



# Contract RN Orientation Manual

December 2021

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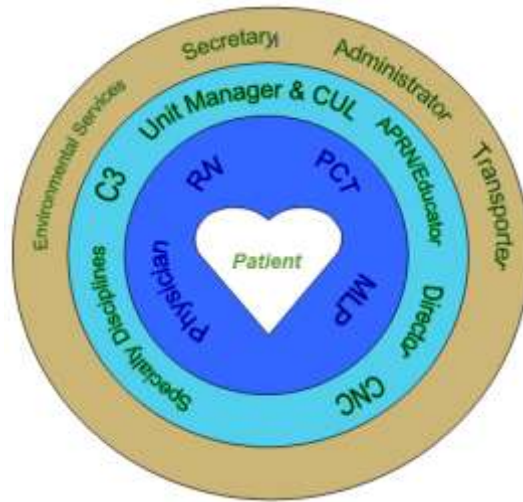
**1.1. Section I:**

Overview of Nursing

Clinical Care Team

Medical Interpretation

Hourly Care Rounds



## Overview of Nursing at NCH

### OUR MISSION

Nurses at NCH share the mission, vision, and values of the integrated system of care. NCH Mission: We exist to improve the health of the communities we serve and to meet individuals' healthcare needs.

### OUR NURSING PHILOSOPHY

Nurses at Northwest Community Healthcare are committed to the patient, the patient's family/support system, the profession, the interprofessional team, and the organization.

The organizational structure highly values nursing as a discipline whose practitioners have input into decisions, policies, and planning that impacts their practice. NCH demonstrates excellent outcomes in many areas, representative of the transformational leadership, structural empowerment, exemplary professional practice, and new knowledge, innovations, & improvements integrated within nursing throughout the organization.

### MAGNET® RECOGNITION

#### What is Magnet® Recognition?

It's the highest level of recognition nursing services can receive. The Magnet Recognition Program was developed by the American Nurses Credentialing Center (ANCC), a subsidiary of the American Nurses Association, to recognize healthcare organizations that provide the very best in nursing care. Magnet status is granted to hospitals that exhibit

exemplary patient outcomes and satisfaction, have impressive nurse-patient ratios and attract and retain the best staff from all disciplines.

To date, only 7% of hospitals in the nation hold this prestigious designation. Northwest Community is honored to be one of them, since 2006.

## **Clinical Care Team**

The patient and his/her support system is the focus of our practice model. Exemplary care is delivered by nurses, patient care technicians (PCT), physicians, midwives, advanced practice nurses, clinical care coordinators (C3), clinical unit leaders, and managers.

### **Registered Nurses**

- Focus on patient needs & are accountable for providing holistic care
- Are expert communicators who collaborate with the entire healthcare team
- Report changes in patient status to physicians
- Carry out physician orders and initiate independent nursing orders
- Assess, diagnose, identify outcomes, plan, implement, and evaluate plan of care
- Provide patient/family education

### **Patient Care Technicians**

- Perform patient care procedures within their scope of care
- Maintain a safe, clean patient care environment
- Observe and report patient status and changes to RN
- Support and interact with all members of the healthcare team

### **Unit Secretaries**

- Facilitate patient care through excellent customer service skills
- Coordinate communication between units, patients, families, and the healthcare team
- Serve as a resource for order entry process; assist with processing of selected orders

### **Unit Managers**

- Coordinate the day-to-day operations for their assigned clinical units
- Set goals and standards for unit
- Manage unit finances
- Oversee recruitment, interviewing, and hiring
- Monitor patient outcomes to identify areas for improvement
- Evaluate, coach and develop staff

### **Clinical Care Coordinators (C3s)**

- Expedite patient flow throughout the continuum of care, managing length of stay
- Round with physicians; conduct SNAP (Situation Now Action Plan) huddles
- Assist patient/family with arrangements for post-acute placement

- Collaborate with patient/family and healthcare team to reduce barriers to discharge and increase efficiency of care

### **Directors**

- Are accountable for the “big picture”
- Provide support for people and processes; responsible for several units
- Manage department finances
- Evaluate, coach, and develop staff

### **Advanced Practice Nurses/Clinical Nurse Specialists**

- Provide patient, family and staff education
- Support evidence-based clinical practice
- Role model expert critical thinking skills
- Provide advanced interdisciplinary management for patients with complex clinical needs

### **Clinical Nurse Educators/Clinical Practice Specialist**

- Coordinate unit-based orientation for new staff
- Teach expert nursing care in area of specialty
- Serve as role models for professional practice

### **Nursing Administrative and Clinical Support**

Monday – Friday (Day shift)

- Administrative support provided by your Clinical Director.
- Clinical support provided by your APN/Clinical Nurse Specialist, Clinical Educator, or Clinical Resource Nurse (CRN)

Monday – Friday (PM and Night shift) and Weekends

- Administrative support provided by the Administrative Supervisor
- Clinical support provided by the Clinical Nurse Consultant (CNC) (pager 0060 or phone 7990)

Additional Clinical Support is provided by Float Pool staff.

## **Medical Interpretation Resources**

It is required to use qualified medical interpreters for patients/families with limited English proficiency. Resources are noted below.

1. Primary source of interpretation: Cyracom telephonic language services on units
2. Video Remote Interpreting (VRI): Cyracom on Emmi iPads and/or iPads carts
3. In-Person interpretation: Call 7945 (Monday-Friday 7:30 am to 4 pm, after hours 7933)
4. Qualified Bilingual Staff Members: identified by ID badge (*Spanish, Russian, Polish, Hindi/Punjabi, Arabic, Greek*)

## Hourly Care Rounds:

1. At the beginning of the shift, the RN and PCT will introduce themselves and will inform patient about hourly rounding while patient is awake. (see script below)
2. The nurse and PCT will determine a schedule to share hourly patient visits.
3. Pain, Potty, Position, Possessions, Pathway (the 5 P's) will be the primary focus during rounds.
4. Document in EMR that Care Rounds were done. This check indicates that Care Rounds were completed per protocol.

### SAMPLE ROUNDS SCRIPT

**Remember:** The patient's perception of the quality of nursing care depends on the nurse's ability to meet the patient's needs.

