**TRI-CITY HEALTHCARE DISTRICT**
**AGENDA FOR A REGULAR MEETING**
**OF THE PROFESSIONAL AFFAIRS COMMITTEE**
**OF THE BOARD OF DIRECTORS**
**September 8, 2016 – 12:00 p.m. – Assembly Room 1**
**Tri-City Medical Center, 4002 Vista Way, Oceanside, CA 92056**

**The Committee may make recommendations to the Board on any of the items listed below, unless the item is specifically labeled "Informational Only"**

| | Agenda Item | Page Nos. | Time Allotted | Requestor/ Presenter |
|---|---|---|---|---|
| 1. | Call To Order/Opening Remarks | | 2 min. | Chair |
| 2. | Approval of Agenda | 1-2 | 2 min. | Chair |
| 3. | Public Comments<br>NOTE: During the Committee's consideration of any Agenda item, members of the public also have the right to address the Committee at that time regarding that item. | | 5 min. | Standard |
| 4. | Ratification of minutes of the August 2016 Meeting | 3-7 | 2 min. | Committee |
| 5. | New Business | | | |
| a. | Consideration and Possible Approval of Policies and Procedures | 8-9 | | All |
| | **Patient Care Services** | | | |
| | 1. Chemotherapy Exposure, Spills, and Handling of Linens Contaminated with Chemotherapeutic Agents Procedure | 10-14 | | |
| | 2. Chemotherapy Extravasation Procedure | 15-21 | | |
| | 3. Chemotherapy Pre-Administration Reqts. and Transportation | 22-24 | | |
| | 4. Documentation in the Medical Record Policy | 25-28 | | |
| | 5. Influenza Nasopharyngeal Swab Testing Procedure | 29 | | |
| | **Administrative Policies and Procedures:** | | | |
| | 1. Student Clinical Rotation Education 249 | 30-31 | | |
| | **Unit Specific**<br>**Infection Control** | | | |
| | 1. Waste Management IC 101 | 32-35 | | |
| | **Neonatal Intensive Care** | | | |
| | 1. Peripheral Arterial Line Insertion, Maintenance and Removal Of | 36-38 | | |
| | 2. Periprheral Intravenous Infiltrations, Treatment For | 39-42 | | |
| | 3. Skin to Skin Contact Tracked Changes | 43-46 | | |
| | Skin to Skin Contact- Clean Copy | 47-49 | | |
| | 4. Umbilical Catheters, Insertion, Management, and Discontinuation of | 50-53 | | |
| | **Oncology** | | | |
| | 1. Chemotherapy Administration Procedure Tracked Changes | 54-64 | | |
| | Chemotherapy Administration Procedure Clean Copy | 65-74 | | |
| | **Outpatient Infusion Center** | | | |
| | 1. Ambulatory Infusion Pump (AIP) Policy | 75-76 | | |
| | 2. Chemotherapy Administration Procedure Infusion Center | 77-84 | | |
| | 3. Chemotherapy Exposure Spills and Handling of Linens Contaminated with Chemotherapeutic Agents | 85-88 | | |
| | 4. Chemotherapy Extravasation | 89-93 | | |
| | 5. Chemotherapy Writing and Preparation | 94-97 | | |
| | 6. Disposal of Chemotherapy Waste | 98 | | |

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|---|---|---|---|---|
| | **Pharmacy**<br>1. Chemotherapy Prescribing, Processing and Preparation<br><br>**Women's and Newborn Services**<br>1. Dinoprostone (Cervidil)<br>2. WNS Admission Registration Policy Tracked Changes<br>WNS Admission Registration Policy Clean Copy | 99-104<br><br>105-107<br>108-109<br>110-111 | | |
| 6. | Review and Discussion of CLINICAL Contracts- NO Contracts To Review (*Discussion/ Possible Action*) | | | |
| 7. | Motion to go into Closed Session | | 2 min. | Committee |
| 8. | CLOSED SESSION<br>a. Reports of the Hospital Medical Audit and/or Quality Assurance Committee (Health & Safety Code Section 32155)<br>b. Conference with Legal Counsel – Significant exposure to litigation (Government Code Section 54956.9(b)) | | 30 min. | Chair |
| 9. | Reports from the Committee Chairperson of any Action Taken in Closed Session (Government Code, Section 54957.1) | | 10 min. | Chair |
| 10. | Comments from Members of the Committee | | 5 min. | Committee |
| 11. | The next meeting of the Professional Affairs Committee of the Board is on October 13, 2016. | | 1 min | Chair |
| 12. | Adjournment | | 1 min | Chair |

***DRAFT***

# Tri-City Medical Center
# Professional Affairs Committee Meeting
# Open Session Minutes
# August 11, 2016

**Members Present**: Director Laura Mitchell (Chair), Director Larry Schallock, Dr. Marcus Contardo, Dr. Gene Ma, and Dr. Johnson.

**Non-Voting Members Present:** Steve Dietlin, CEO, Kapua Conlery, COO/ Exe. VP, Sharon Schultz, CNE/ Sr. VP, and Cheryle Bernard-Shaw, Chief Compliance Officer.

**Others present:** Rick Barton and Natalie Mueller, General Counsel, Marcia Cavanaugh, Sr. Director for Regulatory and Compliance, Jami Piearson, Director for Regulatory Compliance, Cli. Quality and Infection Control, Kathy Topp, Lisa Mattia, Rowena Okumura, Patricia Guerra and Karren Hertz.

**Members Absent:** Director Finnila and Dr. Scott Worman.

| Topic | Discussion | Follow-Up Action/ Recommendations | Person(s) Responsible |
|---|---|---|---|
| 1. Call To Order | Director Mitchell called the meeting to order at 12:12 p.m. in Assembly Room 1. | | Director Mitchell |
| 2. Approval of Agenda | The committee reviewed the agenda and there were no additions or modifications. | Motion to approve the agenda was made by Director Schallock and seconded by Dr. Contardo. | Director Mitchell |
| 3. Comments by members of the public on any item of interest to the public before committee's consideration of the item. | Director Mitchell read the paragraph regarding comments from members of the public. | | Director Mitchell |

| Topic | Discussion | Follow-Up Action/ Recommendations | Person(s) Responsible |
|---|---|---|---|
| 4. Ratification of minutes of July 2016. | Director Mitchell called for a motion to approve the minutes from July 14, 2016 meeting. | Minutes ratified. Director Schallock moved and Dr. Contardo seconded the motion to approve the minutes from July 2016. | Karren Hertz |
| 5. New Business<br><br>a. Consideration and Possible Approval of Policies and Procedures<br><br>**Patient Care Policies and Procedures:**<br>1. Billiary Drain, Care of Percutaneous Procedure | There was no discussion on this policy. | **ACTION:** The Patient Care Services policies and procedures were approved. Dr. Johnson moved and Director Schallock seconded the motion to approve the policies moving forward for Board approval. | Patricia Guerra |
| 2. Patient Classification (Acuity) Procedure | There was a question from the group if nursing intensity is used as one of the parmeters in acuity classification. Sharon clarified that the patient classification is based on nursing model (Synergy) and some units customize it accordingly. The Emergency Dept. and L&D though used a different classification system that is different from the other units/departments. | | |
| **Administrative Policies and Procedures**<br>1. Signage 215 | The use of synthetic materials for signages was mentioned in this policy. It was noted that synthetic materials are considered fire- | **ACTION:** The Administrative policies and procedures were approved. Director Schallock | Patricia Guerra |

| Topic | Discussion | Follow-Up Action/ Recommendations | Person(s) Responsible |
|---|---|---|---|
| | retardant in accordance to the Fire Department requirements. | moved and Dr. Johnson seconded the motion to approve the policies moving forward for Board approval. | |
| **Unit Specific Infection Control**<br>1. Bed Bugs, Identification and Control | There was a brief discussion on this policy and it was noted only the EVS personnel have the specific solution that safely eliminates this insect. | **ACTION:** The Infection Control policies and procedures were approved. Director Schallock moved and Dr. Contardo seconded the motion to approve the policies moving forward for Board approval. | Patricia Guerra |
| 2. Bloodborne Pathogen Exposure Control Plan | Director Schallock asked about the difference of an Infection Preventionist from an Infection Control practitioner. Instead of "employees", it was recommended by a number of people in the committee to have it be modified to "healthcare workers" for the purpose of having the policy expand its coverage. | | |
| 3. Construction | The issue of asbestos was mentioned; it was defined that asbestos is more of a hazard than an infection control issue. Director Mitchell commended the breakdown of the risk groups as it easily identifies the category, factors and risk evaluation for this policy. | | |
| 4. Scabies and Lice | The group had a brief discussion; head lice do not fly. It was also clarified that scabies and lice are not reportable to CDPH. | | |

| Topic | Discussion | Follow-Up Action/ Recommendations | Person(s) Responsible |
|---|---|---|---|
| **Women's and Newborn Services**<br>1. Infant Baptism | This policy is a deletion. | | |
| 6. Clinical Contracts | No contracts were reviewed for this month. | **ACTION:** No action taken. | Director Mitchell |
| 7. PAC Charter | Cheryle Bernard-Shaw presented the revised draft of the PAC Charter.<br>Some of the revisions were made:<br>• The committee purpose was modified to say "to assist the Board in healthcare delivery oversight"<br>• Performance of clinical service providers was taken out<br>• Charter needs to be reviewed every three (3) years instead of annually.<br>• The Medical Staff Quality Assusrance committees was changed to say QAPI. | **ACTION:** The PAC Charter was approved with revisions. Final clean copy will be reviewed by Board Chair Mitchell before going to the Board for approval this month. | Cheryle Bernard-Shaw |
| 8. Closed Session | Director Mitchell asked for a motion to go into Closed Session. | Dr. Johnson moved, Director Schallock seconded and it was unanimously approved to go into closed session at 12:50 PM. | Director Mitchell |
| 9. Return to Open Session | The Committee return to Open Session at 2:22 PM. | | Director Mitchell |
| 10. Reports of the Chairperson of Any Action Taken in Closed Session | There were no actions taken. | | Director Mitchell |
| 11. Comments from Members of the Committee | No Comments. | | Director Mitchell |

| Topic | Discussion | Follow-Up Action/ Recommendations | Person(s) Responsible |
|---|---|---|---|
| | | | |
| 12. Adjournment | Meeting adjourned at 2:24 PM | | Director Mitchell |

# PROFESSIONAL AFFAIRS COMMITTEE
## September 8th, 2016

CONTACT: Sharon Schultz, CNE

| Policies and Procedures | Reason | Recommendations |
|---|---|---|
| **Patient Care Services Policies & Procedures** | | |
| 1. Chemotherapy Exposure, Spills, and Handling of Linens Contaminated with Chemotherapeutic Agents Procedure | Practice change | |
| 2. Chemotherapy Extravasation Procedure | 3 year review, practice change | |
| 3. Chemotherapy Pre Administration and Transportation Procedure | DELETE | |
| 4. Documentation in the Medical Record Policy | 3 year review, practice change | |
| 5. Influenza Nasopharyngeal Swab Testing Procedure | 3 year review | |
| | | |
| **Administrative Policies & Procedures** | | |
| 1. Student Clinical Rotation Education 249 | 3 year review, practice change | |
| | | |
| **Unit Specific** | | |
| **Infection Control** | | |
| 1. Waste Management IC 101 | 3 year review, practice change | |
| | | |
| **Neonatal Intensive Care (NICU)** | | |
| 1. Peripheral Arterial Line Insertion, Maintenance and Removal of | 2 year review, practice change | |
| 2. Peripheral Intravenous Infiltrations, Treatment for | DELETE | |
| 3. Skin to Skin Contact **Tracked Changes** Skin to Skin Contact **Clean Copy** | 2 year review, practice change | |
| 4. Umbilical Catheters, Insertion, Management, and Discontinuation of | DELETE | |
| | | |
| **Oncology** | | |
| 1. Chemotherapy Administration Procedure **Tracked Changes** Chemotherapy Administration Procedure **Clean Copy** | 3 year review, practice change | |
| | | |
| **Outpatient Infusion Center** | | |
| 1. Ambulatory Infusion Pump (AIP) Policy | NEW | |
| 2. Chemotherapy Administration Procedure Infusion Center | DELETE | |
| 3. Chemotherapy Exposure Spills and Handling of Linens Contaminated with Chemotherapeutic Agents | DELETE | |
| 4. Chemotherapy Extravasation | DELETE | |
| 5. Chemotherapy Writing and Preparation | DELETE | |
| 6. Disposal of Chemotherapy Waste | DELETE | |

# PROFESSIONAL AFFAIRS COMMITTEE
## September 8th, 2016

**CONTACT: Sharon Schultz, CNE**

| Policies and Procedures | Reason | Recommendations |
|---|---|---|
| **Pharmacy** | | |
| 1. Chemotherapy, Prescribing, Processing, and Preparation | 3 year review, practice change | |
| | | |
| | | |
| **Women and Newborn Services** | | |
| 1. Dinoprostone [Cervidil] | 3 year review, practice change | |
| 2. WNS Admission Registration Policy **Tracked Changes**<br>WNS Admission Registration Policy **Clean Copy** | 3 year review, practice change | |

| Tri-City Medical Center | Distribution: Patient Care Services |
|---|---|
| PROCEDURE: | CHEMOTHERAPY EXPOSURE, SPILLS, AND HANDLING OF LINENS CONTAMINATED WITH CHEMOTHERAPEUTIC AGENTS AND BODY FLUIDS, ACCIDENTAL EXPOSURE TO RADIOACTIVE BODY FLUIDS |
| Purpose: | To outline staff responsibility and management of chemotherapy spills, radioactive body fluid exposures, and handling of contaminated linens. |
| Supportive Data: | To prevent staff exposure to chemotherapy and radiopharmaceuticals |
| Equipment: | Chemotherapy Spill Kit |

A. **POLICY:**

1. Many drugs used in the treatment of cancer are considered to be hazardous to health care workers.
   a. The term hazardous refers to drugs/chemicals requiring special handling because of potential health risks.
2. Staff working with chemotherapy drugs and the body fluids of patients that have received chemotherapy shall adhere to this procedure and reference Patient Care Services Disposal of Chemotherapy Waste procedure.
   a. Body fluid includes sweat, saliva, emesis, urine, feces, semen, vaginal fluid, or blood.
3. Do not use chemical inactivators due to the potential for dangerous by-products.
   a. Exception: Sodium thiosulfate is used to inactivate nitrogen mustard.

