipment fitted with an appropriate scavenging system per manufacturer's and hospital guidelines. Staff exposure shall be assessed in compliance with **Policy 106.41 Environmental Safety Surveillance** and in collaboration with the hospital's Safety Officer. Dosimeters shall be worn by select staff members and exposure shall be evaluated in June and December of each year and results reported to Hospital Safety Officer.

IV. Documentation

A. In the electronic health record, the following shall be documented in Power Chart Maternity:

1. Informed consent obtained from patient.
2. Date, time, dosage, route of administration and concentration of nitrous oxide given. Time administration is initiated and time of discontinuation.
3. Any side effects experienced and patient response to nitrous oxide.
4. Any noted change in fetal heart rate and interventions implemented are documented
5. Patient/family teaching on patient education record.

V. Competency Assessment

A. Initial Competence

1. Nursing staff and LIPs will attend a nitrous oxide training session and will demonstrate the following:
 - a. Understanding of equipment
 - b. Ability to set-up equipment properly
 - c. Understanding of indications and contraindications
 - d. Knowledge of potential side effects
 - e. Physicians and Certified nurse midwives only: Ability to provide informed consent and instruction to patients requesting this method of analgesia
2. In addition, certified nurse midwives and OB registered nurses shall each be observed setting up and administering nitrous oxide ~~to a patient by a member of the anesthesia team~~ before being deemed competent.

B. Continued Proficiency

1. Certified nurse midwives or OB registered nurses shall receive updates in the use of nitrous oxide ~~from the obstetrical anesthesia team~~ annually and will be re-evaluated on a yearly basis to ensure continued competence.

All revision dates:

11/8/2021, 8/12/2020

Attachments

Nitrous Oxide Consent Form

Approval Signatures

Step Description	Approver	Date
Medical Staff Committees: Family Medicine & OB	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	7/14/2022
Nursing Administration	Michelle Sayre: Chief Nursing Officer	11/22/2021
Nursing Administration	Sherry Block: Associate Chief Nursing Officer	11/15/2021
Policy Owner	Kristina Swaim: Clinical Nurse Manager, OB	11/15/2021



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 8/11/2020
Last Approved: N/A
Last Revised: 11/23/2021
Next Review: 3 years after approval
Owner: Kristina Swaim: Clinical Nurse
Manager, OB
Policy Area: OB Nursing
References:

OB.73 Water Immersion During Labor

POLICY:

Ventura County Medical Center (VCMC) and Santa Paula Hospital (SPH) utilizes immersion in water during the first stage of labor which may be associated with shorter labor and decreased use of spinal and epidural analgesia and may be offered to healthy women with uncomplicated pregnancies between 37 0/7 weeks and 41 6/7 weeks of gestation.

Benefits of water immersion include increased relaxation, mobility, and pain relief. The safety of water immersion during labor has been established by research, and does not result in reduced APGAR scores, increased neonatal or maternal infections, or increased NICU admissions (Cluett and Burns 2009).

PROCEDURE:

I. PURPOSE

The purpose of this policy is to provide professionals guidelines to safely provide care to women who labor and chose to use water immersion as their preferred choice of pain management and relaxation.

II. DEFINITIONS

- A. **Warm water immersion:** Immersion in a tub with depth that allows for complete submersion of the abdomen to the breast level.
- B. **Water labor:** Use of warm water immersion during any stage of labor up to but not including the birth of the neonate.
- C. **Waterbirth:** Use of warm water immersion during the second stage of labor that results in the birth of a neonate entirely underwater, regardless of the location of delivery of the placenta.