Hello Mr/Ms Jones. My name is Florence. I will be your nurse today until (time). I will be working with Clara (PCT). He/she will be your care technician today. We both will work together to make sure that you get excellent care while you are in the hospital.

We perform **Care Rounds** for our patients while they are here. During our rounds, please let us know if you are in **pain**. We will encourage or help you to the toilet. We will also help you get **repositioned** if needed. Our **goal** is to check on you every hour during the day and every 2 hours at night.

In the meantime, please call us if you need any help. *Place the call light within the patient's reach.* This is the phone extension I am carrying. Please feel free to use it IF you do not get a timely response to the call light.

Do you have any questions? Is there anything else I can do for you?

*Before you leave, don't forget to tell patient when you or the PCT will be rounding next*

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## **1.2. Section 2: Critical Elements (Skills) and Policy highlights**

**Code Blue**

**Rapid Response**

**Restraints**

**Blood Administration**

**Central Lines**

**Blood Glucose Testing**

**Alaris IV Infusion pump**

**Fall Prevention**






**Patient Education**

## Code Blue

### Automated External Defibrillator (AED) Lifepak 20

CRITICAL ELEMENTS	MET	NOT MET
Use <b>ONLY</b> when patient is unresponsive, with no breathing and no pulse		
1. Verify patient is unresponsive with no breathing		
2. Call for help (Call a CODE BLUE x3333 and bring the crash cart)		
3. Check pulse. If no pulse, start compressions at a ratio of 30 compressions to 2 breaths (breaths are to be given using an ambu bag only if feel can get a good seal. Otherwise leave passive oxygen in place and apply drape to patient's face.		
4. When AED arrives, press <b>ON</b> button		
5. Apply multifunction pads to chest in anterior-lateral position		
6. Connect multifunction pads to the therapy cable		
7. Press <b>ANALYZE</b> button, making sure everyone is CLEAR of patient		
8. Follow screen messages and voice prompts		
9. If directed to deliver energy, announce CLEAR before pushing <b>SHOCK</b> button. NOTE: continue compressions while device is charging		
Resume CPR, beginning with chest compressions		
10. NOTE: The CPR Metronome automatically provides audible compression tones and ventilation prompts during CPR.		

#### Notes from Equipment Manual / Manufacturer's Recommendations

-  Follow manufacturer's recommendations for pad placement; see package for alternative pad placements.
-  Opening the door on the Lifepak will convert the unit to a manual defibrillator
-  Nursing is responsible for Lifepak daily checks; Biomedical Engineering is responsible for the recommended maintenance schedule.
-  For additional information, see Lifepak 20 Operating Instructions Manual.
-  Contact Biomedical Engineering #7520 for operational problems with the Lifepak 20

## Notes from Cardiac Arrest- Code Blue Policy

- 📖 A Code Blue is considered an aerosolizing procedure and an N95 needs to be worn regardless of COVID status.
- 📖 Apply passive oxygenation and drape to patient's face while awaiting respiratory therapy. If you feel you can get a good seal you can use Ambu bag.
- 📖 For COVID positive patients PPE must be donned and a limited number of staff should be in the room. Cover the patient's face with drape until respiratory therapy arrives.
- 📖 When a patient, visitor, or employee experiences a cardio/pulmonary arrest: Dial 3333 and identify the following; type of Code (Pediatric Code blue for ≤ 17 years old), building, location, floor, room number, your name, call back number, and wait for operator to repeat back.
- 📖 Unit staff will: initiate BLS, call Code Blue, get the crash cart, apply backboard, apply patient to AED, open crash cart, set up suction, establish IV line, and administer IV meds as directed. As of April 2020, we will **no longer be bringing crash carts into isolation rooms for code blues**. The defib, pads and back board will still need to be brought into the room. The defib is wiped down with Sani-cloth wipes (purple top) and backboard with bleach wipes (orange top).
- 📖 Primary RN will: Stay at bedside to give history, support Code team, and assist with transfer to CCU if needed.
- 📖 Other responders to Code Blue include: critical care intensivist, code coordinator (critical care nurse/CNC), respiratory therapists, administrative supervisor, chaplain, security if in public area.

## Notes from Rapid Response Team (RRT) Protocol

- 📖 Provides emergent and non-emergent response to situations of clinical decline for patients in the non-CCU and non-OB patient areas.
- 📖 The RRT should be called in the following situations:
  - **Acute** change in systolic BP to < 90mmHg
  - **Acute** change in respiratory rate to < 8 or > 30
  - **Acute** change in heart rate <40 or >130
  - **Acute** change in pulse oximetry saturation to < 88%
  - **Sudden** changes in LOC
  - S/S of **NEW** onset stroke
  - Temperature < 96.8 or >100.4
  - Concern about the patient's condition
  - Other urgent situations requiring assistance from clinicians with expertise in critical care/emergency response
- 📖 Dial 3333 and identify RRT, building, location, floor, room number, your name, call back number, and wait for operator to repeat back.
- 📖 Responders include: Critical Care Nurse and Critical Care Advanced Practice Nurse (during hours of 0700-1700), Critical Care Clinical Specialist (if needed), Clinical Nurse

Consultant, Respiratory therapist assigned to the unit, and Administrative supervisor (during off shift hours).

- 📖 The Critical Care Intensivist is immediately available to the RRT team via phone and is given an update in the beginning and end of the RRT.

## Restraint

See NCH Administrative Policy, *Restraint and/or Seclusion Use and Indications in the Acute Care Setting* for more details.

Restraint and seclusion use is limited to those situations where there is appropriate clinical justification, based on the assessed behavior needs of the patient, to protect the patient from harming himself/herself or others. Use the *least* restrictive device possible. Examples and strategies for least restrictive alternatives are listed in Appendix A of policy.

### Definitions:

Nonviolent/Non self-destructive Restraint: the use of restraints in medical and post-surgical care when it may be necessary to limit mobility or temporarily immobilize a patient. When restraints must be applied to directly support medical healing, regardless of irrational or uncooperative behavior.