B. **PROCEDURE FOR SPILL MANAGEMENT:**

1. For chemotherapy spills greater than 400 mL in any department:
   a. Open spill kit and immediately post a sign that warns others of the presence of cytoxic spill (included in kit).
   b. Remove personnel and patients from the immediate area.
      i. Immediate area is approximately 20-foot perimeter.
   c. If spill occurs in a patient's room, evacuate patient(s) from the room and close door.
   d. Nursing to contact Environmental Services (EVS) supervisor at 760-644-6973.
      i. EVS to contact EOC Safety Officer regarding the chemotherapy spill at 760-590-0352.
2. For chemotherapy spills less than 400 mL:
   a. Non-Oncology Nursing Units Responsibilities for spills on hard surfaces <u>estimated at less than 400 mL</u>
      i. Open spill kit and immediately post a sign that warns others of the presence of cytoxic spill (included in chemo spill kit).
      i. Contact EVS Supervisor of the chemotherapy spill 760-644-6973.
   b. EVS Responsibilities for spills on hard surfaces <u>estimated at 400 mL or less:</u>
      i. Open spill kit and immediately post a sign that warns others of the presence of cytoxic spill (included in chemo spill kit).
      ii. Don personal protective equipment in the following order:
         1) N-95 mask (For additional mask(s) please use the N-95 masks located on the unit.)
         2) First pair of chemotherapy gloves
         3) Chemotherapy gown with the cuffs over the first pair of gloves
         4) Second pair of chemotherapy gloves over the cuffs of the gown
         5) Splash goggles or face shield
         6) Protective Shoecovers
      iii. Place spill pillows from spill kit in a "V" position on outer perimeter of spill to prevent spreading of fluid.
      iv. Place one towel from the spill kit over spill to absorb fluid.

| Department Review | Clinical Policies & Procedures | Nursing Executive Council Committee | Division of Oncology | Pharmacy & Therapeutics | Medical Executive Committee | Professional Affairs Committee | Board of Directors |
|---|---|---|---|---|---|---|---|
| 3/00, 10/06, 5/09, 2/12, 9/15 | 4/12, 8/15, **6/16** | 4/12, 09/15, **7/16** | 4/12, 09/15, **07/16** | 09/15, **6/16** | 5/12. 10/15, **08/16** | 6/12, 11/15 | 6/12, 12/15 |

v. Pick up saturated towel and spill pillows and place in small chemotherapy waste bag.
vi. Use brush to sweep any glass or fragments into scoop and place in small chemotherapy waste bag with discarded towels and spill pillows.
vii. Use the DIMENSION 3 procedure of the EVS guidelines to complete the cleaning.
viii. After DIMENSION 3 cleaning, use remaining towels to wipe up the rinse and fully dry area. Place towels in small chemotherapy waste bag and seal.
ix. Place sealed bag in Spill Kit box and seal the box with bright orange chemotherapy waste label.
x. Remove personal protective equipment in the following order.
1) Outer pair of gloves
2) Chemotherapy gown
3) N95 mask
4) Splash goggles or face shield
5) Protective Shoecovers
6) Final pair of gloves
xi. Place personal protective equipment in large chemotherapy waste bag along with spill kit box and seal the bag.
xii. Place sealed bag in the designated chemotherapy waste area on the unit.
xiii. Complete the Hazardous Drug Exposure Report and give to the supervisor of the EVS department.
xiv. The EVS supervisor shall submit copies of the Hazardous Drug Exposure Report to Employee Health Services and to the EOC Officer.

c. Oncology Unit/**Outpatient Infusion Center**/Pharmacy **r**~~R~~esponsibilities for spills on hard surfaces estimated between 200 mL and 400 mL:
i. Open spill kit and immediately post a sign that warns others of the presence of cytoxic spill (included in chemo spill kit).
ii. Delegate to a co-worker to contact EVS Supervisor of the chemotherapy spill. and/or EOC Safety Officer regarding the chemotherapy spill. EVS is responsible for spills on the oncology and pharmacy units that is between 200 mL and 400 mL.
1) 760-644-6972 (Day Shift) or pager 760-926-0841
2) 760-644-6973 (Evening Shift) or pager 760-926-0832
3) 760-644-6974 (Night Shift) or pager 760-926-0834
4) 760-590-0352 (EOC Officer)

d. Oncology Unit/**Outpatient Infusion Center**/Pharmacy ~~(~~responsibilities for spills on hard surfaces estimated at less than 200 mL:~~)~~
i. Open spill kit and immediately post a sign that warns others of the presence of cytoxic spill (included in chemo spill kit).
ii. Contact or delegate a co-worker to contact Environmental Services (EVS) Supervisor of the chemotherapy spill.
1) 760-644-6972 (Day Shift) or pager 760-926-0841
2) 760-644-6973 (Evening Shift) or pager 760-926-0832
3) 760-644-6974 (Night Shift) or pager 760-926-0834
iii. Don personal protective equipment in the following order:
1) N-95 mask (For additional mask(s) please use the N-95 masks located on the unit.)
2) First pair of chemotherapy gloves
3) Chemotherapy gown with the cuffs over the first pair of gloves
4) Second pair of chemotherapy gloves over the cuffs of the gown
5) Splash goggles or face shield
6) Protective Shoecovers

iv. To clean up a spill from a hard surface estimated as less than 200 mL:

1) Place spill pillows in a "V" position on outer perimeter of spill to prevent spreading of fluid.
2) Place one towel from the spill kit over spill to absorb fluid.
3) Pick up saturated towel and spill pillows and place in small chemotherapy waste bag.
4) Use brush to sweep any glass or fragments into scoop and place in small chemotherapy waste bag with discarded towels and spill pillows.
5) EVS must use the DIMENSION 3 procedure of their EVS guidelines to complete the cleaning.
6) After EVS has completed the DIMENSION 3 cleaning, use remaining towels to wipe up the rinse and fully dry area. Place towels in small chemotherapy waste bag and seal.
7) Place sealed bag in Spill Kit box and seal the box with bright orange chemotherapy waste label.
8) Remove personal protective equipment in the following order:
   a) Outer pair of gloves
   b) Chemotherapy gown
   c) N95 mask
   d) Splash goggles or face shield
   e) Protective Shoecovers
   f) Final pair of gloves
9) Place personal protective equipment in large chemotherapy waste bag along with spill kit box and seal the bag.
10) Place sealed bag in the designated chemotherapy waste area on the unit.
11) Complete the Hazardous Drug Exposure Report and give to the clinical manager on the nursing unit.
12) The clinical manager shall submit copies of the Hazardous Drug Exposure Report to Employee Health Services and to the Environment of Care (EOC) Safety Officer.

C. **PROCEDURE -- EXPOSURE AND PREVENTION RELATED TO CHEMOTHERAPY AGENTS AND BODY FLUIDS:**

1. In the event of skin exposure to chemotherapeutic agent; remove any contaminated garment and immediately wash contaminated skin with soap and water.
2. In case of eye exposure, immediately flush the eye with saline solution or water for at least five minutes.
3. All linen exposed to a chemotherapy agent or body fluid of a patient that is currently receiving or has received chemotherapy in the past 48 hours, must be placed (using chemotherapy gloves and gown) in a Yellow chemotherapy waste bag and tagged by the EVS with a "Special Handling Ticket" before adding it to the general hospital linen.
4. Contact EVS when chemo waste linen bag is 2/3 full. EVS will place the chemo waste linen bag in a regular hospital blue linen bag and will place a special handling ticket on the outside of the blue linen bag before it can be placed in the general hospital linen.
5. Place any disposable cytoxic contaminated materials into a sealed, leak proof chemo waste plastic bag. Use puncture proof chemotherapy waste containers for sharps, breakable items and/or items that are saturated with body fluids. See Patient Care Services: Disposal of Chemotherapy Waste Procedure.
6. All containers will be clearly labeled citing the hazardous nature of the contents-Chemotherapy.
7. Report any cytotoxic exposures or spills to your supervisor.
8. Report any employee exposure to employee health services and/or emergency department.
   a. Fill out Illness/Injury Investigation Report
9. Report any patient exposure to the patient's healthcare provider and per institution policy.

D. **PROCEDURE - PRECAUTIONS WHEN HANDLING BODY FLUIDS OF A PATIENT RECEIVING CHEMOTHERAPY(Precautions need to be taken during and 48 hours after last Chemotherapy Dose):**

1. Wear appropriate personal protective equipment (PPE) which may include the following:
   a. N-95 mask
   b. Double chemotherapy gloves
   c. Chemotherapy gown
   d. Splash goggles or face shield
   e. Protective shoecovers
2. Disposing of body fluid
   a. Dispose of body fluids in the toilet.
   b. DO NOT USE THE TOILET SPRAYER. Rinse containers with a cup of water to prevent splashing
   c. Before flushing toilet, cover open toilet with chux. (New chux to be used with each flush).
   d. Flush toilet twice
   e. Place personal protective equipment and chux in chemotherapy waste bag.
   f. Non-Oncology contact EVS to dispose of chemo waste bag when they become ¾ of the way full.
   g. Oncology unit will place sealed chemo waste bag in the designated chemotherapy waste area on the unit.
3. All linen exposed to a chemotherapy agent or body fluid of a patient that is currently receiving or has received chemotherapy in the past 48 hours, must be placed (using chemotherapy gloves and gown) in a Yellow chemotherapy waste bag and tagged by the EVS with a "Special Handling Ticket" before adding it to the general hospital linen.
4. Skin care of incontinent adult receiving chemotherapy
   a. Clean patients skin well after voiding or having a bowel movement
   b. Apply protective barrier ointment or cream before diapering
5. All disposable equipment (i.e. foley catheter, bedpan, graduated cylinder, and diapers) used in caring for chemotherapy patients must be disposed of in a chemotherapy waste container and placed in the designated chemotherapy waste area on the unit.

E. **PROCEDURE - RADIOACTIVE BODY FLUIDS, EXPOSURE RELATED TO:**

1. In the event of exposure from the body fluid, immediately remove any contaminated garment or shoes being careful to avoid contact with substance.
2. Place contaminated articles in red radioactive marked containers in room.
3. Place as much distance from contaminated articles and self as possible.
4. Immediately wash contaminated skin with soap and water.
5. Alert Radiation Safety Officer and manager via in room phone or call light, of radiation exposure.
6. Do not leave room unless cleared by Radiation Safety Officer.
7. Report any employee exposure to employee health department or emergency department.
   a. Fill out appropriate injury form
8. Report any patient exposure to the patient's healthcare provider and per institution policy.

F. **RELATED DOCUMENTS:**

1. PCS Disposal of Chemotherapy Waste Procedure

G. **REFERENCES**

1. ONS Chemotherapy and Biotherapy Guidelines and Recommendations for Practice, 20~~11~~**14**, Fourth Edition
2. Center for Disease Control and Prevention. Occupational Exposure to Antineoplastic Agents and Other Hazardous Drugs. http://www.cdc.gov/niosh/topics/antineoplastic/December 12, 2014

3. Medical Waste Management Act January 2015 California Health and Safety Code Sections 117600 – 118360
4. "Preventing Occupational Exposure to Antineoplastic and Other Hazardous Drugs in Health Care Settings." National Institute for Occupational Safety and Health (NIOSH), 2014. http://www//cdc/gov/niosh/docs/2004-165/#c. "Kendall Chemobloc Procedure." Tyco Healthcare. 2006 www.tycohealthcare.com
5. Oncology Nursing Society. Manual for Radiation Oncology Nursing Practice and Education, 4th Edition, 2012. Print

| Tri-City Medical Center | Distribution: Patient Care Services |
|---|---|
| **PROCEDURE:** | **CHEMOTHERAPY EXTRAVASATION** |
| Purpose: | To outline the responsibility of the registered nurses in the event of chemotherapy extravasation |
| Supportive Data: | The Oncology Nursing Society Chemotherapy Biotherapy and Guidelines sets the standard for best practice in the care of oncology patients. |
| Equipment: | Extravasation Kit |

A. **DEFINITIONS:**

1. Extravasation: Passage or escape into tissue of antineoplastic drugs. Tissue slough and necrosis may occur.
   a. Extravasation is a medical emergency. Immediate intervention must occur if extravasation is suspected.
2. Flare Reaction: A local allergic reaction to an agent, manifested by streaking or red blotches along the vein, but without pain.

B. **POSSIBLE SIGNS AND SYMPTOMS OF EXTRAVASATION:**

1. Swelling (most common)
2. Stinging, burning, or pain at the injection site (not always present)
3. **Intravenous (**IV**)** flow rates that slow or stop
4. Lack of blood return (extravasation can occur with the presence of a blood return)
5. Erythema, inflammation, or blanching at the injection site (not always immediately evident)
6. Induration
7. Vesicle formation ~~or Ulceration (1-2 week's if extravasation is not treated)~~
~~7.~~**8. Ulceration**
9. Necrosis -- Tissue damage may progress for six months after the incident
10. **Sloughing**
~~8.~~**11. Damage to tendons, nerves and joints**

C. **CHEMOTHERAPEUTIC VESICANTS AND IRRITANTS THAT CAN CAUSE TISSUE DAMAGE**

1. **Vesicants**
   a. Alkylating Agents
      i. CISplatin **(only at concentrations ≥0.5 mg/ml)**
      ii. Mechlorethamine Hydrochloride
   b. Antitumor Antibiotic
      i. DOXOrubicin
      ii. DAUNOrubicin
      iii. Mitomycin
      iv. Dactinomycin
      **v.** Epirubicin ~~(non-formulary)~~
      ~~v.~~**vi. Idarubicin**
   c. Vinca Alkaloid or Micro-tubular Inhibiting Agent
      i. vinCRIStine
      ii. vinBLAStine
      iii. Vindesine (non-formulary)
      **iv.** Vinorelbine
   **d. Topoisomerage II Inhibitor**
      **i. Mitoxantrone**
   **e. Miscellaneous**
      ~~iv.~~**i. Amsacrine**
   ~~d.~~**f.** Taxane

| Department Review | Clinical Policies & Procedures | Nursing Executive Council | Division of Oncology | Pharmacy & Therapeutics Committee | Medical Executive Committee | Professional Affairs Committee | Board of Directors |
|---|---|---|---|---|---|---|---|
| 2/07; 2/10; 1/13, **5/16** | 3/07; 2/10;2/13, **6/16** | 4/07; 2/10;2/13; **7/16** | **07/16** | **06/16** | 4/07;3/10;5/13, **08/16** | 4/07; 4/10, 6/13 | 4/07; 4/10, 06/13 |

i. PACLItaxel **(irritant with vesicant-like properties)**

2. **Irritants**
   a. Alkylating Agents
      i. CARBOplatin
      ii. Dacarbazine
      iii. Ifosfamide
      iv. Melphalan
      ~~v. Mitoxantrone~~
      ~~vi.~~**v.** OXALIplatin
   b. Nitrosourea
      i. Carmustine
   c. Antitumor Antibiotic
      i. DAUNOrubicin liposomal
      ii. Bleomycin
   d. Epipodophyllotoxin
      i. Etoposide
      ii. Teniposide (non-formulary)