III. Criteria for the Use of Water Immersion

- Mother has elected and made an informed choice regarding water birth
- Single gestation at or >37 weeks who is low risk and within the providers' scope of practice

IV. Contraindications for Water Immersion in labor

- Any condition requiring transfer to a higher level of care
- Presence of thick meconium
- Excessive intrapartum bleeding
- Elevated maternal temperature greater than 100.4° F (38° C)
- Non-reassuring fetal heart rate patterns

- Use of agents causing sedation
- Active herpes, carrier of MRSA, or untreated skin infection should not enter the pool
- Rupture of membranes without active labor
- At the provider's discretion

V. Management

1. Patient should be assessed by the provider before entering the water
2. Maternal vital signs and fetal heart rate should be monitored regularly as per standard of care and reevaluated as necessary.
3. Mother should be encouraged to remain hydrated, drinking water and electrolytes.
4. The mother should be encouraged to empty her bladder regularly on the toilet. Fecal matter or other contamination should be removed from the water immediately. If the water becomes significantly contaminated, the mother should leave the pool.
5. The birth team should prepare a safe birth environment outside the pool in case evacuation of the tub is necessary, such as having towels and a blanket or mattress near the pool. Special attention should be provided to prevent slipping.
6. If the provider or member of the birth team requests the mother exit the pool, the mother should comply and leave the pool immediately.
7. Artificial rupture of membrane (AROM) should not be performed in the water.

VI. Reasons for Leaving the Pool

- Elevated maternal temperature or abnormal vital signs
- Slow progress, reduction in effective or frequency of contractions
- Non-reassuring fetal heart rate pattern or inability to adequately assess fetal heart rate
- Water temperature too hot or cold
- Fecal matter or other contamination that cannot be removed
- Excessive bleeding
- Use of agents causing sedation
- At the request of the patient or the provider's discretion.

VII. Pool Set up and Cleaning

Portable pool (AquaDoula) or (Birth Pool in a Box) is designed and manufactured for use as labor and birth pools for which the manufacturer has provided manufacturer instructions for use (MIFU) cleaning and disinfecting instructions. The AquaDoula and Birth Pool in a Box should always be used with 1 time (single use) use disposable liners.

1. Portable Pool Set Up

- Set up following manufactures assembly instructions. ~~AquaDoula users~~Users manual will be kept at the nurses station, or can be downloaded at AquaDoula.com or birthpoolinabox.com
- Fill ~~AquaDoula~~tub with warm water from a warm water tap using the provided water hose adapter.
- For safe use of the heating system, fill tub to a level of 6 inches from the top of the AquaDoula Aqua Wall.
- Water temperature should be at a safe and comfortable water temperature (generally 95-100 degrees F).
- Water should always be tested for a safe temperature before entering the AquaDoula labor immersion tub. ~~The cover can be placed on the surface of the water to help insulate the AquaDoula prior to use.~~

1. Portable Pool Disassembly

- ~~The~~When using the AquaDoula the heating system should be unplugged prior to draining the AquaDoula.
- Follow disassembly instructions found in the AquaDoula-users guide located in the nurse's station, or can be downloaded at AquaDoula.com or birthpoolinabox.com
- Connect garden hose to pump and then submerge into the pool, tilt pump to maximize suction flow, disposing of water ~~into toilet~~.
- Pump should be monitored to ensure proper operation and safety.
- Remove and safely dispose of disposable liner.
- In the event of excessive water spillage, page Environmental Support Services at 805-933-8632

1. Portable Pool Cleaning

- Clean and disinfect the pool before installing the single-use liner after use.
- Use Environmental Protection Agency (EPA) approved tuberculocide disinfectants (List B) *Attachment A*
- Preferred product is 9480-8 PDI SANI-CLOTH BLEACH WIPES (4 Minute Contact Time)
- Alternative choice is 5813-1 CLORAX BLEACH (3 minutes Contact Time)
- Wipe with fresh water
- Towel dry surfaces prior to storage.
- ~~Roll the AquaWall and wrap tight for storing with carrying strap.~~ Store according to manufactures instructions.