Violent/Self-Destructive/Behavioral Restraint: the use of restraint for emergency behavior management, when a patient's severely aggressive or destructive behavior places the patient or others in immediate danger. The use of violent/self-destructive/behavioral restraint is to protect the patient against injury to self or others because of an emotional or behavioral disorder.

### Nonviolent/ Non self-destructive

- Restraints are only applied and removed by trained personnel.
- May be applied only under the order of a physician, LIP, or APP.
- If a qualified RN initiates the Nonviolent/Non self-destructive restraint, a physician's confirming order is obtained within **24 hours** of restraint application. Physician notification is **immediate** if restraint is being applied due to significant change in patient's condition.
- Orders are effective daily. They can be renewed daily, if clinically justified, by a physician, LIP, APP, or supervising nurse (eg. the charge RN or point person for the shift).
- Under no circumstances will a PRN order be accepted for restraints.
- If the restraints are discontinued and clinical justification for restraint reoccurs, a new order is required and is considered a new episode of restraint.
- Assessed by trained staff approx. every 2 hours or more frequently if patient's condition warrants.

## Violent/Self-destructive/Behavioral Restraint

- May be applied only under the order of a physician, LIP, or APP.
- If a qualified RN initiates Nonviolent/Non self-destructive restraint, a physician's confirming order is obtained **within one hour** of imposing restraint. Physician notification is **immediate** if restraint is being applied due to significant change in patient's condition.
- A physician, LIP, or APP sees the patient **in person** and evaluates need for restraint **within one hour** of restraint being initiated.
- Orders must be written with a time interval; maximum interval is **4 hours** for adults ages 18 and older and **2 hours** for adolescent age 9-17 years.
- Patients are continuously observed in person; assessed by trained staff every 15 minutes or more frequently if patient's condition warrants.

## Documentation

- Restraint use and assessments are documented on the Non-violent/Violent Restraint flowsheet in the medical records.
- Vital signs including RR, HR, B/P, and SpO2 will be monitored and documented per unit standard or as patient condition warrants for non-violent restraints, and every 4 hours or more frequently if patient condition warrants for violent restraints.

## Initial documentation

Intake/Output	IV Assessment	Daily Cares/Safety	Telemetry	CIWA-Ar Score	Non-Violent Restraints
<input type="text" value="Search (Alt+Comma)"/>					Accordion Expanded <b>View All</b>
<input type="text" value="Non-Violent Restraints"/>					1m 5m 10m
<input type="button" value="Hide All"/> <input type="button" value="Show All"/>					ED to Hosp-Admission (C
					<b>1101</b> 1152
<input checked="" type="checkbox"/> Assessment (ONCE...					<b>Assessment (ONCE at Restraint Start)</b>
<input checked="" type="checkbox"/> Education (Daily an...					Less Restrictive Alternative 1:1 patient car...
<input checked="" type="checkbox"/> *Restraint Monitori...					Family Notification Patient decline...
<input checked="" type="checkbox"/> Restraint Type (NV)					Clinical Justification Altered mental ...
<input checked="" type="checkbox"/> Vital Signs (Freque...					<b>Education (Daily and PRN)</b>
					Discontinuation Criteria Explained Safe self mana...
					Patient's Response Unable to com...
					<b>Restraint Type (NV)</b>
					Soft Limb R Wrist (NV) Start
					Soft Limb L Wrist (NV) Start
					Mitten R Hand (NV)
					Mitten L Hand (NV)

## 2 hour documentation

Vital Signs	Complex Assessment	Intake/Output	IV Assessment	Daily Cares/Safety	Telemetry	CIWA-Ar Score	Non-Violent Restraints
<input type="text" value="Search (Alt+Comma)"/>							Accordion Expanded <b>View All</b>
<b>Non-Violent Restraints</b>							1m 5m 10m 15m 30m 1h 2h 4
Hide All Show All							ED to Hosp-Admission (Current) from 8/2/2021 in NCH Neuro Uni 8/4/21
Assessment (ONCE... <input checked="" type="checkbox"/>							<b>1300</b>
Education (Daily an... <input checked="" type="checkbox"/>							<b>1336</b>
*Restraint Monitori... <input checked="" type="checkbox"/>							<b>1441</b>
Restraint Type (NV) <input checked="" type="checkbox"/>							
<b>Vital Signs (Freque... <input checked="" type="checkbox"/></b>							
<b>Assessment (ONCE at Restraint Start)</b>							
Less Restrictive Alternative							
Family Notification							
Clinical Justification							
<b>Education (Daily and PRN)</b>							
Discontinuation Criteria Explained							
Patient's Response							
<b>*Restraint Monitoring Every 2 Hours - Complete * rows every 2 Hours</b>							
*Behavior Agitated/restless							
*Circulation No signs of injury							
*Position Changed Yes							
*Continued Restraint Need Yes							
*Range of Motion Patient declined							
*Fluids Patient declined							
*Food/Meal Patient declined							
*Elimination Offered							
<b>Restraint Type (NV)</b>							
Soft Limb R Wrist (NV) Continued							
Soft Limb L Wrist (NV) Continued							
Mitten R Hand (NV)							
Mitten L Hand (NV)							

## Blood Administration

Procedure: Refer to **Blood/ Blood Components Administration Policy/Procedure**

### PUMP ADMINISTRATION OF BLOOD /BLOOD COMPONENTS USING THE ALARIS SMARTSITE BLOOD SET (IN-LINE 180 MICRON FILTER)

CRITICAL ELEMENTS	MET	NOT MET
1. Verify MD order/ consent signed/ patient identification		
2. Explain procedure to patient		
3. Gather equipment: Either – CareFusion GRAVITY Blood (filter in-line) tubing OR Alaris Control unit, pump module, CareFusion Smartsite®Blood set (filter in-line)		
4. Start peripheral IV (largest gauge possible) if necessary or ensure patency of existing site		
5. Obtain blood product from blood bank or via tube system and verify according to policy		
6. Priming Alaris Smartsite blood set: <ul style="list-style-type: none"> <li>a. Close roller clamp</li> <li>b. Hang 0.9% Normal Saline solution, using one side of the y-tubing</li> <li>c. Squeeze and release blood filter until filter is completely covered; prime remainder of tubing with saline solution</li> <li>d. Clamp NS side of tubing</li> <li>e. Hang blood unit using the remaining spike.</li> <li>f. Prime blood until a streak of blood reaches near the distal end of the tubing set</li> </ul>		
7. Load blood administration set into the Alaris IV pump		
8. Program infusion pump by selecting Guardrails IV Fluids, followed by applicable blood product		
9. Slowly initiate transfusion of blood product		
10. Increase infusion rate after 15 minutes if patient does not display s/s of reaction		