D. **PROCEDURE:**
1. Initial management
   a. Stop administration and IV fluids immediately.
   b. Don two (2) pairs of chemotherapy gloves.
   c. Disconnect the IV tubing from the IV device (central or peripheral IV site). DO NOT REMOVE the **peripheral** IV ~~device~~ or noncoring port needle.
   d. Attempt to aspirate the residual drug from the IV device or port needle by using a 1-3 ml syringe.
   **e.** Remove the **peripheral** IV device or port needle
   **f. Assess the site of the suspected extravasation and photograph site.**
   ~~e.~~**g. Assess symptoms experienced by patient.**
   **h.** Notify the physician and report the patient's symptoms, amount of extravasation and the extent of the extravasation. **Review Vesicant Extravasation Management Guidelines with physician and obtain orders for treatment.**
      ~~f.~~**i.** For central lines, collaborate with physician regarding **the need to** discontinu**eation of** the central line, need for a radiographic flow study to determine the cause of the extravasation and future plans for IV access.
      ~~i. The efficacy of extravasation antidotes and treatments is unknown with the exception of dexiazoxane for injection (TOTECT ®) which has 98.2% overall efficiency.~~
   **i. Administer antidote if ordered by physician per the manufacturers recommendations.**
   ~~g. If an **antidote** is ordered, administer the antidote per the manufacturer's recommendations.~~
   ~~h.~~**j.** Apply a hot or cold compress per Vesicant Extravasation Management Guidelines. ~~(available on the Intranet under Clinical References)~~
   ~~i.~~**k.** Document the following information in the medical record:
      i. Description of the events that occurred
      ii. Drug
      iii. Dilution
      ~~iv. Description of quality of blood return before/during vesicant administration.~~
      ~~v.~~**iv.** Amount of Drug Infiltrated
      ~~vi.~~**v.** Method of Drug Administration
      ~~vii.~~**vi.** Type of IV device
      ~~viii.~~**vii.** ~~Symptoms reported by patient~~
      ~~ix.~~**viii.** Description of Site

1) Size
2) Color
3) Texture

~~x. Photographs of administration site (see below post-extravasation care)~~
~~xi. Immediate nursing intervention~~

~~xii.~~**I.** Document Physician Notification

~~xiii.~~**i.** ~~Patient teaching and follow up care.~~

2. Post–Extravasation Care
   a. Photograph the initial extravasation site including:
      i. Measuring guide for size or length / width / depth
      ii. Date of photograph
      iii. Patients initials
      iv. Medical record number
      i. Location
   b. ~~Repeat photographs weekly.~~**Photograph every Monday, Wednesday and Friday.**
   c. Instruct the patient to rest and elevate the site for 48 hours and then may resume normal activity.
   d. Give patient written instructions regarding what symptoms they should report immediately, local care of the site, pain management and the plan for follow up. Document all patient education in the Cerner Education All Topics Powerform.
   e. Educate patient to ensure that no medications are given distally to an extravasation injury~~, the need to protect extravasation site from sunlight, monitor the site, report fever, chills, blistering, skin sloughing and worsening of pain.~~ .
   ~~f. Notify risk management per Administrative Policy Incident Report – Quality Review Report (QRR).~~

## E. RELATED DOCUMENTS:

1. **PCS Procedure: Chemotherapy Administration**
2. **Vesicant Extravasation Management Guidelines**

## ~~E.~~F. REFERENCES:

1. Infusion Nursing Society (January/February 201~~06~~). Infusion Nursing Standards of Practice. Journal of Infusion Nursing, Vol. 3~~4~~**29**, Number 1S.
2. The Oncology Nursing Society (**2014**). ONS Chemotherapy and Biotherapy (23 ed.), p. 1~~05-110.~~**55-160**
3. **Chu E, DeVita VT, Jr., Copur MS et al. Physicians' Cancer Chemotherapy Drug Manual 2008. Sudbury: Jones and Barlett, 2008**
4. **Dorr RT and Von Hoff DD. Cancer Chemotherapy Handbook. 2 ed. Norwalk: Appleton and Lange; 1994:109-18**
5. **Goolsby TV and Lombardo FA. Extravasation of Chemotherapeutic Agents: Prevention and Treatment. Seminars in Oncology. 2006; 33(1): 139-43**

~~2.~~**6.** **Clamon GH. The Chemotherapy Source Book. 4th ed. Philadelphia. Lippincott Williams & Wilkins, 2008: 148-51**

~~Attachment A~~

## Vesicant Extravasation Management Guidelines

| Classification/Drug | Immediate Topical Therapy | Antidote or Treatment | Antidote or Treatment Administration, Patient Monitoring, and Follow-Up |
|---|---|---|---|
| Alkylating agent<br>• Mechlorethamine hydrochloride (nitrogen mustard, Mustargen®) | Apply ice for 6–12 hours following sodium thiosulfate antidote injection (Lundbeck, 2012). | Antidote: Sodium thiosulfate<br>Mechanism of action: Neutralizes mechlorethamine to form nontoxic thioesters that are excreted in the urine<br>Preparation: Prepare 1/6 molar solution.<br>• If 10% sodium thiosulfate solution: Mix 4 ml with 6 ml sterile water for injection.<br>• If 25% sodium thiosulfate solution: Mix 1.6 ml with 8.4 ml sterile water.<br>Storage: Store at room temperature between 15°C–30°C (59°F–86°F). | Inject 2 ml of the sodium thiosulfate solution for each milligram of mechlorethamine suspected to have extravasated. Inject the solution SC into the extravasation site using a 25-gauge or smaller needle (change needle with each injection).<br>Assess the extravasation area for pain, blister formation, and skin sloughing periodically as needed or in accordance with institutional policy.<br>Instruct the patient to monitor the extravasation site and report fever, chills, blistering, skin sloughing, and worsening pain.<br>Instruct the patient with peripheral extravasations to report arm or hand swelling and stiffness. |
| Anthracenedione<br>• Mitoxantrone (Novantrone®) | Apply ice pack for 15–20 minutes at least four times a day for the first 24 hours. | No known antidotes or treatments | Extravasation typically causes blue discoloration of the infusion site area and may require debridement and skin grafting (EMD Serono, Inc., 2008).<br>Assess the extravasation area for pain, blister formation, and skin sloughing periodically as needed or in accordance with institutional policy.<br>In collaboration with the physician or advanced practice nurse, refer the patient for specialized care when indicated or needed (e.g., plastic or hand surgery consult, physical therapy, pain management, rehabilitation services). |

| Classification/Drug | Immediate Topical Therapy | Antidote or Treatment | Antidote or Treatment Administration, Patient Monitoring, and Follow-Up |
|---|---|---|---|
| Anthracyclines<br>• Daunorubicin (Cerubidine®)<br>• Doxorubicin (Adriamycin®)<br>• Epirubicin (Ellence®)<br>• Idarubicin (Idamycin®) | Apply ice pack (but remove at least 15 minutes prior to dexrazoxane treatment). | Treatment: Dexrazoxane for injection (Totect® Kit, Biocodex, Inc., 2011)<br>Note: Totect is the U.S. Food and Drug Administration (FDA)-approved treatment for anthracycline extravasation, and its manufacturer maintains a patent for use on the product. Although Zinecard® and generic dexrazoxane are neither indicated nor FDA-approved for anthracycline extravasation treatment, their clinical efficacy in treating anthracycline extravasations has been documented in the literature (Arroyo et al., 2010; Conde-Estévez et al., 2010; Langer, 2007, 2008; Uges et al., 2006).<br>Mechanism of action: Unknown<br>Dose: The recommended dose of dexrazoxane is based on the patient's body surface area:<br>• Day 1: 1,000 mg/m²<br>• Day 2: 1,000 mg/m²<br>• Day 3: 500 mg/m²<br>The maximum recommended dose is 2,000 mg on days 1 and 2 and 1,000 mg on day 3. The dose should be reduced 50% in patients with creatinine clearance values < 40 ml/min.<br>Preparation: Each 500 mg vial of dexrazoxane must be mixed with 50 ml diluent. The patient's dose is then added to a 1,000 ml normal saline infusion bag for administration.<br>Storage: Store at room temperature between 15°C–30°C (59°F–86°F). | The first dexrazoxane infusion should be initiated as soon as possible and within 6 hours of the anthracycline extravasation.<br>Dexrazoxane should be infused over 1–2 hours in a large vein in an area other than the extravasation area (e.g., opposite arm). The same arm should be used only when the patient's clinical status (e.g., lymphedema, loss of limb) precludes use of the unaffected arm, and a large vein distal to the extravasation site should be used for dexrazoxane administration.<br>Dimethyl sulfoxide should not be applied to the extravasation area.<br>Assess the extravasation area for pain, blister formation, and skin sloughing periodically as needed or in accordance with institutional policy.<br>Instruct the patient to monitor the extravasation site and report fever, chills, blistering, skin sloughing, and worsening pain.<br>Instruct patients with peripheral extravasations to report arm or hand swelling and stiffness.<br>Instruct the patient about treatment side effects (e.g., nausea/vomiting, diarrhea, stomatitis, bone marrow suppression, elevated liver enzyme levels, infusion-site burning).<br>Monitor the patient's complete blood count and liver enzyme levels. |
| Antitumor antibiotics<br>• Mitomycin (Mutamycin®)<br>• Dactinomycin (actinomycin D, Cosmegen®) | Apply ice pack for 15–20 minutes at least four times a day for the first 24 hours. | No known antidotes or treatments | Assess the extravasation area for pain, blister formation, and skin sloughing periodically as needed or in accordance with institutional policy.<br>In collaboration with the physician or advanced practice nurse, refer the patient for specialized care when indicated or needed (e.g., plastic or hand surgery consult, physical therapy, pain management, rehabilitation services). |
| Plant alkaloids and microtubule inhibitors<br>• Vinblastine (Velban®)<br>• Vincristine (Oncovin®)<br>• Vinorelbine (Navelbine®) | Apply warm pack for 15–20 minutes at least 4 times per day for the first 24–48 hours.<br>Elevate extremity (peripheral extravasations). | Antidote: Hyaluronidase<br>Mechanism of action: Degrades hyaluronic acid and promotes drug dispersion and absorption<br>Preparation: Available hyaluronidase preparations are<br>• Amphadase™ (bovine, hyaluronidase injection) (Amphastar Pharmaceuticals, 2005): Vial contains 150 units per 1 ml; use 1 ml of solution. Do not dilute. Use solution as provided. Store in refrigerator at 2°C–8°C (36°F–46°F). | Administer 150 units of the hyaluronidase solution as five separate injections, each containing 0.2 ml of hyaluronidase, SC into the extravasation site using a 25-gauge or smaller needle (change needle with each injection).<br>Assess the extravasation area for pain, blister formation, and skin sloughing periodically as needed or in accordance with institutional policy.<br>Instruct the patient to monitor the extravasation site and report fever, chills, blistering, skin sloughing, and worsening pain. |

**Table 11. Vesicant Extravasation Management Guidelines**

| Drug Classification and Medication Name | Immediate Topical Therapy | Antidote or Treatment | Antidote or Treatment Administration, Patient Monitoring, and Follow-Up |
|---|---|---|---|
| Alkylating agents<br>• Mechlorethamine hydrochloride (nitrogen mustard, Mustargen®) | Apply ice for 6–12 hours following sodium thiosulfate antidote injection (Merck and Co., Inc., 2005). | Antidote: Sodium thiosulfate<br>Mechanism of action: Neutralizes mechlorethamine to form nontoxic thioesters that are excreted in the urine<br>Preparation: Prepare 1/6 molar solution.<br>• If 10% sodium thiosulfate solution: Mix 4 ml with 6 ml sterile water for injection.<br>• If 25% sodium thiosulfate solution: Mix 1.6 ml with 8.4 ml sterile water.<br>Storage: Store at room temperature between 15°–30°C (59°–86°F). | Inject 2 ml of the sodium thiosulfate solution for each milligram of mechlorethamine suspected to have extravasated. Inject the solution subcutaneously into the extravasation site using a 25-gauge or smaller needle (change needle with each injection).<br>Assess the extravasation area for pain, blister formation, and skin sloughing periodically as needed or in accordance with institutional policy.<br>Instruct the patient to monitor the extravasation site and report fever, chills, blistering, skin sloughing, and worsening pain.<br>Instruct patients with peripheral extravasations to report arm or hand swelling and stiffness. |
| Anthracyclines<br>• Daunorubicin (Cerubidine®)<br>• Doxorubicin (Adriamycin®)<br>• Epirubicin (Ellence®)<br>• Idarubicin (Idamycin®) | Apply ice for 6–12 hours following sodium thiosulfate antidote injection (Merck and Co., Inc., 2005) (30 minutes prior to Totect® treatment). | U.S. Food and Drug Administration (FDA)-approved treatment for anthracycline extravasation (Topo-Target USA, 2007). Zinecard® and generic dexrazoxane are neither indicated nor FDA-approved for anthracycline extravasation treatment. There are no therapeutic equivalents to Totect (FDA, 2007).<br>Mechanism of action: Unknown<br>Dose: The recommended dose of Totect is based on the patient's body surface area:<br>• Day one: 1,000 mg/m²<br>• Day two: 1,000 mg/m²<br>• Day three: 500 mg/m²<br>The maximum recommended dose is 2,000 mg on days one and two and 1,000 mg on day three. The dose should be reduced 50% in patients with creatinine clearance values < 40 ml/minute.<br>Preparation: Each vial of Totect 500 mg must be mixed with 50 ml diluent. The patient's dose of Totect is then added to a 1,000 ml normal saline infusion bag for administration.<br>Storage: The Totect emergency treatment kit contains 10 vials of Totect 500 mg and 10 vials of 50 ml diluent and is stored at 25°C (77°F). | first Totect infusion should be initiated soon as possible and within 6 hours of the anthracycline extravasation.<br>Totect should be infused over 1–2 hours in a large vein in an area other than the ~~extravasation area (e.g., opposite arm)~~. The same arm should be used only when the patient's clinical status (e.g., lymphedema, loss of limb) precludes use of the unaffected arm, and a large vein distal to the extravasation site should be used for Totect administration.<br>Dimethyl sulfoxide should not be applied to the extravasation area.<br>Assess the extravasation area for pain, blister formation, and skin sloughing periodically as needed or in accordance with institutional policy.<br>Instruct the patient to monitor the extravasation site and report fever, chills, blistering, skin sloughing, and worsening pain.<br>Instruct patients with peripheral extravasations to report arm or hand swelling and stiffness.<br>Instruct the patient about Totect treatment side effects (e.g., nausea/vomiting, diarrhea, stomatitis, bone marrow suppression, elevated liver enzyme levels, infusion site burning).<br>Monitor the patient's complete blood count and liver enzyme levels. |

DELETE – Refer to Vesicant Extravasation Management Guidelines.