VII. Documentation

1. Use of the Labor Pool will be documented in the patients Electronic Medical Record (EMR).
 - a. Select Pain Intervention
 - b. Select Nonpharmacological Therapy
 - c. Select Labor Water Immersion
1. Fetal Heart Rate will be documented according to *Policy OB. 45 Management of Fetal Heart Tracing.*

All revision dates:

11/23/2021, 5/11/2021, 8/11/2020

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Medical Staff Committees: Family Medicine & OB	Tracy Chapman: VCMC - Med Staff	pending
Infection Prevention	Magdy Asaad: Infection Prevention Manager	8/23/2022
Nursing Administration	Joyce Volsch: Interim Chief Nursing Officer	1/26/2022
Nursing Administration	Sherrri Block: Associate Chief Nursing Officer	11/23/2021
Policy Owner	Kristina Swaim: Clinical Nurse Manager, OB	11/23/2021



VENTURA COUNTY
HEALTH CARE AGENCY

Origination: 12/1/2015
Effective: Upon Approval
Last Approved: N/A
Last Revised: 8/8/2022
Next Review: 3 years after approval
Owner: Hugo Ortiz: Diabetes Nurse Educator
Policy Area: Diabetes Management
References:

DM.003 Pediatric Hypoglycemia

POLICY:

To define, identify and treat hypoglycemia in infants and children according to evidence-based standards. For management of neonatal hypoglycemia, please see separate Neonatal Hypoglycemia protocol. It is the policy of Ventura County Medical Center/Santa Paula Hospital that pediatric hypoglycemia will be identified and immediately treated according to evidence-based standards.

DEFINITION OF HYPOGLYCEMIA:

~~Infants and children with blood glucose less than 70 mg/dL, or less than 80 mg/dL with symptoms of hypoglycemia.~~

Definitions and Classifications

Per ISPAD Clinical Practice Consensus Guideline 2018, "hypoglycemia is a fall in blood glucose level that exposes a patient to potential harm and there can be no single numerical definition of hypoglycemia for all patients and situations."

The threshold for initiating treatment is a blood glucose value less than or equal to (<) 70 mg/dL.¹⁻²

Characterization of Hypoglycemia²

Level 1	<u>Blood glucose value between 54 mg/dL and 70 mg/dL</u>
Level 2	<u>Blood glucose value less than (<) 54 mg/dL</u>
Level 3	<u>Severe hypoglycemia characterized by altered mental and/or physical status requiring assistance in the treatment of hypoglycemia</u>

Signs and Symptoms of Hypoglycemia¹

<u>Autonomic</u>	<u>Shakiness, sweatiness, trembling, palpitations, pallor</u>
<u>Neuroglycopenic</u>	<u>Poor concentration, blurred or double vision, disturbed color vision, difficulty hearing, slurred speech, poor judgement and confusion, problems with short term memory, dizziness and uneasy gait, loss of consciousness, seizure</u>
<u>Behavioral</u>	<u>Irritability, erratic behavior, agitation, nightmares, inconsolable crying</u>

Non-specific

Hunger, headache, nausea, tiredness

Per ADA 2020, "[Blood glucose] targets should be individualized, and lower targets may be reasonable based on benefit-risk assessment. Blood glucose targets should be modified in children with frequent hypoglycemia or hypoglycemia awareness."

PROCEDURE:

A. Assessment:

1. Assess for signs and symptoms of hypoglycemia including irritability, shakiness, dizziness, headache, confusion, jitteriness, feeding problems, cyanosis, tachypnea, lethargy, weakness, decreasing level of consciousness, hunger, tachycardia, pallor and/or diaphoresis. Assess for signs and symptoms of hypoglycemia
2. If symptoms present:
 - a. Have patient stop all activity
 - b. Perform a STAT bedside blood glucose
 - c. Begin treatment per protocol
 - d. Inform provider of hypoglycemia

B. Treatment:

1. Patient Responsive: If patient responsive and able to take oral medications, give 15 grams of carbohydrates.³
 - a. Able to take orals: 120 mL (4 oz) apple, cranberry, or orange juice (do not give 45 grams of carbohydrates:
 - i. 120 mL (4 oz) apple, cranberry, or orange juice (do not give orange juice to patients with renal insufficiency)
OR
 - ii. 120 mL (4 oz) non-diet soda
OR
 - iii. 4 glucose tablets
OR
 - iv. 15 grams of glucose gel
orange juice to patients with renal insufficiency)
OR
 - If patient NPO, or unable to swallow:
 - i. Blood glucose < 40 mg/dL: Give 2 mL/kg of D₂₅W or 5 mL/kg of D₁₀W IV over 30-60 minutes
 - ii. Blood glucose ≥ 40 mg/dL: Give 2.5 mL/kg of D₁₀W IV over 30-60 minutes
 - b. 120 mL (4 oz) non-diet soda OR
 - c. 4 glucose tablets OR
 - d. 15 grams of glucose gel
2. If patient unresponsive, NPO, and/or unable to swallow, give weight based IV push of dextrose