## Notes from NCH Blood/Blood Component Administration Procedure

- 📖 At a minimum, vital signs (T, HR, BP, RR) must be obtained prior to transfusion, 15 minutes after the transfusion is initiated, and at completion of transfusion.
- 📖 When receiving a unit of blood/blood component via the tube system, verify information on unit of blood/blood component against the ISSUE OF BLOOD COMPONENTS VIA TRANSLOGIC SYSTEM form, and against the labels on the unit. If no discrepancy, sign form and return to Blood Bank immediately.
- 📖 Before hanging a unit of blood/blood component, 2 RNs must simultaneously verify information on the unit, the patient's ID band, and the information scanned in Epic. (**DO NOT ADMINISTER** if there is ANY discrepancy.)
  - Verification includes: Patient's name, MR number, Patient blood type/Rh group, Donor blood type/Rh group, unit identification number, expiration date/time
  - RNs also verify: Correct set up of blood tubing, normal saline is priming solution, and infusion pump settings are accurate rate based upon physician order.
- 📖 Begin blood/blood component infusion slowly for first 15 minutes. Closely monitor patient for a possible transfusion reaction. After 15 minutes, increase the rate if there is no evidence of reaction.
- 📖 For acute reactions to blood/blood component transfusion, IMMEDIATELY stop the transfusion, keep vein open with normal saline using new administration set, notify MD and Blood Bank, and initiate Blood Transfusion Reaction Report if physician determines reaction is acute and orders Transfusion Reaction order set.
- 📖 Blood must be initiated within 30 minutes of leaving the Blood Bank. Primary nurse should start the transfusion as soon as possible after the product arrives. If the patient will receive the product ordered and it is spiked a few minutes after the 30 minute guide, then proceed with the transfusion.
- 📖 Two units of PRBCs can be infused through one blood administration set when those units are infused back to back within four hours from the time of first spike.
- 📖 Blood/blood components must not infuse longer than 4 hours from the time unit is spiked.
- 🔔 Care Fusion gravity blood administration sets available in house
- ☎️ Additional resources
  - NCH nursing policy, "Blood/Blood Component Administration", reviewed 4/16
  - NCH Laboratory User's Manual (section titled, "Blood Bank test Order Requirements")
  - Care Fusion website, "Infusing blood products FAQs". Found at [http://www.carefusion.com/pdf/Infusion/clinical\\_documentation/faq\\_tip\\_sheets/IV\\_2061-01-Infusing\\_blood\\_products\\_FAQs.pdf](http://www.carefusion.com/pdf/Infusion/clinical_documentation/faq_tip_sheets/IV_2061-01-Infusing_blood_products_FAQs.pdf)

## Blood & Blood Component Administration

Blood products should be administered at a rate sufficient to infuse the blood component volume over the time-frame ordered by the physician for NON-emergency/urgent situations.

1. The electronic order will indicate the duration of minutes or hours that the product should be administered over.
2. The primary nurse will adjust the infusion rate as the blood product and patient is observed to administer the total amount over the ordered duration.

**ADULT Blood Component Transfusion Rates in Non-emergency Settings.** For the first 15 mins: Infusion rate of all products should be NO faster than 75 ml/hr to evaluate patient's tolerance, then increase the rate if patient is stable to infuse **over the duration ordered by provider.** AABB Transfusion Technical Manual rate guidelines below:

Component	Infusion Rate/Duration	Special Considerations	ABO Compatibility
<b>PRBCs</b> (volume varies per unit) usually 300 - 350 ml total	1 <sup>st</sup> 15 mins- no faster than 75 ml/hr ; then over 2 HR if tolerated, with <u>4 HR MAX from Release time</u>	<i>All products @ NCH are Leukoreduced upon collection</i> For pts at risk for overload, slower rate of infusion preferable.	Crossmatch required must be ABO compatible
<b>Platelets</b> (volume varies per unit) usually 300 - 450 ml. per unit	1 <sup>st</sup> 15 mins – no faster than 75 ml/HR; then as rapid as tolerated, but no more than 1 hour duration.	Usually given ≤ 60 min MD may order pre-meds <i>All platelets @ NCH are apheresed from 1 donor &amp; leukoreduced</i>	ABO/Rh compatible preferred, but not required; Crossmatch not required. May be HLA-matched.
<b>FFP (plasma)</b> volume varies per unit	1 <sup>st</sup> 15 mins – no faster than 75 ml/HR; then, approx. 300 ml/HR	<b>Thaw time needed</b> before issue <i>Coordinate by phone with Blood Bank</i>	Crossmatch not required ABO compatibility with recipient red cells
<b>Cryoprecipitate AHF</b>	1 <sup>st</sup> 15 mins – no faster than 75 ml/HR; then, as rapid as tolerated, within 30 minutes.	Infuse as soon as possible after thawing... coordinate with BB	Crossmatch & ABO compatibility not required  2/2020

## Central Venous Catheter (CVC)

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### Notes from Central Venous Catheter (CVC) Policy/Procedure