*(Continued on next page)*

**Table 11. Vesicant Extravasation Management Guidelines *(Continued)***

| Drug Classification and Medication Name | Immediate Topical Therapy | Antidote or Treatment | Antidote or Treatment Administration, Patient Monitoring, and Follow-Up |
|---|---|---|---|
| Antitumor antibiotics<br>• Mitomycin (Mutamycin®)<br>• Dactinomycin (actinomycin D, Cosmegen®) | Apply ice pack for 15–20 minutes at least four times a day for the first 24 hours. | No known antidotes or treatments | Assess the extravasation area for pain, blister formation, and skin sloughing periodically as needed or in accordance with institutional policy.<br>In collaboration with the physician or advanced practice nurse, refer the patient for specialized care when indicated or needed (e.g., plastic or hand surgery consult, physical therapy, pain management, rehabilitation services). |
| Plant alkaloid or microtubular inhibiting agents<br>• Vinblastine (Velban®)<br>• Vincristine (Oncovin®)<br>• Vindesine<br>• Vinorelbine (Navelbine®) | Apply warm pack for 15–20 minutes at least four times per day for the first 24–48 hours.<br>Elevate extremity (peripheral extravasations). | Antidote: Hyaluronidase<br>Mechanism of action: Degrades hyaluronic acid and promotes drug diffusion<br>Preparation: Available hyaluronidase preparations are<br>• Amphadase™ [bovine] (hyaluronidase injection (Amphastar Pharma-<br>• Hydase™ (hyaluronidase injection)<br>– Vial contains 150 units per 1 ml. Do not dilute. Use solution as provided. Store in refrigerator at 2°–8°C (36°–46°F).<br>• Hylenex® [recombinant] (hyaluronidase human injection (Baxter Healthcare Corporation, 2006)<br>– Vial contains 150 units per 1 ml. Do not dilute. Use solution as provided. Store in refrigerator at 2°–8°C (36°–46°F).<br>• Vitrase® [ovine] (hyaluronidase injection (ISTA Pharmaceuticals, 2007)<br>– Vial contains 200 units in 2 ml vial. Dilute 0.75 ml of solution with 0.25 ml of 0.9% sodium chloride (final concentration is 150 units per 1 ml). Store in refrigerator at 2°–8°C (36°–46°F). | Administer 1 ml of the hyaluronidase solution as five separate injections, each containing 0.2 ml of hyaluronidase, subcutaneously into the extravasation site using a 25-gauge or smaller needle (change needle with each injection).<br>Assess the extravasation area for pain, blister formation, and skin sloughing ...riodically as needed or in accordance ...h institutional policy.<br>...uct the patient to monitor the ex-...vasation site and report fever, chills, ...stering, skin sloughing, and worsen-...g pain.<br>Instruct patients with peripheral extravasations to report arm or hand swelling and stiffness. |
| Taxanes<br>• Docetaxel (Taxotere®)<br>• Paclitaxel (Taxol®) | Apply ice pack for 15–20 minutes at least four times a day for the first 24 hours. | No known antidote or treatment. Docetaxel extravasation may cause hyperpigmentation, redness, and tenderness (Sanofi-Aventis, 2007).<br>Paclitaxel is a mild vesicant; extravasation may cause induration, blistering, and rarely tissue necrosis (Bristol-Myers Squibb, 2003; Stanford & Hardwicke, 2003). | Assess the extravasation area for pain, blister formation, and skin sloughing periodically as needed or in accordance with institutional policy.<br>Instruct the patient to monitor the extravasation site and report fever, chills, blistering, skin sloughing, and worsening pain.<br>Instruct patients with peripheral extravasations to report arm or hand swelling and stiffness. |

DELETE – Refer to Vesicant Extravasation Management Guidelines.

| Tri-City Medical Center | Distribution: Patient Care Services |
|---|---|
| PROCEDURE: | CHEMOTHERAPY, PRE-ADMINISTRATION REC |
| ~~Purpose:~~ | ~~To outline the responsibility of pharmacy and nursi chemotherapy and pre-administration requirement~~ |
| ~~Supportive Data:~~ | ~~Oncology Nursing Society's Chemotherapy and Bi Recommendations for Practice 3rd 4thEdition 2014~~ |
| ~~Equipment:~~ | ~~Chemotherapy Spill Kit and a Labeled Chemotherapy transport receptacle~~ |

**DELETE – incorporated into PCS Chemotherapy Prescribing, Processing and Preparation and Patient Care Services Policy Chemotherapy Administration**

~~A. **PROCEDURE:**~~

~~1. Pre-Administration Guidelines for Nursing and Pharmacy:~~

~~a. Chemotherapy may only be administered by a Chemotherapy Competent Registered Nurse (RN) **or physician**. A Chemotherapy Competent RN is defined by the following requirements:~~

~~i. Has taken and passed an Oncology Nursing Society approved chemotherapy course.~~

~~ii. Has completed competency validation by a Tri-City **Healthcare District (TCHD)** Medical Center (TCMC) chemotherapy competent nurse on all areas of the TCMC**TCHD**'s Advanced Oncology Chemotherapy Addendum Skills Checklist.~~

~~b. All chemotherapy orders from a physician must be written on the TCMC**TCHD** approved Chemotherapy Pre-Printed Order **(PPO)**(see attachment A)~~

~~i. Chemotherapy orders shall only be scanned to the pharmacy from the nursing units on a TCMC**TCHD** approved Chemotherapy Order Form to the pharmacy.~~

~~ii. All sections of the TCMC**TCHD** approved Chemotherapy Order Form must be completed for the chemotherapy order to be valid.~~

~~iii. Any chemotherapy orders from a physician that has been received verbally or via telephone shall not be recognized as a valid chemotherapy order.~~

~~iv. Only Pharmacists may receive clarification of a chemotherapy order verbally or via the telephone.~~

~~v. Chemotherapy orders received via fax on a TCMC**TCHD** approved Chemotherapy Order Form are acceptable.~~

~~Both the Oncology Unit and Pharmacy need to be aware when chemotherapy orders are received. When one department receives chemotherapy orders, they shall notify the other department of the orders.~~

~~vi. **See Pharmacy Policy: Chemotherapy, Prescribing, Processing and Preparation for exceptions to use of Pre-Printed Order for additional information and exceptions to use of Pre-Printed Order.**~~

~~c. Pharmacy must notify oncology unit as soon as possible when an order for a chemotherapy agent has been received from another nursing unit other than the oncology unit.~~

~~d. All units must notify the oncology unit's Assistant Nurse Manager or designee when a chemotherapy order has been written for a patient on a unit other than the oncology unit. Notification must be done as soon as the order is written and no later than a 12-hour notice so staffing can be adjusted appropriately for patient safety.~~

~~e. All patients at TCMC**TCHD** with orders for antineoplastic agents to be administered while in our care, must have a TCMC**TCHD** approved consent form completed in full prior to the administration of the antineoplastic agent.~~

~~2. Pharmacy and Nursing Responsibilities for Transporting Chemotherapy Agents:~~

~~a. Transport syringes containing chemotherapy with the luer lock end syringe capped and in a sealed container.~~

~~b. All chemotherapy agents shall be placed in a leak proof, sealable bag labeled "Chemotherapy" and then placed in the designated impervious carrying receptacle that is also labeled "chemotherapy" prior to transporting from the pharmacy.~~

| Department Review | Clinical Policies & Procedures | Nurse Executive Committee | Pharmacy & Therapeutics Committee | Division of Oncology | Medical Executive Committee | Professional Affairs Committee | Board of Directors |
|---|---|---|---|---|---|---|---|
| 10/06, 5/09; 11/11,08/15, 5/16 | 12/11, 09/15, 6/16 | 12/11, 09/15, 7/16 | 09/15, 06/16 | 07/16 | 1/12, 08/16 | 02/12 | 02/12 |

c. The pharmacyist **personnel** or RN transporting any chemotherapy agent shall carry a spill kit at all times in case of a potential chemotherapy spill.
   i. In case of an accidental spill or exposure please see Patient Care Service Procedure, Chemotherapy Exposure, Spills and Handling of Contaminated Linen with Chemotherapeutic agents and Bodily Fluids, Accidental Exposure to Radioactive $I_{131}$ Body Fluids, as well as the Patient Care Service Procedure, Disposal of Chemotherapy Waste.

d. The Pharmacist and a Chemotherapy Competent RN shall check all Intramuscular (IM) and Intravenous (IV) chemotherapy orders and agents for accuracy at the time the agent is delivered to the nursing unit.

e. A Pharmacist shall co-sign with the Chemotherapy Competent RN on the Pharmacist/Nurse Chemotherapy Verification Form. Accuracy shall be determined by verifying:
   i. Date/Time of Administration
   ii. Patient Name
   iii. Chemotherapy Agent
   iv. Dose
   v. Diluents /Volume (If applicable)
   vi. Rate of Administration (If applicable)
   vii. Route
   viii. Patient's Height and Weight
   ix. Patient's body surface area (BSA)

3. Transporting patients that are receiving intravenous chemotherapy infusion (Nursing)
   a. Transporting a patient that is receiving intravenous chemotherapy infusion should be avoided if at all possible due to the potential risk of a chemotherapy spill, extravasation at the IV site, and physiological complications associated with chemotherapy administration.
   b. If a patient must be transported to another department the nurse must carry a chemotherapy spill kit at all times. The nurse must ensure that the IV site, IV bag(s) and IV lines that are connected to the chemotherapy and the patient are visible and secure to prevent extravasation and spillage of the chemotherapy agent during transport.
   c. Chemotherapy patients actively receiving IV chemotherapy infusion transported off the nursing unit must be accompanied by a chemotherapy competent RN.

B. **ATTACHMENTS:**
1. Attachment A: Chemotherapy Pre-Printed Order #8711-3222; available in the Copy Center and on-line at http://etcmc/PP_Orders/

C. **REFERENCES**
1. National Institute for Occupational Safety & Health (NIOSH). (2004). Preventing occupational exposure to antineoplastic and other hazardous drugs in health care settings. Retrieved (April 1, 2009) from http://www.cdc.gov/niosh/docs/2004-156/#c
2. Oncology Nursing Society (ONS). (2011). Chemotherapy and biotherapy guidelines ($4^{th}$ $3^{rd}$ Ed.).
3. Patient Care Services Medication Administration Policy

**DIAGNOSIS/REGIMEN/MNEMONIC:** _____

**ALLERGIES:** _____

CURRENT Height. _____(in)_____ (cm) Weight. _____(kg)_____ (lbs) BSA _____ ($M^2$) CrCl_____

**CHEMOTHERAPY AGENTS**

**Note: Diluent/Volume/and Rate of Administration per Standard of Practice unless otherwise stated in Chemo Instructions**

| Start Chemo Date: | Agent | $Mg/M^2$ dose | Mg dose | Route of Administration | Frequency (continuous, every _ hrs, day 1,3,5, etc.) | Duration (X_days, X_doses) |
|---|---|---|---|---|---|---|
| | | | | ☐ Infusion ☐ IVPB ☐ PO ☐ Intraperitoneal (IP) | | |
| | | | | ☐ Infusion ☐ IVPB ☐ PO ☐ Intraperitoneal (IP) | | |
| | | | | ☐ Infusion ☐ IVPB ☐ PO ☐ Intraperitoneal (IP) | | |
| | | | | ☐ Infusion ☐ IVPB ☐ PO ☐ Intraperitoneal (IP) | | |
| | | | | ☐ Infusion ☐ IVPB ☐ PO ☐ Intraperitoneal (IP) | | |
| | | | | ☐ Infusion ☐ IVPB ☐ PO ☐ Intraperitoneal (IP) | | |

**Chemo instructions or reasons for dose modifications:** _____

**Pre-medications:** _____

**Hydration:** _____

**Anti-emetics:** _____

**Other Orders:** _____

| Nurse's – Signature | Date | Time | Physician's – Signature | Date | Time |
|---|---|---|---|---|---|
| | | | | | |

Affix Patient Label

Tri-City Medical Center
4002 Vista Way • Oceanside • CA • 92056
8711-4010

**CHEMOTHERAPY ORDERS**

**Page 1 of 1**

Tri-City Medical Center
Oceanside, California

PATIENT CARE SERVICES ~~POLICY MANUAL~~

| | | | |
|---|---|---|---|
| **ISSUE DATE:** | **12/01** | **SUBJECT:** | **DOCUMENTATION IN THE MEDICAL RECORD** |
| **REVISION DATE:** | **6/03, 12/03, 2/04, 8/04, 1/05, 2/07, 7/10, 8//12** | **POLICY NUMBER:** | **IX.I** |

| | |
|---|---|
| **Department Approval:** | **07/16** |
| **Clinical Policies & Procedures Committee Approval:** | **~~10/12~~07/16** |
| **Nursing Executive Committee Approval:** | **~~10/12~~07/16** |
| **Pharmacy & Therapeutics Committee Approval:** | **n/a** |
| **Medical Executive Committee Approval:** | **08/16** |
| **Professional Affairs Committee Approval:** | **01/13** |
| **Board of Directors Approval:** | **01/13** |

A. **PURPOSE:**

1. To maintain documented information for each patient that is accurate, timely, legible, readily accessible, and is performed by authorized personnel.
2. To ensure the medical record contains sufficient information to identify the patient, support the diagnosis, plan of care, continuity of care justify treatment and document the course and outcome of treatment.

B. **DEFINITIONS:**

1. Activity View: A set of clinical data elements related to a specific activity that may include required documentation elements.
2. Annotation: Ability to add a comment to documentation.
3. Authentication: Review process of documentation completed by a student or other caregiver requiring review by a licensed staff or instructor.
4. Carry forward functionality: fields which bring forward the last charted data.
5. Clinical Range Bar: Indicates the date range of displayed information.
6. CPOE: Computerized Provider Order Entry.
7. Duplicate Results: Allows clinician **in Iview** to copy and paste data to a different time column for review and signing.
8. Edit Fields: The ability to modify or delete documented fields.
9. ~~HER~~**EHR**: Electronic Health Record
10. Encounter: Each patient visit/admission is assigned a Financial (FIN)/encounter number.
11. Erasing fields: To delete or "unchart" information placed in a current field currently or from a carry forward function.
12. Iview: An interactive view for clinical documentation that allows direct charting.
13. MAR: Medication Administration Record.
14. Patient Access List (PAL)/**Care Compass**: An interactive screen available to the nursing staff to view and perform patient care tasks by selecting icons, which launch a form or screen for completion of the task.
15. PowerForm: Electronic forms with one or many sections. Each section provides data entry options for documenting assessments, procedures, and other patient care events.
16. Task List: An electronic list of tasks or reminders within a specified time frame that may be attached to a form or activity.