i. Patient weight < 40 kg²: Give dextrose 0.5 gram/kg/dose

i. Dextrose 10% (D10W) 5 mL/kg OR

ii. Dextrose 25% (D25W) 2 mL/kg IV Push

ii. Patient weight > 40 kg

i. Give Dextrose 50% (D50W) 1 mL/kg

ii. Maximum dose = 25 gm/50 mL

3. If patient unresponsive: and patent IV not present

Patent IV present:

i. Blood glucose < 40 mg/dL: Give 2 mL/kg of D₂₅W or 5 mL/kg of D₁₀W over 3-5 minutes

ii. Blood glucose ≥ 40 mg/dL: Give 2.5 mL/kg of D₁₀W over 3-5 minutes

a. Patient weight⁶ ≤ 25 kg: Give glucagon 0.5 mg intramuscularly (IM) or subcutaneous (subcut)

b. Patient weight⁶ > 25 kg: Give glucagon 1 mg IM or subcut

c. Attempt IV access

d. Patent IV not present:

i. Weight-based dosing:

1. Patient weight ≤ 20 kg: Give Glucagon 0.5 mg IM or SQ

2. Patient weight > 20 kg: Give Glucagon 1 mg IM or SQ

ii. Attempt IV access

iii. Turn patient on side, as nausea and vomiting frequently occur with Glucagon administration

Turn patient on side, as nausea and vomiting frequently occur with glucagon administration

C. Reassess:

Recheck blood glucose 15 minutes after treatment. If blood glucose is still < 80/70 mg/dL, repeat treatment, and recheck blood glucose in 15 minutes to confirm target glucose has been reached.³

D. Prevent Recurrence: Goal is euglycemia (pre-meal blood glucose of 80-130 mg/dL, post-meal blood glucose 100-180 mg/dL)

1. For patients taking orals: Once blood glucose is above 400/70 mg/dL, provide snack containing both carbohydrates and protein, without insulin coverage.

2. For patients unable to take orals: Call Provider for orders to prevent recurrence.

a. Initiate intravenous fluids (NS, ½ NS, ¼ NS) with 10% dextrose at rate of 1.2-3 mL/kg/hr or 5% dextrose at rate of 2.5-6 mL/kg/hr (2-5 mg/kg/min glucose infusion rate)¹

E. Document all events in EHR/the electronic health record. Notify Provider/Licensed Independent Practitioner.

Initiate notification form for all blood glucose < 50 mg/dL.

REFERENCES:

A. American Diabetes Association. Standards of Medical Care in Diabetes 2018. Diabetes Care 41: supplement 1, 2018.

- B. Ly TT, Maahs DM, Rewers A, Dunger D, Oduwole A, Jones TW. ISPAD Clinical Practice Consensus Guidelines 2014 Compendium: Assessment and management of hypoglycemia in children and adolescents with diabetes. *Pediatric Diabetes* 2014; 15(Suppl. 20): 180–192.
1. Abraham MB, Jones TW, Naranjo D, Karges B, Oduwole A, Tauschmann M, Maahs DM. ISPAD Clinical Practice Consensus Guidelines 2018: Assessment and management of hypoglycemia in children and adolescents with diabetes. *Pediatr Diabetes*. 2018 Oct;19 Suppl 27:178-192.
 2. American Diabetes Association. 6. Glycemic Targets: Standards of Medical Care in Diabetes-2020. *Diabetes Care*. 2020 Jan;43(Suppl 1):S66-S76
 3. Hamdy, O. How to Treat Hypoglycemia. Joslin Diabetes Center. 4/24/2019. <http://www.joslin.org/patient-care/diabetes-education/diabetes-learning-center/how-to-treat-hypoglycemia>. Last Accessed 10/19/2021.
 4. American Diabetes Association. 15. Diabetes Care in the Hospital: Standards of Medical Care in Diabetes-2020. *Diabetes Care*. 2020 Jan;43(Suppl 1):S193-S202.
 5. Broselow J, Luten R. *Broselow Pediatric Emergency Reference Tape*. 2019.
 6. Product Information: GlucaGen(R) subcutaneous injection, intramuscular injection, intravenous injection, glucagon rDNA origin subcutaneous injection, intramuscular injection, intravenous injection. Bedford Laboratories (per DailyMed), Bedford, OH, 2013.