- 📖 Assess the need for the CVC on a daily basis & remove (with physician order) when no longer needed.
- 📖 All patients with a CVC will receive a daily CHG bath and document.
- 📖 Use a 10ml or larger syringe to flush catheter lumen, never use force to flush, use a “push-pause” technique, leave at least 0.5 ml of NS in the syringe before disconnecting.
- 📖 Refer to CVC Summary chart for flushes regarding frequency & type of flush required for central venous catheters located in the *Blood Sampling for Central Venous Catheter* policy.
- 📖 **All** lumens are to be flushed whether used or not!
- 📖 If the CVC was emergently placed, dressing must be replaced within 24 hours.
- 📖 If gauze is present (even with a chlorhexidine dressing) replace the dressing every 48 hours.
- 📖 Change dressing and neutral lumen caps every 7 days and prn.
- 📖 Briskly cleanse the neutral lumen caps/extension set junction with alcohol for 15 seconds **before** removing caps allow to air dry.
- 📖 Obtain measurement of external catheter length on insertion, at every dressing change, and PRN.
  - ➡ *For PICC line only also:* include mid-upper arm circumference measurement
- 📖 Catheter lumens should have a neutral lumen cap securely attached.
- 📖 Place an alcohol swab cap on all unused infusion ports connected to a CVC, except where TPN or Lipids are infusing.
- 📖 Alcohol swab caps are 1 time use only! If removing alcohol swab cap for any reason you must replace with a NEW one.
- 📖 The patient must perform Valsalva maneuver if lumen end is ever open to the air.
- 📖 **Additional information** found in *Central Venous Catheter Flushing and Blood Sampling Summary Chart*; policy on *Blood Sampling for Central Venous Catheter*; policy on *Central Line Catheter Insertion and Removal for Adults*.

## Central Venous Catheter (CVC) Flushing & Blood Sampling Summary Chart

### Best practice with all CVCs:

- Use only 10 ml or larger syringes as much as possible for flushing (pressure prevention)
- Stop IV infusions (of EACH lumen) at least 2 mins prior to drawing samples
- Label all specimens at the patient's bedside
- **If TPN is infusing** – stop infusion, flush w/20 ml NS prior to - withdraw 5 ml discard, obtain blood samples, flush w/20 ml
- Leave 0.5 ml in syringe at disconnect
- **If any patient has Heparin Induced Thrombocytopenia (HIT) – DO NOT administer heparin to any catheter** (use only NS)

TYPE of CVC	FLUSHING (EACH LUMEN always)	BLOOD SAMPLING (method for all CVCs)
<b>Central Venous Catheter (only INPT – usually in CCU):</b> Multi-lumen catheter	2 ml NS Q 12 HR to maintain patency OR 10 ml NS <u>after each use</u> unless blood in line – then 20 ml NS	-Withdraw and discard 5 ml of blood waste -Withdraw blood for specimens -Flush w/20 ml NS after any blood in catheter -Resume infusion or saline lock
<b><u>PICC – Peripherally Inserted Central Catheter</u></b> (@ NCH – usually purple <b><u>POWER PICC SOLO</u></b> (saline only lock option - can maintain with NS only) <b><u>Closed End PICC (Groshong)</u></b> Slit Valve at end of catheter  <b><u>Open-Ended PICC</u></b> (Must use clamps on the catheter)	<b><u>ALWAYS USE: Push-Pause Technique</u></b>  Flush with 10 ml of NS once a week <b>OR AFTER EACH USE</b> (unless blood was in the catheter – then 20 ml NS)  <u>Maintenance: When NOT IN USE (or outpt):</u> 10 ml NS every 7 days to maintain patency or may use 3 ml Heparin Flush (10 u/ml) IF needed for outpatient (not harmful to catheter per manufacturer)	<b><u>ALWAYS USE: Pull-Pause Technique</u></b> <i>Leave 0.5 ml in syringe at disconnect</i> -MAY use vacutainers on PICC catheters ≥ 4 Fr -Withdraw and discard 5 ml of blood waste -Withdraw blood for specimens -Flush w/ <b>20</b> ml NS after any blood in catheter -Resume infusion or saline lock  <b><u>Using clamp before and after withdraw/flush</u></b> -withdraw and discard 5 ml of blood waste -withdraw specimens -Flush w/20 ml of NS after any blood in catheter -Resume infusion or saline lock
Flushing and Locking Volumes for <u>Implanted PORTS</u> with <b>OPEN-Ended</b> catheters (must use CLAMPS)		
Procedure	Flush & Volume	
When port <u>NOT</u> in use	10 ml of NS followed by 5 ml heparinized saline (100u/ml) <i>Every 4 weeks for maintenance</i>	
After each infusion of Medication	10 ml of NS flush <i>if locking</i> - followed by 5 ml heparinized saline (100u/ml)	
After any blood withdrawal/transfusion OR TPN	20 ml of NS flush <i>if locking</i> - followed by 5 ml heparinized saline (100u/ml)	
Flushing and Locking Volumes for <u>Implanted PORTS</u> with <b>CLOSED-Ended</b> catheters (Groshong)		

Procedure	Flush & Volume
When port <u>NOT</u> in use	10 ml of NS followed by 5 ml heparinized saline (100u/ml) <i>Every 4 weeks for maintenance</i>
After each infusion of Medication	10 ml of NS if locking – followed by 5 ml heparinized saline (100u/ml)
After any blood withdrawal/transfusion OR TPN	20 ml NS If locking – followed by 5 ml heparinized saline (100u/ml)
Flushing and Locking Volumes for <u>Tunneled</u> Open-ended External catheters – USE CLAMPS (Hickman, Broviac)	
Procedure	Flush & Volume
When Catheter <u>NOT</u> in use	10 ml of NS followed by 5 ml heparinized saline (100u/ml) <i>Every 4 weeks for maintenance</i>
After each infusion of Medication	10 ml of NS if locking - followed by 3 ml heparinized saline (10u/ml)
After any blood withdrawal/transfusion OR TPN	20 ml NS If locking – followed by 3 ml heparinized saline (10u/ml)

ad/Jan/2018



## CLABSI Prevention

- Hand Hygiene
- Remove unnecessary CVCs
- Perform hub/access cleaning (“scrub the hub”)
- Use swab caps
- Change dressing:
  - every 7 days per protocol or
  - dressing is or CHG patch is saturated with blood
  - if dressing is no longer occlusive or
  - if gauze present change in 48 hrs or
  - if the CVC was emergently placed change in 24 hrs or
  - dressing is from home/outpatient change in 24 hrs.
- Ensure line patency
- CHG (chlorhexidine) bathing
- Date dressing and tubing