C. **POLICY:**

1. Documentation is the primary communication medium. Each practitioner is responsible for accurate documentation of care provided. All entries manual or computerized are permanent.
2. Documentation will be complete and reflect patient specific care, support the medical diagnosis, course of treatment, and Plan of Care.
3. Documentation shall be efficient with minimal to no duplication of charting.
4. Documented patient information must be readily accessible to all care providers.
5. Documentation in the Medical Record shall include key components such as:
   a. The patient's initial admission information, transfer information, and discharge summary, with a full and accurate description of the patient's condition and responses at the time.
   b. Any change in the patient's condition.
   c. A record of communication with physicians, patient or family.
   d. Upon discharge, clear documentation of understanding of all discharge education and instructions to patient/responsible party.
   e. When an unexpected event occurs, complete the following:
      i. Document the facts of occurrence in the Medical Record and completes an incident report/quality review report.
      ii. DO NOT document or reference a**n incident report/quality review report** ~~**Quality Review Report (QRR)**~~ has been completed in the medical record (~~reference~~ **See** Administrative Policy ~~275~~: **Disclosure of Unanticipated Adverse Outcomes to Patients/Families 8610-275).**
6. Documentation in the patient's record shall be complete, factual, accurate, and legible.
   a. When charting on paper, DO NOT pre-date or back date patient information. (See Late Entry into the Medical Record).
      i. In the manual record, document on the next available space.
      ii. Do not skip lines
7. ~~TCMC~~ **Tri-City Healthcare District (TCHD)** care providers shall document in Cerner when online documentation forms/screens/IView bands are available.
   a. Exceptions to the practices are areas using paper flow sheets or other hard chart forms. Refer to unit specific policies and procedures.
   b. Powerforms shall be accessed from the task or ~~Patient Access List (PAL~~ **Care Compass**~~)~~ when available. If not available on the task list or ~~PAL~~**via Care Compass**, access the forms from AdHoc. Some of the Powerform~~s~~ titles may vary slightly to indicate a patient or area specific document.
   c. All access and documentation in Cerner shall be reflected by the user **identification**~~ID~~.
   d. Each user must define/update an encounter relationship to access a patient's chart.
      I. Some positions are assigned a default relationship.
   e. Users are required to use only their log-on to document in the patient's record.
8. Documentation shall be timed and dated to reflect the actual time events occurred.
   a. It is recommended that all shift assessments, reassessments, PRN assessments, and/or care provided be documented after completion of the care in a timely manner.
   b. When it is not possible to document shift assessments, reassessments, PRN assessments and/or care provided due to unforeseen circumstances such as urgent or emergent situations, changes in assignment or increased patient acuity document the patient care and assessment as soon as reasonably able to do so.
   c. Activity Views in IView will be used to help guide required data documentation for key assessments and reassessments.
   d. Reasonable and timely manner may be defined as within 4 hours after completion of assessments or care provided or as defined in unit specific policies and/or procedures.
   e. Discharge documentation must be completed within four hours of discharging the inpatient.
9. Documentation in the patient record shall not include:

a. Issues affecting credibility, including inconsistency in documentation, contradiction or blaming of other practitioners
b. Issues affecting professionalism, including intentional documentation of inadequate care, unprofessional verbal communications among practitioner, judgment or emotional statements about patients or their families, or "sloppy" charting practices in the manual chart (squeezing in" an entry where there is not adequate space, or charting in advance of an intervention or treatment).
c. Issues which imply information or events are being hidden (i.e., obliterating a chart entry (in the manual chart), or failure to document an untoward event, such as a fall or change in vital signs).
~~c.~~**d. Duplication of results in IView.**

10. Late entry into the ~~l~~Medical Record (~~Reference~~**See**: **Patient Care Services** (PCS) ~~p~~**P**rocedure: "~~-~~Medical Record, Making Corrections in Documentation~~"~~)
    a. When a pertinent entry is missed or not written/entered into the EHR in a timely manner, a late entry shall be documented in the Medical Record.
11. If an entry is made for another practitioner (by proxy), the entry must include the original practitioner's name and reason for proxy entry.
    a. Name of person making revision, date and time of entry and practitioner's (proxy's) unique log-on will be tracked by the system.
12. Refer to departmental specific documentation procedures for unit or departmental documentation requirements.
13. Refer to PCS **Policy:** ~~policy~~ Cerner Downtime ~~Policy~~ for specific downtime documentation requirements.
14. Authenticating documentation is a process for authenticating the person, identified by name and relationship (discipline), who is responsible for ordering, providing or evaluating a clinical service rendered to a patient.
    a. The ~~TCMC~~ **TCHD** health care provider shall authenticate information entered into a powernote, powerform, IView or clinical note by students.
15. The following are authorized to document in the Medical Record:
    a. Advanced Care Technicians (ACT)
    b. Audiologist
    c. Behavioral Health Liaisons (BHL)
    d. Case Managers
    e. Certified Nurse Midwife (CNM)
    f. Chaplain
    g. Clinical Nurse Specialists (CNS)
    h. Dentists
    i. Department Specific Technologist (i.e., Cath Lab, Cardiology, Radiology, etc.)
    j. Dieticians
    k. Doctor of Osteopathic Medicine (DO)
    l. Dosimetrist
    m. Emergency Technicians (ET)
    ~~n. Graduate Licensed Vocational Nurse (IPLVN)~~
    ~~o. Graduate Registered Nurse (IPRN)~~
    ~~p.~~**n.** Interpreters
    ~~q.~~**o.** Lactation Consultants
    ~~r.~~**p.** Licensed Vocational Nurse (LVN)
    ~~s.~~**q.** Marriage Family Therapist (MFT)
    ~~t.~~**r.** Marriage Family Therapist Intern
    **s. Medical Assisstant**
    ~~u.~~**t.** Medical Doctor (MD)
    ~~v.~~**u.** Medical Physicist
    ~~w.~~**v.** Mental Health Worker (MHW)
    ~~x.~~**w.** Monitor Technicians (MT) per unit specific policy

~~y.~~**x.** Neurophysiologist
~~z.~~**y.** **Nursing Instructor**
~~aa.~~**z.** Nurse Practitioner (NP)
~~bb.~~**aa.** Nursing Assistant (NA)/Certified Nursing Assistants (CNA)/Student Nurse Technician
~~cc. Optometrist~~
~~dd.~~**bb.** Organ Procurement Representatives
~~ee.~~**cc.** Orthopedic Assistant
**dd. Opthamologist**
~~ff.~~**ee.** Pharmacist
~~gg.~~**ff.** Licensed Physical/Occupational/Speech/Recreational Therapists (LPT/OT)
~~hh.~~**gg.** Physician's Assistant (PA)
~~ii.~~**hh.** Podiatrist
~~jj. Psychiatric Technician~~
~~kk. Psychiatrist~~
~~ll.~~**ii.** Psychologist
~~mm.~~**jj. Respiratory Care Practitioner (RCP)**~~Pulmonary Technician~~
~~nn.~~**kk.** Recreational Therapist
~~oo.~~**ll.** Registered Nurse (RN)
~~pp.~~**mm.** Research Coordinators (credentialed by TCMC Medical Staff)
~~qq.~~**nn.** Resident
~~rr.~~**oo.** ~~Scribes~~
~~ss.~~**pp.** Social Workers
~~tt.~~ ~~Student/Extern RN~~
~~uu.~~**qq.** Students ~~under the direction of their Clinical Instructor~~**in approved clinical rotation.**
~~vv.~~**rr.** Transcriptionists
~~ww.~~**ss.** Unit Secretaries
~~xx.~~**tt.** Contracted services that have completed the process as outlined in the Administrative ~~p~~**P**olicy: ~~"~~Non-TCHD Workers' ~~Compensation~~ **Orientation** and Identification Badge Process~~"~~ **8610-**~~(~~#451~~)~~.

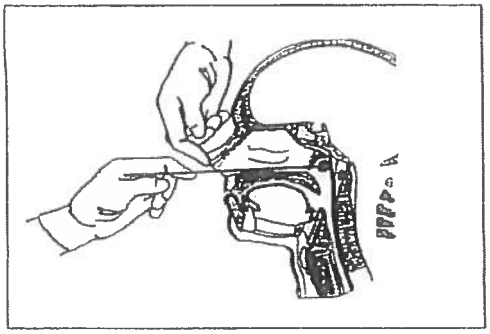
D. **RELATED DOCUMENTS:**

1. **Administrative Policy: Disclosure of Unanticipated Adverse Outcomes to Patients/Families 8610-275**
2. **Administrative Policy: Non-TCHD Worker's Orientation and Identification Badge Process, Non-Employees 8610-451**
3. **PCS Policy: Cerner Downtime**
4. **PCS Procedure: Medical Record Making Corrections to Documentation**

| Tri-City Medical Center | Distribution: Patient Care Services |
|---|---|
| **PROCEDURE:** | **INFLUENZA NASOPHARYNGEAL SWAB TESTING** |
| Purpose: | To provide guidelines for Registered Nurses and Licensed Vocational Nurses testing patients for influenza. Patients requiring influenza testing will have nasopharyngeal swabs obtained in a timely manner using technique which will assure accurate results. |
| Equipment: | Dacron-tipped nasopharyngeal swab with flexible wire handle<br>Mask Goggles or face shield<br>Gloves and gown<br>Tissues |

A. **OBTAINING SPECIMEN:**

1. Don personal protective equipment.
2. Have patient sit with head against wall as patients have a tendency to pull away during this procedure.
3. Insert swab into one nostril **straight back** (not upwards) along the floor of the nasal passage for several centimeters until reaching the posterior wall of the nasopharynx (resistance will be met). The distance from the nose to the ear gives an estimate of the distance the swab should be inserted. Do not force the swab, if obstruction is encountered before reaching the nasopharynx, remove swab and try the other side.
4. Rotate the swab gently for 5-10 seconds to loosen the epithelial cells.



B. **TRANSPORT TO LAB:**

1. Specimen must be transported to the lab as soon as possible.

| Department Review | Clinical Policies & Procedures | Nursing Executive Committee | Medical Staff Department / Division | Pharmacy & Therapeutics Committee | Medical Executive Committee | Professional Affairs Committee | Board of Directors |
|---|---|---|---|---|---|---|---|
| 11/12, 6/16 | 12/12, 07/16 | 12/12, 07/16 | n/a | n/a | 01/13, 08/16 | 02/13 | 02/13 |

Tri-City Healthcare District
Oceanside, California

Administrative Policy Manual
District Operations

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| | | | |
|---|---|---|---|
| **ISSUE DATE:** | **5/95** | **SUBJECT:** | **STUDENT CLINICAL ROTATION/EDUCATION** |
| **REVISION DATE:** | **4/98; 4/02; 12/02; 9/05; 11/08; 12/10** | **POLICY NUMBER:** | **8610-249** |

| | |
|---|---|
| **Administrative Policies & Procedures Committee Approval:** | **08/16** |
| **Medical Executive Committee Approval:** | **n/a** |
| **Professional Affairs Committee Approval:** | **08/13** |
| **Board of Directors Approval:** | **12/13** |

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A. **PURPOSE:**

1. To ensure a consistent policy for establishing student clinical affiliations.

B. **POLICY:**

1. A written clinical affiliation agreement must be approved before students are allowed to participate in clinical education. The clinical affiliation agreements are to be coordinated by the Education Department.
2. Tri-City Healthcare District (TCHD) utilizes **an** ~~two types of~~ education affiliation agreements for organizations requesting educational experiences (internships, shadowing, etc) for their students:
   a. Tri-City Medical Center (TCMC) Clinical Education Affiliation Agreement **will be completed for all clinical placements**: ~~This contract is used for the university/college requesting traditional clinical internships at TCMC (40+ Hours over several months).~~
   ~~b. TCMC Student/Intern Affiliation Agreement: This abbreviated (one page) agreement is designed primarily for the high school requesting a shorter educational experience at TCMC for their group or individual students in the form of a field trip, shadow day(s), etc. However, it may be used for a short college shadowing experience if deemed appropriate by the Education Director.~~
   **b. All schools must now sign a copy of the Business Associate Agreement provided by the Compliance Department.**
3. Education staff will review any requested changes to the standard Clinical Education Affiliation Agreement with **the Compliance Department**~~Legal Affairs~~ for appropriateness and legal concerns.
4. Any necessary changes will be communicated directly to the school for discussion and approval.
5. The Clinical Affiliation Agreement is then sent to Administration for final review and signature approval.
6. Copies of the approved agreement are retained in the Education Department, **the online contract database** and sent to the school.
7. Scheduling of clinical education for nursing students will be coordinated by the Education Department. Clinical education of all other students will be coordinated by the appropriate service or department.
   a. All students must complete TCMC orientation requirements prior to starting their internship/shadow experience. The Education Department provides a self-paced student orientation and maintains orientation paperwork.
8. The schools of Nursing are apprised on a continuing basis regarding census fluctuation and the availability of clinical opportunities for students.
   ~~b.~~**a.** All schools of Nursing are invited to participate in ~~the~~**a Nursing Faculty** ~~annual~~ meeting

at the Medical Center to discuss clinical schedules and current issues **as needed**.

~~8.~~**9.** Cancellation of Clinical Affiliation Agreements when requested by departments will be coordinated by the Education Department and approved by Administration.

C. **FORMS REFERENCED WHICH CAN BE LOCATED ON THE INTRANET:**

1. Clinical Education Affiliation Agreement
2. ~~Student/Intern Affiliation Agreement~~**Business Associate Agreement Form**

D. **RELATED DOCUMENTS:**

1. **Patient Care Services (PCS) Policy: Nursing Students in Patient Care Areas**
2. **PCS Policy: Allied Health Students in Patient Care Areas**
3. ~~2.~~**PCS Policy: Nursing Students in Advanced Practice**

Tri-City Health Care Distr
Oceanside, California

**Delete from Infection Control Manual and Move to Environment of Care Manuel**

Environment of Care~~Infection Control Policy~~ Manual

| | |
|---|---|
| **ISSUE DATE: 9/01** | **SUBJECT: Waste Management** |
| REVISED: 10/~~20~~03. 1/~~20~~07, 7/~~20~~09 | ~~STANDARD NUMBER: IC. 10.1~~ |
| **Department Approval Date(s):** | **10/15** |
| **Infection Control Committee Approval:** | **~~10/12~~10/15** |
| **Environmental Health and Safety Approval:** | **07/16** |
| **Medical Executive Committee Approval:** | **~~11/12~~08/16** |
| **Professional Affairs Committee Approval:** | |
| **Board of Directors Approval:** | **11/12** |

A. **POLICY**~~Introduction~~

1. The Medical Waste Management Act provides the legislative definition of medical waste (California Health and Safety Code, Section 117690). In lay terms, waste must satisfy three critical criteria in order to be classified as medical waste. These three criteria are:
   a. The material must actually be a waste product.
      i. This precludes materials that have intrinsic value (such as outdated pharmaceuticals that are returned for credit) from being classified as a medical waste.
   b. The waste can be either biohazardous or sharps waste.
      i. Various forms of waste are defined as biohazardous because of the actual or presumed presence of pathogenic microorganisms. Such wastes as laboratory waste and fluid blood fall into this category and are therefore biohazardous waste. Trace amounts of chemotherapeutic agents, outdated pharmaceutical wastes and tissues with trace amounts of fixatives also fall into the category of biohazardous waste. Objects that have been used in invasive procedures such as hypodermic needles and broken glass items contaminated with blood or other biohazardous waste are considered to be sharps waste.
   c. The waste must be produced as a result of a specified action in the delivery of health care.
      i. The Medical Waste Management Act (section 117690) defines this as the "...diagnosis, treatment, or immunization of human beings..."

~~B. Biohazardous~~

~~1.~~**2.** Most waste generated during the direct patient care is not biohazardous. Examples of biohazardous waste that might be generated at our facility that requires special disposal includes:

- ~~2.~~**a.** Human specimen cultures, culture dishes and devices used to transfer, inoculate and mix cultures from medical and pathology laboratories.
- ~~3.~~**b.** Surgery specimens or tissues suspected of being contaminated with infectious agents known to be contagious.
- ~~4.~~**c.** Waste containing recognizable fluid blood, fluid blood products, and containers or equipment containing fluid blood.
- ~~5.~~**d.** Waste containing materials that are required to be isolated by the infection control staff, attending physician and surgeon or local health officer to protect others from highly communicable diseases (such as smallpox or the hemorrhagic fevers: Ebola, Lassa, Marburg, or Crimean-Congo).