All revision dates:

8/8/2022, 5/15/2019, 12/1/2015

Attachments

No Attachments

Approval Signatures

Step Description	Approver	Date
Pediatrics Committee	Tracy Chapman: VCMC - Med Staff	pending
Pharmacy & Therapeutics Committee	Sul Jung: Associate Director of Pharmacy Services	8/24/2022
Nursing Administration	Sherri Block: Interim Chief Nursing Officer	8/8/2022
Diabetes Management	Jessica Colborn: Nursing-Diabetes Education	8/8/2022
Diabetes Management	Anthony Walls: MD	8/7/2022

Delineation Of Privileges

Transgender/Gender Affirming Surgery

Name:

Privilege	Requested	Granted	Deferred	Suspended
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Basic Criteria:

- a. Completion of an ACGME or AOA approved residency program in Plastic Surgery, Urology, or Obstetrics and Gynecology **OR** an ACGME-accredited fellowship in Female Pelvic Medicine and Reconstructive Surgery as applicable to privileges requested;
- b. Completion of a formal fellowship that included training in specific privileges requested. The fellowship must be sponsored by an organization that is recognized as specializing in transgender surgery. Prior training in the specific privileges requested must have included didactic, cadaver lab, and supervised cases on human subjects. Training experience should include a minimum of 10 feminizing (single-stage) surgeries, and 10 each of the 3-stage masculinizing surgeries as the independent primary surgeon **OR** Documentation of prior training and ongoing clinical practice, meeting the minimum privileging requirements for the specific privileges requested
- c. Current board certification in Plastic Surgery, Urology, Female Pelvic Medicine and Reconstructive Surgery, or Obstetrics and Gynecology by the ABMS or AOA
- d. Documentation of case volumes as outlined in each requested privilege section
- e. Documentation of a minimum of 12 hours of transgender health-related CME every 2 years

Evaluation Criteria: Concurrent evaluation of a minimum of the first 5 cases representative of requested privileges; additional or specific requirements outlined in each privilege section

Renewal Criteria:

- a. Documentation of case volumes as outlined in each requested privilege section for renewal of privileges
- b. Documentation of a minimum of 12 hours of transgender health-related CME every 2 years

NOTE: This form is for genital urinary surgery only. Other feminization/masculinization procedures on the face, throat, breast, or hysterectomy are located on the Surgery or Obstetrics & Gynecology privileging forms.

This field is also referred to as Sex Reassignment Surgery (SRS) and Gender Confirmation/Affirmation Surgery.

FEMINIZING SURGERY

Initial Criteria:

Documentation* of a minimum of 10 cases performed in the previous 24 months reflective of the scope and complexity of privileges requested

Evaluation Criteria: Concurrent evaluation of the first 5 feminizing surgeries

Renewal Criteria: Documentation of a minimum of 10 cases in the previous 24 months

**Hospital case/activity log required to support requested privileges in each category*

Delineation Of Privileges

Transgender/Gender Affirming Surgery

Name:

Privilege	Requested	Granted	Deferred	Suspended
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Vaginoplasty With Skin Grafts With or Without Use of Additional Local Skin Flaps or Intestinal Graft

Indicate in the comment section below, any portion of the privileges NOT being requested

Privileges include but are not limited to the following:

- Admission, evaluation, consultation, diagnosis, and medical and surgical treatment of adult patients who require structural modification of the genital urinary system for purposes of gender affirmation; privileges include performing history and physical examination.
- Bilateral orchiectomy
- Radical penectomy
- Complex urethroplasty including use of perineal approach
- Clitoroplasty
- Complex scrotoplasty
- Labioplasty
- Neovagina creation including use of pedicled penile skin flap
- Neovagina creation including harvest and only of free skin grafts
- Neovagina creation including harvest of scrotal skin pedicle flap
- Neovagina creation including harvest and placement of an intestinal segment of bowel for use as neovagina
- Application of silver nitrate to treat vaginal granulation tissue

Vaginoplasty Revisional Surgery

Indicate in the comment section below, any portion of the core privileges NOT being requested

Privileges include but are not limited to the following:

- Admission, evaluation, consultation, diagnosis, and medical and surgical treatment of adult patients who require structural modification of the genital urinary system for purposes of gender affirmation; privileges include performing history and physical examination.
- Vaginectomy (resection of neovagina)
- Lysis of labial adhesions
- Perineoplasty
- Urethroplasty revision in neovagina
- Vulvoplasty
- Revision clitoroplasty

MASCULINIZING SURGERY

Initial Criteria: a. Documentation* of a minimum of 10 cases performed in the previous 24 months reflective of the scope and complexity of privileges requested

Evaluation Criteria: Concurrent evaluation of the first 5 masculinizing surgeries

Renewal Criteria: Documentation of a minimum of 10 cases in the previous 24 months

*Hospital case/activity log required to support requested privileges in each category

Delineation Of Privileges

Transgender/Gender Affirming Surgery

Name:

Privilege	Requested	Granted	Deferred	Suspended
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Phallo-urethroplasty: Creation of a phallus with or without urethral lengthening (Stage 1)

Indicate in the comment section below, any portion of the core privileges NOT being requested

Privileges include but are not limited to the following:

Admission, evaluation, consultation, diagnosis, and medical and surgical treatment of adult patients who require structural modification of the genital urinary system for purposes of gender affirmation; privileges include performing history and physical examination.
 Metoidioplasty with urethral lengthening (single or two stage)
 Metoidioplasty without urethral lengthening
 Creation of a neophallus using suprapubic pedicle skin flap
 Construction of a neophallus and/or neourethra using forearm radial artery skin flap or using an anterior lateral thigh (ALT) skin flap
 Microvascular anastomosis of free flap neophallus

Phallo-urethroplasty (Stage 2)

Indicate in the comment section below, any portion of the core privileges NOT being requested

Privileges include but are not limited to the following:

Admission, evaluation, consultation, diagnosis, and medical and surgical treatment of adult patients who require structural modification of the genital urinary system for purposes of gender affirmation; privileges include performing history and physical examination.
 Cystoscopy in a transgender man
 Placement of supra-pubic bladder catheter
 Vaginectomy
 Second stage urethroplasty with advancement of local vaginal skin flaps
 Clitoroplasty for a transgender man
 Glansplasty including advancement of local skin flaps and harvest of full thickness skin-grafts less than 30 cm²
 Testicular prosthesis placement
 Complex labiaplasty
 Complex scrotoplasty (local skin Y-V and/or V-Y advancement flap)

Phallo-urethroplasty (Stage 3) and Revisional Surgery

Indicate in the comment section below, any portion of the core privileges NOT being requested

Privileges include but are not limited to the following:

Admission, evaluation, consultation, diagnosis, and medical and surgical treatment of adult patients who require structural modification of the genital urinary system for purposes of gender affirmation; privileges include performing history and physical examination.
 Penile prosthesis placement in a transgender man
 Repair of neourethral stricture
 Repair of non-urethral fistula (to skin, vaginal cavity or bladder)
 Perineal urethrostomy
 First or second stage onlay urethroplasty with harvest of buccal mucosal grafts
 Partial or complete vulvectomy
 Neophallus revision including girth reduction and scar revision
 Partial or complete resection of neophallus