**Dressing change due date will auto populate when you document the change OR “new dressing” when CVC is inserted.**

CVC Triple Lumen 12/11/21 Right Internal jugular	
CVC Properties	Placement Date/Time: 12/11/21
Site Assessment	Clean, Dry, Intact
Proximal Lumen Status	Blood return noted
Medial Lumen Status	Infusing
Distal Lumen Status	
Length mark (cm)	
Dressing Type	Occlusive
Dressing Status	Clean, Changed, Intact
Dressing Intervention	New Dressing
Dressing Change Due	12/18/21

## Blood Glucose Testing, Nova StatStrip

CRITICAL ELEMENTS	MET	NOT MET
<b>QUALITY CONTROL PROCEDURES</b>		
1. Turns monitor on by pressing 'Login' key or 'OK'. This turns on the welcome screen		
2. Screen then displays 'Enter Operator ID' number: Press 'Scan' key and scan personal bar code located on back of ID badge, then press 'Accept'. If your barcode does not scan, you may manually enter in your Operator ID.		
3. From the 'Welcome' screen, press 'QC' button.		
4. Screen then displays 'Enter Strip Lot', press 'Scan' key and scan bar code on strip bottle.		
5. Screen then displays 'Enter QC Lot', press 'Scan' key and scan bar code on QC vial bottle.		
6. Screen then displays 'Insert Strip', insert test strip into meter; the screen will then display 'Apply Sample'. Place meter on <b>flat</b> surface; do not pick up the meter.		
7. Gently mix control vial and discard the first drop of QC solution into a tissue.		
8. <b>DO NOT PICK UP METER WITH TEST STRIP INSERTED- KEEP ON FLAT SURFACE.</b>		
9. Place a drop of control solution to the end of the test strip. When enough solution has been applied, meter will begin countdown and screen will display 'Testing Sample'. Results will display in 6 seconds with either PASS (blue) or FAIL (red)  .  ➤  If QC test fails a comment must be selected documenting corrective action. Failed QC samples must be repeated		
10. Remove test strip and accept result by pressing 'Accept' or 'OK' key.		
11. Proceed with the next QC test following steps 3-10.		
12. If going on to test a patient, press menu, select 'Patient Test' and proceed.		

<b>PATIENT TESTING</b>	MET	NOT MET
1. Ask patient to state their name & date of birth while checking the patient's ID band for verification. Explain procedure to the patient		
2. Put gloves on, clean site on patient's finger with alcohol pad and allow to air dry		
4. Turn on monitor by pressing 'Login' key or 'OK'		
5. Screen then displays 'Enter Operator ID' number: Press 'Scan' key and scan personal bar code located on back of ID badge, then press 'Accept'. If your barcode does not scan, you may manually enter in your Operator ID		
6. Screen will display 'Patient Test', press 'Accept'.		
7. Screen then displays 'Enter Strip Lot', press 'Scan' key and scan bar code on strip bottle.		
8. Screen then displays 'Enter Patient ID', press 'Scan' then scan patient bar code/ID number located on <b><u>the Patient's ID wristband</u></b> , then press 'Accept'.		
9. Screen then displays 'Insert Strip', insert test strip into meter; the screen will then display 'Apply Sample'.		
11. Prepare lancing device, lance finger, obtain a drop of blood from the patient's finger. Hold meter in a downward position above the puncture site, touch end of the test strip to the drop of blood.		
12. The test strip is full when the countdown begins. Results will appear in 6 seconds.		
13. Place the meter on a flat surface while waiting for results: DO NOT pick up the meter. Apply pressure to puncture site to stop bleeding.		
14. Dispose of lancing device in appropriate container.		
15. Once patient's result appears on the screen; you <b><u>MUST</u></b> do one of the following: <ul style="list-style-type: none"> <li data-bbox="423 1398 1260 1472">➤ <b>WARNING:</b> You must select a test type comment in order for the results to transmit to the EMR properly!</li> <li data-bbox="423 1482 1190 1556">➤ Select the appropriate test type comment and any other comments as needed.</li> <li data-bbox="423 1566 862 1598">➤ Press 'Accept' soft key or 'OK'</li> </ul>		
16. Remove gloves & wash hands		
17. Blood glucose reading will be documented into EMR only when the glucose meter has been placed back into the docking station.		

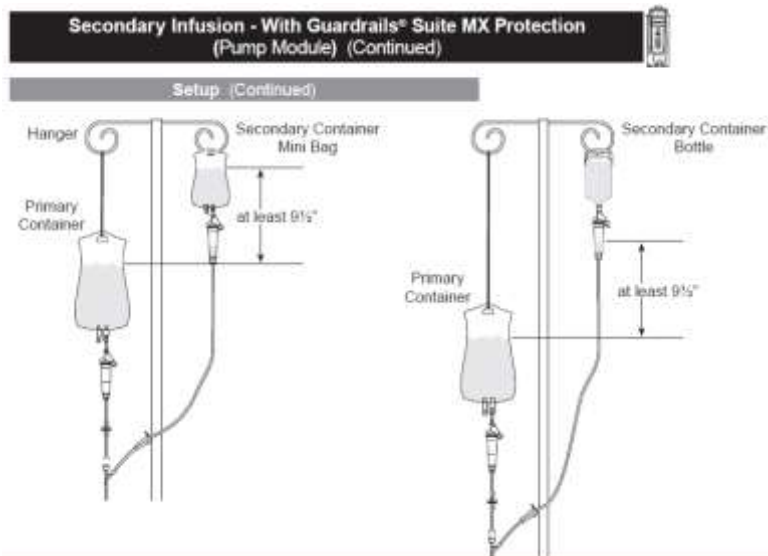
## Notes from NCH Blood Glucose Monitoring Procedure and Protocol