~~C.~~**B. PROCEDURE**

1. Segregation of other medical waste is accomplished by staff (see Appendix A). All regulated medical waste will be collected within the area of origin in a biohazard bag or sharps container as appropriate.
2. Biohazardous bags are disposable, red in color, impervious to moisture with strength sufficient to preclude ripping, tearing, or bursting under normal conditions of usage and handling. They must pass the 165-gram dropped dart impact resistant test as prescribed by Standard D 1709-85 of the American Society for Testing and Materials and certified by the bag manufacturer.
   a. Red biohazardous bags shall be securely tied at the top so as to prevent leakage or expulsion of solid or liquid during storage, handling or transport.
   b. All items in a red bag must be managed as biohazardous. Red-bagged waste are handled by a contract service as biohazardous and never sent to the landfill.
3. Storage
   a. Red biohazardous bags shall be placed in rigid containers for storage, handling and transport.
   b. Containers holding red biohazardous bags shall be leak-resistant have tight fitting covers and are kept in good repair. These containers are not required to be red in color but must be labeled on the cover and sides with the words "Biohazard"
   c. The bag shall be legibly labeled with the hospital's name, address, and phone number and easily visible on the outside of the bag
   d. Any enclosure or designated collection area used for the storage of medical waste containers shall be secured so as to deny access to unauthorized persons. Signs worded "Caution-Biohazardous Waste Storage Area- Unauthorized Persons Keep Out" in English and Spanish. must be posted on the entry doors.
4. Transportation to Final Storage
   a. Covers are required where biohazardous material is being stored after collection or during transport.
   b. Intermediate holding areas for red-bagged wastes are located~~ on the floors~~ **in designated Patient care areas**. Daily, Environmental Services staff will check waste levels and when necessary, transport all wastes, including red-bagged wastes to the holding area for pick-up by the contract service,~~ Med-Serve Environmental~~**Stericycle**.
   c. Biohazardous wastes may be stored on the premises no longer than seven days.
   d. Biohazardous wastes stored for final disposition and transport offsite must be stored in secured storage area so as to deny access to unauthorized persons. Storage areas shall be marked with warning signs on or adjacent to exteriors of doors or gates and provide protection from animals, vermin and natural elements.
   e. This area will display prominent warning signs in English: "Caution: Biohazardous waste storage area. Unauthorized persons keep out." and in Spanish: "Cuidado: Zona de residos infectados. Prohibida la entrada a personas no authorizadas." Warning signs shall be readily legible during daylight from a distance of at least 25 feet. This area will be well ventilated and kept clean at all times.
   f. Unless protected by disposal liners, reusable rigid containers shall be washed and decontaminated by a hospital-approved disinfectant every time they are emptied.
   g. During transport, medical wastes shall be separated from other wastes in the same vehicle by use of containers or barriers.
5. Certain hazardous wastes may be solidified for disposal. An EPA approved product (i.e. Isosorb) is used to solidify contents of suction canisters. After treatment is done, this waste must be put in a red bag to be discarded.
6. Patients' rooms shall have waste containers lined with regular plastic bags. Environmental Services staff accomplishes disposal of waste from patients' rooms.
7. Sharps waste:
   a. All used needles and syringes will be disposed of at the point of origin in an appropriate sharps collection container. All sharps container will be checked for fill level daily and exchanged appropriately by our outside vendor or Environmental Services Department.

b. Sharps waste shall be contained in sharps containers, which are rigid, puncture-resistant, leak-resistant when, sealed, labeled with biohazard signs and red in color. Full sharps containers shall be tightly lidded. Tape may not serve as lid. Sealed sharps containers may be placed in red biohazard bags.

c. The container shall be legibly labeled with the hospital's name, address, and phone number and easily visible on the outside of the container.

8. Each newly hired Environmental Services employee will receive orientation to the procedure for the in-house collection, transportation, and storage of regulated and non-regulated waste at the medical center prior to ~~his/her first day on the job~~ **handling any waste materials.**. Training must include legal definitions, separation and proper storage, transportation, treatment and disposal of biomedical waste. Training will be the responsibility of the **manager** /supervisor in charge of this area.

## ~~D.~~C. RELATED DOCUMENTS:

1. **Administrative Policy: Handling of Pharmaceutical Waste, Expired Medications, and Expired Iv Solutions 276**

## ~~E.~~D. REFERENCES:

1. Ordinance No. 7646 of San Diego County, Department of Health Services regulating the storage and disposal of medical wastes
2. Medical Waste Management Act, Sections 117600-118360 in Chapter 6.1, California Health and Safety Code.
3. ~~Self-Assessment Manual for Proper Management of Medical Waste. Ca DHS and the California Healthcare Association, 2nd Ed., 1999~~
4. **Official California Code of Regulations (CCR), Title 22, Division 4.5**

| Type of Waste | Red Bag | Regular Bag | Sharps Container |
|---|---|---|---|
| Fluid blood, blood elements, vials of blood, specimens for culture, used culture media, and stock cultures. | X | | |
| Bloody body fluids or disposable drapes **saturated and/or** dripping with bloody body fluids such as CSF, synovial, pleural, pericardial, amniotic. | X | | |
| Bloody body fluid filled containers from nursing units, ED, PACU, outpatient areas not treated with Premicide. | X | | |
| Materials used to clean up fluid blood or bloody body fluid spills that are dripping. | X | | |
| Surgical specimens. | X | | |
| Wound dressings, bandages, wrappings **saturated and/or** dripping with blood. | X | | |
| Food waste such as soda cans, paper cups, cutlery, including food or service items from isolation rooms. | | X | |
| Empty urine and stool containers, empty colostomy and urinary drainage bags, empty bedpans, breathing circuits, surgical drapes. | | X | |
| Flexi-Seal Fecal Management Bags | X | | |
| Gastric washings, dialysate, vomitus, feces, urine, diapers. Please empty in toilet. | | X | |
| Tracheal and bronchial secretions, sputum, IV tubing without the needles. | | X | |
| Soiled but not dripping items such as dressings, bandages, cotton balls, peripads, chux, cotton swabs. | | X | |
| Suction Canisters, treated with solidifying agent. | X | | |
| Used gloves, aprons, masks, goggles, respirators. | | X | |
| Broken glass, guide wires. | | | X |
| Uncapped Needle/syringe units, needles, scalpels, vials from live or attenuated vaccines. | | | X |

Decision Table for Medical Waste

| | |
|---|---|
| **PROCEDURE:** | **PERIPHERAL ARTERIAL LINE (PAL): INSERTION, MAINTENANCE, AND REMOVAL OF** |
| Purpose: | To facilitate the efficient aseptic and complication free insertion of a peripheral arterial line for monitoring blood pressure and obtaining arterial blood samples. |
| Supportive Data: | |
| Equipment: | 1. Non-sterile Gloves<br>2. ~~Cholrhexidine~~**2% chlorhexidine gluconate** swabs<br>3. Infusion solution<br>4. IV tubing<br>5. transducer<br>6. 3 ml syringe<br>7. Leur-lock ~~(preferred) or Slip-tip~~ t-connector<br>8. 22 or 24 gauge angiocath**eter**<br>9. Tape<br>10. Transparent dressing<br>11. IV infusion pump<br>12. Light source transilluminator<br>13. IV board<br>14. Cotton balls |

A. **POLICY:**

1. Placement of a peripheral arterial line is done by a physician **or Allied Health Professional (AHP)**.
2. Transparent dressing will be placed over the site for stabilization and to allow continuous visualization of skin around catheter insertion site.
3. Excessive extension of extremity is to be avoided to prevent occlusion of artery.
4. Fingertips or toes are to be exposed so that circulatory status can be monitored.
5. Usual infusion is ½ NS or NS with 1 ~~to 2~~ units heparin/ml at a rate of 0.5 to 1 ml/hour. Infusions into PALs should not exceed 1 ml/hour.
6. Infusion is to run continuously on an infusion pump with a transducer to monitor blood pressure.
7. No medications, glucose, blood products or any rapid bolus will be administered through a PAL.
8. The physician **or AHP** will be notified if there is blanching, cyanosis, circulatory compromise, bleeding, dampened waveform or difficulty drawing blood from the PAL.

B. **PROCEDURE (ASSISTING WITH PAL INSERTION):**

1. Perform hand hygiene.
2. Confirm patient identity using two-identifier system~~. Refer to Patient Care Services "Identification, Patient" (IV.A) policy~~
3. Immobilize patient with developmentally supportive methods, such as swaddling.
4. Attach syringe containing **heparinized** flush solution to leur-lock T-connector- **and flush the connector.** ~~(preferred) or slip-tip T-connector~~.
5. ~~Flush T-connector.~~
6. ~~6.~~**5.** Dim lights if transilluminator is being used to visualize artery.
7. ~~7.~~**6.** Provide pain management as indicated.
8. ~~8.~~**7.** Don non-sterile gloves.
8. Assist with immobilizing the extremity during catheter insertion.
9. **Assist the physician or AHP as necessary with cleansing the area of insertion using 2% chlorahexidine gluconate for 30 seconds and allow to dry for 1 minute. .**
10. Assist physician **or AHP** as necessary with securing the line.

| NICU Department Review | Perinatal Collaborative Practice | Division of Neonatology | Pharmacy and Therapeutics | Medical Executive Committee | Professional Affairs Committee | Board of Directors |
|---|---|---|---|---|---|---|
| 05/14, **4/16** | 06/14 | 06/14 | n/a | **07/14, 08/16** | 08/14 | 08/14 |

**11. Connect the flushed tubing with the Luer-Lok adapter to the arterial catheter.**

~~11.~~**12.** Assist with taping or placement of an occlusive dressing.

~~12.~~**13.** Apply an arm or foot board. Dressing is applied in a manner as to display all digits as much as possible.

~~13. Once artery is cannulated, attach t-connector firmly to cannula, gently flush and clamp. If slip-tip T-connector is used, make sure it is taped securely to prevent accidental disconnection and blood loss.~~

14. Attach T-connector- to transducer and IV tubing. Unclamp the T-connector -and begin fluid administration.

15. Discard used supplies in appropriate receptacles, remove gloves, and perform hand hygiene.

16. Documentation of insertion in patient's medical record:
    a. Cannula size and type
    b. Location of arterial site
    c. Date and time of procedure
    ~~d. How procedure was tolerated~~
    ~~e. Estimated blood loss~~
    ~~f.~~**d.** Characteristics of waveform on monitor
    ~~g.~~**e.** Perfusion of extremity

C. **MAINTENANCE:**

1. Assess the neurovascular and peripheral vascular status of the cannulated extremity immediately after catheter insertion and hourly or more often if warranted.

2. The transducer is calibrated once a shift and PRN.~~:~~
    ~~a. Open the transducer stopcock to air by turning it off to the patientand loosening the non-vented cap while maintaining sterility..~~
    ~~b. Maintain transducer at the level of the infant's right atrium.~~
    ~~c. Press "zero" on the monitor.~~
    ~~d. Replace cap and close stopcock to air by opening stopcock to infant.~~
    ~~e. If waveform dampens:~~
        ~~i. Check connections.~~
        ~~ii. Flush transducer if bubbles are present.~~
        ~~iii. Check selected pressure scale on monitor.~~
        ~~iv. Recalibrate transducer.~~
        ~~v. Compare cuff blood pressure (BP) to arterial reading.~~
        ~~vi. Change stopcock and transducer.~~
        ~~vii. Notify physician if interventions do not correct waveform.~~

3. Daily Documentation:
    a. **Hourly invasive** ~~B~~**blood p**~~P~~**ressure** ~~and vitals~~ per Standards of Care.
    b. ~~Correlating c~~**C**uff BP once per shift **and prn**
    ~~c. Location~~
    ~~d.~~**c.** Hourly site checks including: **location,** site status, extremity color, waveform assessment

D. **BLOOD SAMPLING:**

1. Equipment:
    a. Non-sterile Gloves
    b. ~~Cholrhexidine~~**2% chlorhexidine gluconate** swabs
    c. ABG syringe sampling kit/lab tubes
    d. 22-25 gauge needle
    e. 2x2 gauze

2. Procedure:
    a. Perform hand hygiene.
    b. Confirm patient identity using two-identifier system.
    c. Don non-sterile gloves.

d. Place 2x2 gauze under t-connector port.
e. Clean diaphragm with ~~Cholrhexidine~~**2% chlorhexidine gluconate** swab for 30 seconds. Allow to dry for 30 seconds.
f. Clamp -t-connector close to the hub with attached clamp. Keep infusion pump running.
g. Insert needle into t-connector port.
h. Allow three drops of blood to flow onto 2x2 **gauze**.
i. Fill lab tubes directly from the needle hub by allowing the blood to drip directly into the lab tube.
j. For ABG sample, adjust plunger on the ABG syringe to the 0.2ml mark then insert the syringe into the needle hub and allow the syringe to fill.
k. Withdraw the needle carefully and activate the safety mechanism.
l. Release clamp on the t-connector, allowing backpressure from pump to flush line.
m. Dispose of needle in the sharps container.
n. Remove gloves and perform hand hygiene.
o. Label labs with the appropriate patient information.

## E. CATHETER REMOVAL:

1. Perform hand hygiene.
2. Confirm patient identity using two-identifier system. ~~Refer to Patient Care Services "Identification, Patient" (IV.A) policy~~
3. Don non-sterile gloves.
4. Turn infusion pump off **and clamp the T-connector**.
5. Remove dressing and tape.
6. Pull catheter out**, applying pressure with a sterile gauze pad over the site while removing the catheter** and assess intactness of catheter.
7. Apply pressure over insertion site with sterile 2x2 gauze ~~,for a minimum of five minutes and re-evaluate every five minutes until bleeding stops.~~
8. Discard used supplies in appropriate receptacles.
9. Remove gloves and perform hand hygiene.
10. Document the procedure in the patient's medical record.