- 📖 Test strips are good for 180 days from date opened. Make sure to mark vial *with open and discard dates*. Check manufacturer's expiration date also.
- 📖 Control solution vials are good for 90days from date opened. Make sure to mark vial with *discard date*. Check manufacturer's expiration date also.
- 📖 When applying blood sample to test strip, make sure that you keep the meter pointed downward. **NEVER** stand the meter straight up when applying the blood to the test strip.
- 📖 Do not touch test strip to the blood drop a second time (discard the test strip and repeat the test with a new test strip).
- 📖 You may remove the test strip once result is obtained, the meter will continue to display the patient's result, after strip is removed you can safely pick up the meter.
- 📖 To add a comment to the result, press the 'Comment' key. Once you have entered a comment press 'Accept' to complete the test.
- 📖 Make sure to follow the prompts on the blue dialogue box at the top of meter for next actions to be taken.
- 📖 Hold meter 4-6" away from bar codes when scanning.
- 📖 A blood glucose can be done on a patient who has not yet been registered; use the unregistered patient bar code located inside the tote.
- 📖 Upon completion of blood glucose testing you must return meter to the docking station in order for test results to be documented in EMR.
- 📖 Normal fasting blood glucose range for non-diabetic patient is 70 – 99mg/dL
- 📖 Refer to Hypoglycemia in the Non-Pregnant Adult Protocol if patient glucose results are <70mg/dL.
- 📖 Patient's glucose testing results can be recalled by selecting 'Review' on the bottom of the screen. You may look up patient results using any of the following: Patient ID, Time/Date or Type.
- 📖 Meters must be returned to docking station within 2 hours or the meter will lock out.
- 📖 Disinfect outside of meter after each patient use and clean meter with two bleach wipes; the first is used to clean; the second used to disinfect.
- 📖 The lock out time for daily QC testing is determined by the unit.
- 📖 QC checks are performed every 24<sup>o</sup> using both high and low controls
- 📖 The meter will display **Glu LOCKED** – no patient testing can be performed until QC testing is done using both high & low solutions.
- 📖 Those units not using their meter daily, such as ED & Ambulatory Infusion Clinic (AIC), will do the high & low QC testing on days the meter is used.
- ☎ For troubleshooting, please consult with your unit's point of care resource person.
- ☎ For further troubleshooting you may call the Point of Care Department at ext. 6162.

## Infusion Pump (Alaris)

CRITICAL ELEMENTS	MET	NOT MET				
<p><b>Prepare Administration Set:</b></p> <ol style="list-style-type: none"> <li>1. Verify physician order/patient identification.</li> <li>2. Explain procedure to patient.</li> <li>3. Gather equipment: Control Unit, Pump Module, administration set</li> <li>4. Close roller clamp on administration set.</li> <li>5. Spike and hang fluid container.</li> <li>6. Fill the drip chamber <b>2/3 full</b>.</li> <li>7. Open roller clamp and slowly prime tubing; <b>invert y-ports</b> to purge air.</li> <li>8. Close roller clamp.</li> </ol>						
<p><b>Load set into the Alaris Pump module:</b></p> <ol style="list-style-type: none"> <li>1. Attach Pump Module to Control Unit, aligning connectors at <b>45° angle</b>.</li> </ol> <p><i>NOTE: The Alaris System® is designed to operate a maximum of four modules.</i></p> <ol style="list-style-type: none"> <li>2. Remove blue sheath from the pumping segment of tubing.</li> <li>3. Load administration set in the Pump Module, placing upper fitment and safety clamp into designated recesses.</li> <li>4. Using finger tip, firmly push tubing toward back of air detector.</li> <li>5. Gently close door and lower latch (use two hands); open roller clamp.</li> <li>6. Describe how to prevent free flow when the set is removed from module.</li> </ol>						
<p><b>Set-up Primary Infusion with Guardrails® Protection:</b></p> <ol style="list-style-type: none"> <li>1. Power on system.</li> <li>2. Choose <b>Yes</b> or <b>No to New Patient?</b></li> <li>3. Confirm current profile or select new profile.</li> <li>4. <b>Enter unit name when prompted for patient ID.</b></li> <li>5. Select Guardrails IV Fluids or Guardrails Drugs.</li> <li>6. Press soft key next to desired solution or drug.</li> <li>7. Acknowledge any clinical advisories by selecting <b>CONFIRM</b>.</li> <li>8. Enter rate and VTBI, using corresponding soft keys.</li> <li>9. Describe limitations of Basic Infusion mode.</li> </ol> <p><i>IMPORTANT: For Maintenance IV Fluids&gt;Maintenance IVF. Basic Infusion mode is ONLY used for solutions or medications not listed in the clinical profile. A G icon exists in the Basic infusion mode.</i></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">Hypoglycemia</td> </tr> <tr> <td style="text-align: center;">Alert &amp; responsive</td> </tr> <tr> <td style="text-align: center;">Asymptomatic</td> </tr> <tr> <td style="text-align: center;">  4oz juice         </td> </tr> </table> <ol style="list-style-type: none"> <li>10. If <b>soft limit</b> is met, verify rate/dose before proceeding.</li> <li>11. If <b>hard limit</b> is met, rate/dose must be verified with pharmacy.</li> <li>12. Describe the purpose of the G icon when displayed on Main Screen.</li> </ol>	Hypoglycemia	Alert & responsive	Asymptomatic	4oz juice		
Hypoglycemia						
Alert & responsive						
Asymptomatic						
4oz juice						

### Set-up Secondary Infusion with Guardrails® Protection:



1. Prime secondary administration set with secondary fluid; close clamp.
2. Attach secondary administration set to upper injection site on primary set.
3. Using hanger provided with secondary administration set, lower primary fluid container.
4. Press **CHANNEL SELECT** key.
5. Press **SECONDARY** soft key.
6. Press soft keys to select desired drug and complete programming per hospital policy.
7. Describe nursing interventions if a soft or hard limit is met.
8. **OPEN** clamp on secondary set.
9. Verify correct parameters and press **START** soft key.
10. Manually Stop Secondary and Return to Primary: press **CHANNEL SELECT**, press **SETUP**, press **PRIMARY**.

### Clear Volume:

1. Select **VOLUME INFUSED** on main screen.
2. Press **CLEAR ALL** or select **PRI/SEC VOLUME** to clear an individual channel.