## F. REFERENCES

**1. Bailey, T. (2015). Common invasive procedures. In M.T. Verklan, M. Walden (Eds.), *Core curriculum for neonatal intensive care nursing* (5th ed., pp. 282-315). St. Louis: Saunders.**
~~1.~~**2.** Ikuta, L.M. & Beauman, S.S. (Eds.). (2011). Policies, Procedures, and Competencies for Neonatal Nursing Care. National Association of Neonatal Nurses.
**3. Infusion Nurses Society (INS). (2011). Standards of practice. Vascular access site preparation and device placement. *Journal of Infusion Nursing, 35*(Suppl. 1), S44-S45.**
~~2.~~**4.** MacDonald, M. G., Ramasethu, J. & Rais-Bahrami, K. (Eds.). (2012). *Atlas of procedures in Neonatology, 5th ed.* Lippincott Williams & Wilkins.
**5. O'Grady, N.P. and others. (2011). Guidelines for the prevention of intravascular catheter-related infections, 2011. Centers for Disease Control and Prevention. Retrieved April 27, 2015, from http://www.cdc.gov/hicpac/pdf/guidelines/bsi-guidelines-2011.pdf**
~~3. O'Shea, J. (2009). A comparison of blood pressure measurements in newborns. American *Journal of Perinatology, 26*(2), 113-116.~~
~~4. Ramasethu, J. (2008). Complications of vascular catheters in the neonatal intensive care unit. *Clinical Perinatology, 35*(1), 199-222~~
~~5. Verklan, M. T. & Walden, M. (2010). Core Curriculum for Neonatal Intensive Care Nursing, 4th ed. St. Louis: Elsevier Saunders.~~

| Tri-City Medical Center | Distribution: NICU |
|---|---|
| **PROCEDURE:** | **PERIPHERAL INTRAVENOUS INFILTRATIONS, TREATMENT FOR** |
| Purpose: | ~~To outline the nursing responsibilities in the treatment of peripheral intravenous (PIV) infiltrations and extravasations to prevent tissue~~ ~~when peripheral circulation is compromised.~~ |
| Supportive Data: | |
| Equipment: | |
| Issue date: 7/07 | ~~Revision date(s): 9/08, 6/09, 6/11, 8/12~~ |

**DELETE - use Mosby's Skill Intravenous Therapy: Line Insertion and Neofax for treatment guidelines**

A. ~~**DEFINITIONS:**~~

1. ~~Vesicant agents are those that cause redness, pain, and blistering when infiltrated and can progress to ulceration and tissue necrosis.~~
2. ~~Intravenous infiltration is the inadvertent administration of nonvesicant solutions or medications into the surrounding tissue.~~
3. ~~Extravasations are the inadvertent administration of vesicant solutions or medications into the surrounding tissue.~~

~~* For the purpose of this policy, infiltration and extravagation may be interchanged.~~

B. ~~**POLICY:**~~

1. ~~A physician's order is required for administration of antidotes for infiltrations.~~
2. ~~Signs and symptoms of an infiltration or extravasation include (but may not be limited to): swelling at the site of infusion, redness, pain with infusion or palpation of site, blanching, coolness of surrounding skin or heat at site of infusion, blister or vesicle formation at injection site, or decreased pulses below injection site.~~
3. ~~The degree of tissue damage is related to the type and amount of medication or fluids absorbed by the tissue, length of exposure, and the site of extravasation.~~
4. ~~Methods of preventing infiltration or extravasations include: hourly site observation, administration of vesicant fluids through a central line if the infusion will last longer than 60 minutes and changing of the PIV site if any signs or symptoms of potential infiltration is noted.~~
5. ~~Treatment options include:~~
   a. ~~Non-pharmacological treatments:~~
      i. ~~Includes elevating the extremity for 24-48 hours post infiltration.~~
   b. ~~*Hyaluronidase (Hydase®):*~~
      i. ~~Most effective when administered within 1 hour of the infiltration, but may be administered up to 12 hours post infiltration.~~
      ii. ~~Hyaluronidase should be administered in a concentration of *150 units/ml.* Inject 0.2 ml subcutaneous in five locations around the periphery of the injury in a circular manner, changing the injection needle before each injection.~~
      iii. ~~Blanching should be alleviated within 10 minutes of administration and swelling should be markedly decreased within 30 minutes.~~
   c. ~~Phentolamine:~~
      i. ~~Indicated for vasopressor extravasations.~~
      ii. ~~It is most effective when administered within 1 to 2 hours of infiltration. Improvement should be apparent within 15 to 30 minutes after administration.~~
      iii. ~~Phentolamine should be administered in a concentration of 0.5 mg/ml and is administered in the same techniques as hyaluronidase (at 0.2 ml SQ in multiple locations around the injury.)~~
      iv. ~~May be repeated as necessary.~~

C. ~~**PROCEDURE**~~

| Department Review | Division of Neonatology | Pharmacy and Therapeutics | Medical Executive Committee | Professional Affairs Committee | Board of Directors |
|---|---|---|---|---|---|
| 04/16 | 04/16 | 06/16 | 08/16 | | |

1. Stop the medication or fluids immediately if infiltration is suspected.
2. Remove the catheter.
3. Notify physician.
4. Initiate appropriate measures as ordered by physician or as indicated with use of a non-pharmacological treatment.
5. Observe the site frequently for signs/symptoms of worsening damage or necrosing of tissue. Notify physician if worsening or no improvement.
6. Document incident according to hospital policy and initiate QRR form.
7. Fill out quality review report (QRR) form per TCMC policy for all infiltrations, stages 1-4.

D. **EXTERNAL LINKS:**

E. **REFERENCES**

1. Alexander, M., et.al. (2006). Standards: Nursing Practice. *Journal of Infusion Nursing, 29(1S)*, S12-S61.
2. Pettit, J. (2003). Assessment of an infant with a peripheral intravenous device. *Advance Neonatal Care 3(5)*, 230-240.
3. Sawatzky-Dickson, D., & Bodnaryk, K. (2006). Neonatal intravenous extravasation injuries: Evaluation of a wound care protocol. *Neonatal Network, 25(1)*, 13-19.
4. Sundquist-Beauman, S., & Swanson, A. (2006). Neonatal infusion therapy: Preventing complications and improving outcomes. *Newborn & Infant Nursing Reviews, 6(4)*, 193-201.
5. Young, T.E. (2011). *Neofax, Edition 24*

F. **APPROVAL PROCESS:**

1. Clinical Policies & Procedures Committee
2. Nurse Executive Council
3. Medical Executive Committee
4. Professional Affairs Committee
5. Board of Directors

## Peripheral Intravenous (PIV) Infiltrations Extent of Injury Reference Tool:

When determining the stage, bused on the clinical symptoms, all of the symptoms may or may not be present. Choose most appropriate stage that reflects the injury.

| Stage | Clinical Symptoms |
|---|---|
| 0 | No infiltration |
| | Site questionable |
| | IV pump registering occlusion |
| | With or without pain |
| | With or without leaking |
| 1 | Skin blanched/translucent |
| | Skin tight, leaking |
| | Skin discolored or bruised |
| | Gross edema |
| | Infiltration of any blood product, irritant or vesicant |
| | Pain at access site |
| 2 | Skin blanched |
| | Gross edema |
| | Cool to touch |
| | Pain at access site |
| 3 | Skin blanched |
| | Edema > 1 cm |
| | Cool to touch |
| | With or without pain |
| 4 | Skin blanched |
| | Edema < 1 cm in any direction |
| | Cool to touch |
| | With or without pain |

| Stage | Treatments |
|---|---|
| 1 | **Hyaluronidase**<br>Best used for infiltrations caused by:<br>• Antibiotics<br>• Sodium Bicarbonate<br>• Potassium<br>• Calcium<br>• Hyperalimentation<br>• Dextrose<br>• Aminophyllin<br>• Blood |
| 2 | **Phentolamine**<br>Best used for infiltrations caused by:<br>• Dobutamine<br>• Dopamine<br>• Epinephrine |
| 3 | **Normal Saline** may be used when hyaluronidase or phentolamine is not available |
| 4 | **Non-pharmacological treatments**<br>*Elevate extremity for 24-48 hours* |

## Tracking Sheet for Peripheral Intravenous (PIV) Infiltrations

**Report for month of:** _____

**IV Site Code**
1=Scalp
2=Right Arm
3=Left Arm
4=Right Hand
5=Left Hand
6=Right Leg
7=Left Leg
8=Right Foot
9=Left Foot
10=Other

**Agent Description**
1=Crystalloids – no additive
2=Crystalloids containing Calcium
3=Hyperalimantation solution only
4=HAL w/Lipids
5=Non-blood product colloidal
6=Blood product
7=Antibiotic only
8=Other*

***Extent of Injury***
*1=Stage 1*
*2=Stage 2*
*3=Stage 3*
*4=Stage 4*

**Treatment**
*1=Hyaluronidase (Amphadase)*
2=Phentolamine (Regitine)
3=Normal Saline
4=Non-pharmacologic treatment*
5=None

* Explain/Describe

| Date | MRN | Patient Age (gestation/ days) | Weight | IV Site | Agent Description | Extent of Injury | Treatment |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
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**Tracked Changes Copy**

| PROCEDURE: | SKIN-TO-SKIN CONTACT |
|---|---|
| Purpose: | Promote caregiver-patient bonding, facilitate lactation, and increase confidence in providing patient care. Benefits to patient may include decreased oxygen requirements during holding, early breastfeeding; longer sleep periods, lowered caloric requirements and shortened hospitalization. Benefits to caregivers may include improved lactation, greater involvement and participation in patient's care and earlier readiness for discharge. |
| Supportive Data: | Skin-to-skin Contact literature supports that patients who are held skin to skin are able to maintain temperature, have regular heart rates and respirations, more deep sleep and alert states, less crying, ~~no increase in~~ **less** infections, greater weight gain and earlier discharge. |
| Equipment: | 1. Comfortable chair<br>2. Front-opening shirt or patient gown for the caregiver<br>3. Foot stool (optional)<br>4. Privacy Screen (optional)<br>5. Blankets<br>6. Tape<br>7. Hat<br>8. Viewing mirror for the caregiver (optional) |
| Issue Date: 9/07 | Revision Date(s): 5/08, 6/09, 6/11, 8/12 |

**A. DEFINITIONS:**

**1. Skin-to-Skin Contact (SSC): Also known as Kangaroo Care.**

~~A.~~**B. POLICY:**

1. **SSC provides both emotional and physiologic benefits to neonates and parents.**~~Before attempting skin-to skin care assure the patient has stable vital signs~~
2. ~~Patients on ventilators, vaso-pressor drips, shall be assessed individually~~
3. ~~Patients with apnea/bradycardia episodes will be evaluated by RN for participation~~

~~4.~~**2.** There **is**~~are~~ no **patient** weight limitations **for**~~on skin-to-skin contact~~**SSC**.

~~5.~~**3.** UAC's, UVC's, and PICC lines shall be assessed individually.

6. ~~The patient's axillary temperature prior to initiation of skin-to-skin contact should be between 36.5 degrees and 37.2 degrees Centigrade.~~
   a. ~~A heat lamp is not necessary since the warmth of the caregiver's skin is sufficient to maintain the patient's temperature.~~
   b. ~~Literature has documented that a state of "thermal harmony" exists where the caregiver's temperature increases or decreases to maintain the patient's temperature in a thermoneutral range during skin-to-skin contact.~~

~~7.~~**4.** ~~Skin-to-skin contact~~**SSC** should be performed for a minimum of 60 minutes, especially for a ventilated patient. Two hours is ideal, to give the patient time to ~~settle down~~**acclimate** and promote **regulation of** the sleep cycle.

a. ~~Skin-to-skin contact~~**SSC** may be done before, during or after a feeding.

b. ~~Mother may also breastfeed per physician or nurse discretion.~~

~~B.~~**C. PROCEDURE:**

1. Preparation
   a. **Assess the family's understanding of the reasons for and the risks and benefits of the procedure.** ~~Review educational materials with the patient's caregivers.~~
   **b.** Confirm patient identity using two-identifier system.
   b. ~~. Refer to Patient Care Services "Identification, Patient" (IV.A) policy~~
   c. Provide privacy screen, comfortable chair and appropriate lighting.

| Department Review | Perinatal Collaborative Practice | Division of Neonatology | Pharmacy and Therapeutics | Medical Executive Committee | Professional Affairs Committee | Board of Directors |
|---|---|---|---|---|---|---|
| 05/16 | 05/16 | 05/16 | n/a | 08/16 | 06/13 | 06/13 |

**d.** Have the caregiver/ wear a shirt or blouse that opens in front, or provide a hospital gown that opens in the front.

~~d.~~**e.** **Ask if the parent needs to use the restroom before beginning the procedure.**

~~e.~~**f.** Perform hand hygiene; have the caregiver perform hand hygiene.

2. Assessment
   a. Before initiating ~~skin-to-skin~~ **SSC** document the patient's baseline assessment **and vital signs.**~~,~~
      ~~i. vital signs~~
      ~~ii. respiratory support,~~
3. Action Steps

~~a. Position caregiver comfortably with adequate support for back, elbows, and feet.~~

**a. Place the chair in optimal position with wheels locked.**

b. Have caregiver unbutton shirt or blouse, mother should remove bra.
   ~~i. If necessary assist in lifting patient into a vertical, prone position between breasts/chest or across the chest.~~
   ~~ii. , maintain a tucked position (shoulders, arms, and legs tucked up and in.~~
   ~~iii. Reposition the patient as needed~~
      ~~1) Head is turned to the side, with the ear resting above the caregiver's heart.~~

**c.** Dress patient in diaper and hat only.

**d. Transfer the patient to the parent using either of the following techniques:**
   **i. Caregiver-assisted transfer**
      **1) Have the parent stand as close to the isolette as possible.**
      **2) Support the patient's head and any tubing as the parent supports the patient's back and buttocks by sliding hands under him or her.**
      **3) With nurse and parent (or second nurse) moving at the same time, turn the patient to the vertical position, instruct the parent to lean over the isolette and gently lift the patient to the parent's chest.**
      **4) Have the parent slowly sit down in the chair. Secure any tubing to the parent's shoulder.**
   **ii. Staff-assisted transfer**
      **1) Have the parent sit down in the chair.**
      2) **Place a forearm under the patient and cup his or her head with the other hand. Have another nurse support any tubing during the patient's transfer**
      **3) Lean over the isolette and gently lift the patient to the chest.**
      **4) Guide the patient toward the parent along with any tubing, and place the patient prone on the parent's chest.**
      **5) Secure any tubing to the parent's shoulder.**

**e. Reposition the patient, as needed, so his or her head is turned to the side with the ear resting above the parent's heart.**

**f. For an intubated patient, check and secure the ventilator tubing, auscultate breath sounds, suction as indicated, and visually verify ET tube placement.**

~~c.~~**g.** Place a light blanket over patient and tuck under caregiver's arm.

~~d. Provide privacy and dim lights.~~

~~e. Take vital signs prior to and on return to isolette.~~

**h. Check the patient's temperature within a few minutes of the transfer. Then, if is stable, check it at regular intervals.**

~~f. Take temperature when patient has been skin to skin for 1 hour.~~

**i. To transfer the patient back from the parent to the bed, use either of the following techniques:**
   **i. Caregiver-assisted back transfer**
      **1) Ask the parent to rise slowly to a standing position while containing the patient prone to the chest. Support the patient's head and buttocks and any tubing while the parent rises.**

2) **Continuing to support the patient's head and any tubing, have the parent support the patient's back and buttocks and, together, slowly lower the patient to the mattress. Place him or her in a supine or side-lying position.**
3) **Keep in mind that transfer may be easier to complete with two nurses, especially with a patient who is intubated.**

ii. **Staff-assisted back transfer**
1) **Lean over the parent and gently lift the patient, containing him or her prone to the chest while cupping the head.**
2) **Keep in mind that transfer may be easier to complete with two nurses, especially with a patient who is intubated.**
3) **Guide the patient and any tubing back to the bed, and place him or her in a supine or side-lying position.**

4. Monitoring
a. All patients in the NICU~~,~~ will be continuously monitored on a cardio-respiratory monitor and ~~when applicable,~~ a pulse oximeter.
b. **Hemodynamic stability of patient (temperature, heart rate, respiratory rate)** ~~Monitor the patient's physiologic cues (heart rate, color, respiratory rate, oxygen saturation).~~
c. Monitor the patient's behavioral cues (comfort level, agitation) frequently throughout SSC.
d. Allow the patient ~~approximately 5 minutes~~ **some time** after transfer from the isolette or bed to the caregiver's chest to ascertain tolerance.
e. Monitor the caregiver's comfort level during the ~~skin to skin process~~**SSC.**
5. Signs of intolerance:
a. Return patient to isolette if patient demonstrates changes in temperature, respiratory rate, ~~or~~ oxygen saturation **or increased apnea and bradycardia episodes that do not resolve with repositioning on the parent's chest**.
~~b. Return patient to isolette if patient demonstrates signs of stress:~~

| ~~MILD~~ | ~~MODERATE~~ | ~~SEVERE~~ |
|---|---|---|
| ~~Gaze aversion~~ | ~~Flushing~~ | ~~Pallor~~ |
| ~~Yawning~~ | ~~Mottling~~ | ~~Cyanosis~~ |
| ~~Hiccups~~ | ~~Sighing~~ | ~~Tachypnea~~ |
| ~~Grimacing~~ | ~~Emesis~~ | ~~Apnea~~ |
| ~~Closing Eyes~~ | ~~Finger splaying~~ | ~~Bradypnea~~ |
| ~~Tongue thrusting~~ | ~~Extension of arms/legs~~ | ~~Tachycardia~~ |
| ~~Bowel movements~~ | ~~Jitteriness~~ | ~~Brachycardia~~ |
| ~~Coughing~~ | ~~Jerky Movements~~ | ~~Arrhythmias~~ |
| ~~Sneezing~~ | ~~Limpness~~ | ~~Decreased O2 saturations~~ |

~~6. Explain to caregivers that the transition to skin-to-skin contact is a significant environmental change for their premature patient and that other stimuli such as stroking, talking to or trying to make eye contact may not be tolerated initially.~~
~~7. Reassure caregivers and provide support as needed, as many caregivers become very emotional during the initial skin-to-skin contact, especially with an extremely small patient.~~

~~C.~~**D. DOCUMENTATION:**
~~1. Temperature monitoring, signs of tolerance, signs of stress in medical record.~~
~~2.~~**1.** Patient **tolerance** ~~response to~~**of** ~~skin-to-skin contact~~**SSC.**~~, adverse/beneficial reactions.~~
~~3.~~**2.** Caregiver's response to ~~skin-to-skin contact~~**SSC**, including specific observations.
**3.** Caregiver education.
4. **Duration of SSC.**

~~D. EXTERNAL LINKS:~~

E. **REFERENCES:**

1. Altimier, L., Brown, B., & Tedeschi, L. (2006). *Neonatal nursing policies, procedures, competencies, and clinical pathways, 4th ed.* Glenview, IL: National Association of Neonatal Nurses.
2. Dodd, U.L. (2005). Implication of Kangaroo Care for the Growth and Development in Preterm Infants. *Journal of Obstetric, Gynecological, and Neonatal Nursing*, 34(1), 218-232.
3. Fohe, K., Kropf, S., & Avenarius, S. (2000). Skin-to-skin contact improves gas exchange in premature neonates. *Journal of Perinatology*, 20, 311-315.
4. Galligan, M. (2006). Proposed Guidelines for Skin to Skin treatment of Neonatal Hypothermia. *The American Journal of Maternal Child Nursing*. September/October, 31(5), 298-304; quiz 305-306.
5. Ludington-Hoe, S.M. et al. (2004). Randomized controlled trial of kangaroo care: Cardiorespiratory and thermal effects on healthy preterms. *Neonatal Network*, 23, 39-48.
6. Merenstein, G. B. & Gardner, S. L. (2011). *Handbook of neonatal intensive care*, 7th ed. Mosby Elsevier.
7. **Mosby's Nursing Skills. (2016). Skin-to-skin Contact. Elsevier, Inc.**
~~7.~~**8.** Roller, C.G. (2005). Getting to Know You: Mother's Experiences of Kangaroo Care. *Journal of Obstetrics, Gynecologic, and Neonatal Nursing*, 34(1) 210-217.
~~8.~~**9.** Smith, K. M. (2007). Sleep and Kangaroo Care: Clinical Practice in the Newborn Intensive Care Unit: Where the Baby Sleeps [horizontal ellipsis]. *The Journal of Perinatal & Neonatal Nursing*, 21(2), 151-157.
~~9.~~**10.** Verger, J.T. **&**~~,~~ Lebet, R.M. (Eds.) (2007). *AACN procedure manual for pediatric acute and critical care.* St. Louis: Saunders.

~~F. **APPROVAL PROCESS:**~~

~~1. Clinical Policies & Procedures Committee~~
~~2. Nurse Executive Council~~
~~3. Medical Executive Committee~~
~~4. Professional Affairs Committee~~
~~5. Board of Directors~~

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| PROCEDURE: | SKIN-TO-SKIN CONTACT |
|---|---|
| Purpose: | Promote caregiver-patient bonding, facilitate lactation, and increase confidence in providing patient care. Benefits to patient may include decreased oxygen requirements during holding, early breastfeeding; longer sleep periods, lowered caloric requirements and shortened hospitalization. Benefits to caregivers may include improved lactation, greater involvement and participation in patient's care and earlier readiness for discharge. |
| Supportive Data: | Skin-to-skin Contact literature supports that patients who are held skin to skin are able to maintain temperature, have regular heart rates and respirations, more deep sleep and alert states, less crying, less infections, greater weight gain and earlier discharge. |
| Equipment: | 1. Comfortable chair<br>2. Front-opening shirt or patient gown for the caregiver<br>3. Foot stool (optional)<br>4. Privacy Screen (optional)<br>5. Blankets<br>6. Tape<br>7. Hat<br>8. Viewing mirror for the caregiver (optional) |
| Issue Date: 9/07 | Revision Date(s): 5/08, 6/09, 6/11, 8/12 |

A. **DEFINITIONS:**

1. Skin-to-Skin Contact (SSC): Also known as Kangaroo Care.

B. **POLICY:**

1. SSC provides both emotional and physiologic benefits to neonates and parents.
2. There is no patient weight limitation for SSC.
3. UAC's, UVC's, and PICC lines shall be assessed individually.
4. SSC should be performed for a minimum of 60 minutes, especially for a ventilated patient. Two hours is ideal, to give the patient time to acclimate and promote regulation of the sleep cycle.
   a. SSC may be done before, during or after a feeding.

C. **PROCEDURE:**

1. Preparation
   a. Assess the family's understanding of the reasons for and the risks and benefits of the procedure.
   b. Confirm patient identity using two-identifier system.
   c. Provide privacy screen, comfortable chair and appropriate lighting.
   d. Have the caregiver/ wear a shirt or blouse that opens in front, or provide a hospital gown that opens in the front.
   e. Ask if the parent needs to use the restroom before beginning the procedure.
   f. Perform hand hygiene; have the caregiver perform hand hygiene.
2. Assessment
   a. Before initiating SSC document the patient's baseline assessment and vital signs.
3. Action Steps
   a. Place the chair in optimal position with wheels locked.
   b. Have caregiver unbutton shirt or blouse, mother should remove bra.
   c. Dress patient in diaper and hat only.
   d. Transfer the patient to the parent using either of the following techniques:
      i. Caregiver-assisted transfer
         1) Have the parent stand as close to the isolette as possible.

| Department Review | Perinatal Collaborative Practice | Division of Neonatology | Pharmacy and Therapeutics | Medical Executive Committee | Professional Affairs Committee | Board of Directors |
|---|---|---|---|---|---|---|
| 05/16 | 05/16 | 05/16 | n/a | 08/16 | 06/13 | 06/13 |

2) Support the patient's head and any tubing as the parent supports the patient's back and buttocks by sliding hands under him or her.
3) With nurse and parent (or second nurse) moving at the same time, turn the patient to the vertical position, instruct the parent to lean over the isolette and gently lift the patient to the parent's chest.
4) Have the parent slowly sit down in the chair. Secure any tubing to the parent's shoulder.

ii. Staff-assisted transfer
1) Have the parent sit down in the chair.
2) Place a forearm under the patient and cup his or her head with the other hand. Have another nurse support any tubing during the patient's transfer
3) Lean over the isolette and gently lift the patient to the chest.
4) Guide the patient toward the parent along with any tubing, and place the patient prone on the parent's chest.
5) Secure any tubing to the parent's shoulder.

e. Reposition the patient, as needed, so his or her head is turned to the side with the ear resting above the parent's heart.
f. For an intubated patient, check and secure the ventilator tubing, auscultate breath sounds, suction as indicated, and visually verify ET tube placement.
g. Place a light blanket over patient and tuck under caregiver's arm.
h. Check the patient's temperature within a few minutes of the transfer. Then, if is stable, check it at regular intervals.
i. To transfer the patient back from the parent to the bed, use either of the following techniques:

i. Caregiver-assisted back transfer
1) Ask the parent to rise slowly to a standing position while containing the patient prone to the chest. Support the patient's head and buttocks and any tubing while the parent rises.
2) Continuing to support the patient's head and any tubing, have the parent support the patient's back and buttocks and, together, slowly lower the patient to the mattress. Place him or her in a supine or side-lying position.
3) Keep in mind that transfer may be easier to complete with two nurses, especially with a patient who is intubated.

ii. Staff-assisted back transfer
1) Lean over the parent and gently lift the patient, containing him or her prone to the chest while cupping the head.
2) Keep in mind that transfer may be easier to complete with two nurses, especially with a patient who is intubated.
3) Guide the patient and any tubing back to the bed, and place him or her in a supine or side-lying position.

4. Monitoring
a. All patients in the NICU will be continuously monitored on a cardio-respiratory monitor and a pulse oximeter.
b. Hemodynamic stability of patient (temperature, heart rate, respiratory rate) .
c. Monitor the patient's behavioral cues (comfort level, agitation) frequently throughout SSC.
d. Allow the patient some time after transfer from the isolette or bed to the caregiver's chest to ascertain tolerance.
e. Monitor the caregiver's comfort level during the SSC.

5. Signs of intolerance:
a. Return patient to isolette if patient demonstrates changes in temperature, respiratory rate, oxygen saturation or increased apnea and bradycardia episodes that do not resolve with repositioning on the parent's chest.

D. **DOCUMENTATION:**
1. Patient tolerance of SSC.

2. Caregiver's response to SSC, including specific observations.
3. Caregiver education.
4. Duration of SSC.

## E. REFERENCES:

1. Altimier, L., Brown, B., & Tedeschi, L. (2006). *Neonatal nursing policies, procedures, competencies, and clinical pathways, 4th ed.* Glenview, IL: National Association of Neonatal Nurses.
2. Dodd, U.L. (2005). Implication of Kangaroo Care for the Growth and Development in Preterm Infants. *Journal of Obstetric, Gynecological, and Neonatal Nursing*, 34(1), 218-232.
3. Fohe, K., Kropf, S., & Avenarius, S. (2000). Skin-to-skin contact improves gas exchange in premature neonates. *Journal of Perinatology*, 20, 311-315.
4. Galligan, M. (2006). Proposed Guidelines for Skin to Skin treatment of Neonatal Hypothermia. *The American Journal of Maternal Child Nursing.* September/October, 31(5), 298-304; quiz 305-306.
5. Ludington-Hoe, S.M. et al. (2004). Randomized controlled trial of kangaroo care: Cardiorespiratory and thermal effects on healthy preterms. *Neonatal Network*, 23, 39-48.
6. Merenstein, G. B. & Gardner, S. L. (2011). *Handbook of neonatal intensive care*, 7th ed. Mosby Elsevier.
7. Mosby's Nursing Skills. (2016). Skin-to-skin Contact. Elsevier, Inc.
8. Roller, C.G. (2005). Getting to Know You: Mother's Experiences of Kangaroo Care. *Journal of Obstetrics, Gynecologic, and Neonatal Nursing*, 34(1) 210-217.
9. Smith, K. M. (2007). Sleep and Kangaroo Care: Clinical Practice in the Newborn Intensive Care Unit: Where the Baby Sleeps [horizontal ellipsis]. *The Journal of Perinatal & Neonatal Nursing*, 21(2), 151-157.
10. Verger, J.T. & Lebet, R.M. (Eds.) (2007). *AACN procedure manual for pediatric acute and critical care.* St. Louis: Saunders.

| | |
|---|---|
| PROCEDURE: | UMBILICAL CATHETERS, INSERTION, MANAGEMENT AND DISCONTINUATION OF |
| Purpose: | ~~To outline the nursing responsibilities assoc umbilical catheters, care of patients with um discontinuation of these catheters.~~ |
| Supportive Data: | ~~An umbilical artery catheter (UAC) is placed determinations, continuous monitoring of art required for infusion of fluids and medicatior for exchange transfusions, long-term IV acc for initial management of ELBW infants.~~ |
| Issue date:11/08 | Revision date(s): 6/09, 6/11, 8/12 |

**DELETE – use Mosby's Skills Umbilical Vessel Catheter: Drawing Blood (Neonatal), Umbilical Vessel Catheter Vessel: Securing (Neonatal), Umbilical Vessel Catheter: Use of Double Lumen UVC (Neonatal)**

A. ~~**PROCEDURE:**~~

1. ~~Assisting with insertion~~
    1. ~~Ensure physician has obtained informed consent from parent or legal guardian.~~
    2. ~~Perform hand hygiene and assemble equipment.~~
    3. ~~Assess patient before procedure. Document any bruising or discoloration found before procedure begins.~~
    4. ~~Place on radiant warmer, cardio-respiratory monitor and pulse oximeter. Immobilize patient in supine position, restraining limbs. Position light source to illuminate umbilical area.~~
    5. ~~Set up tray using aseptic technique.~~
    6. ~~Universal protocol: everyone involved participates in "time out" to verify patient and procedure.~~
    7. ~~Assist by maintaining sterility of procedure, monitoring patient's condition and vital signs. Notify physician of areas of blanching, dusky toes or legs, or change in temperature, color and pulse.~~
    8. ~~During the procedure, *verify proper procedural practice by monitoring for appropriate hand hygiene, maximal sterile barriers, and skin preparation. Document this monitoring on the Central Line Insertion Procedural Checklist.*~~
    9. ~~Confirm placement with x-ray prior to fluid administration unless ordered by physician.~~
    10. ~~Maintain sterility of area until notified otherwise.~~
    11. ~~Wipe off Povidone-Iodine solution from skin using saline wipes.~~
    12. ~~Thirty minutes after procedure is complete, loosen the umbilical tie and observe for bleeding. The tie may be removed once hemostasis is assured. Umbilical tie should be removed within four (4) hours after catheter insertion.~~
    13. ~~Secure catheter(s) to abdomen using a transparent dressing.~~
    14. ~~Discard gloves and supplies in appropriate receptacle.~~
    15. ~~Document the procedure in the patient's medical record. Documentation of the procedure includes:~~
        - ~~i. Date and time of insertion.~~
        - ~~ii. Specifics of insertion (technique, draping, insertion site).~~
        - ~~iii. Size of the catheter.~~
        - ~~iv. Length of the catheter from insertion site to catheter tip.~~
        - ~~v. Patient's tolerance of the procedure.~~
        - ~~vi. Blood loss or complications with insertion.~~
        - ~~vii. X-ray reading of tip location~~
        - ~~viii. Adjustments made after the insertion, (e.g., catheter pulled back, additional x-rays needed).~~
        - ~~ix. Completion of Central Line Insertion Procedural (CLIP)~~
    16. ~~~~