### Adjust Audio Volume:

1. Select **AUDIO ADJUST** soft key on main screen.
2. Verify alarm volume is set at highest limit.

### Lock/Unlock Tamper Resist:

1. To Lock/Unlock: Press and hold Tamper Resist Switch on back of PC Unit for 3-4 seconds.

## FALL PREVENTION

NCH uses the Johns Hopkins Fall Risk Assessment Tool (JH FRAT). NCH has bed exit alarms, chair alarms, and self-releasing chair alarm belts (not a restraint) for patients who can demonstrate how to release the belt.

JH Fall Risk Quick Assessment Tool		
Complete Paralysis or Completely Immobilized		
History of more than one fall in last 6 months		
Fall experienced during this hospitalization?		
Patient is High Fall Risk per Protocol		
Implement LOW Fall Risk Intervention Plan		
Implement HIGH Fall Risk Interventions		
HOPKINS Fall Risk Scoring - Complete this section if ALL Quick Assessment Criteria are NO.		
AGE		
Fall History - Fall within 6 Mo Prior to Admit		
Elimination - Bowel and Bladder		
Medications - High Fall Risk Medication		
Equipment - Patient Care Equipment		
Mobility - Assistance or Supervision with Mobility, Transfer or Ambulation		
Mobility - Unsteady Gait		
Mobility - Visual or Auditory Impairment		
Cognition - Altered awareness of immediate physical environment		
Cognition - Impulsive		
Cognition - Lack of Understanding of One's Physical and Cognitive Limitation		
Hopkins Total Fall Risk Score Points		
Risk Level		

Interventions for low, moderate, or high fall risk are listed in the Decision Tool in the Fall & Injury Prevention Policy. Sock colors correspond with interventions in the Decision Tool.

Patient socks will be available in a 'stop light' system to quickly identify low risk (green), moderate risk (yellow), high or recent fall risk (red).



Sizes will include child/adult small, large, & extra large.

Child/adult small will only be stocked on Pediatrics but can be ordered by other units if needed.

## Fall Risk Prevention Strategies: Decision Tool

Low Risk (Johns Hopkins score <6)	Moderate Risk (Johns Hopkins score 6-13)	High Risk (Johns Hopkins score >13)
<ul style="list-style-type: none"> <li>• Call light, over bed table, water, phone in reach.</li> <li>• Keep path to bathroom clear.</li> <li>• Document in room when possible.</li> <li>• Purposeful hourly rounding*</li> </ul>	<ul style="list-style-type: none"> <li>• Call light, over bed table, water, phone in reach.</li> <li>• Keep path to bathroom clear.</li> <li>• Document in room when possible.</li> <li>• Purposeful hourly rounding*</li> </ul>	<ul style="list-style-type: none"> <li>• Call light, over bed table, water, phone in reach.</li> <li>• Keep path to bathroom clear.</li> <li>• Document in room when possible.</li> <li>• Purposeful hourly rounding*</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Green Socks</b></li> </ul>	<ul style="list-style-type: none"> <li>• Door open</li> <li>• Bathroom door open, do not leave alone if cognitive score on the Johns Hopkins tool is greater than 0.</li> <li>• Gait belt for ambulation/out of bed</li> <li>• Safe Patient Handling consider lift equipment</li> <li>• Bed exit alarm, zone 2, i-Bed activated</li> <li>• Chair alarm</li> <li>• Engage family (stay in room)</li> <li>• Band, star</li> <li>• Consider self-releasing chair alarm belt if patient able to demonstrate self-release</li> </ul>	<ul style="list-style-type: none"> <li>• Door open</li> <li>• Bathroom door open, do not leave alone if cognitive score on the Johns Hopkins tool is greater than 0.</li> <li>• Gait belt for ambulation/out of bed</li> <li>• Safe Patient Handling consider lift equipment</li> <li>• Bed exit alarm, zone 2, i-Bed activated</li> <li>• Chair alarm</li> <li>• Engage family (stay in room)</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Yellow socks</b></li> </ul>	<ul style="list-style-type: none"> <li>• Band, star</li> <li>• Room close to nurses' station as available</li> <li>• Self-releasing chair alarm belt if patient able to demonstrate self-release</li> <li>• Consider sitter</li> </ul>
		<ul style="list-style-type: none"> <li>• <b>Red Socks</b></li> </ul>

\*5Ps

- Potty
- Positioning
- Pathway clear
- Possessions with reach
- Pain controlled

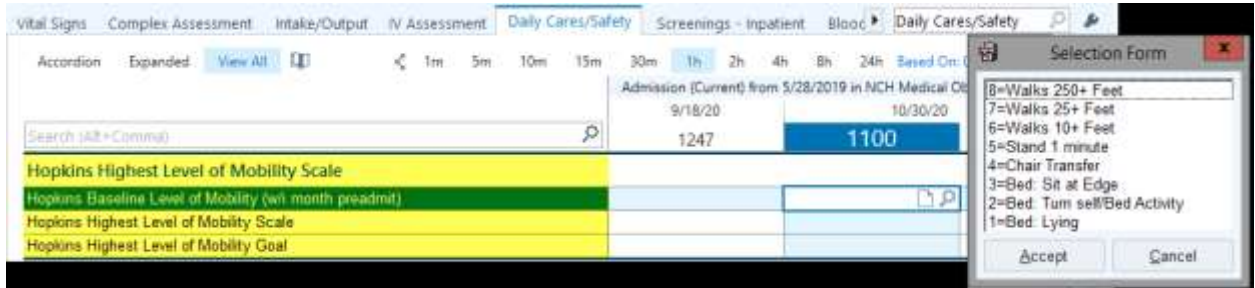
You will see the EPIC banner change color for HIGH risk scores only.

Created March 2021; updated November 2021

See the Fall and Injury Prevention Policy for the attachment: Workflow and Prevention Strategies. <https://nch.policystat.com/policy/10057284/latest/>

Johns Hopkins Highest Level of Mobility (JH HLM) tool is used to document the patient's baseline level of mobility and to set daily mobility goals.

JH HLM aligns with the AMPAC tool used by Physical Medicine Rehab. Maintaining mobility to prevent a functional decline may prevent falls and decrease length of stay and Skilled Nursing Facility discharges.



**Johns Hopkins  
Activity and Mobility Promotion (AMP)**

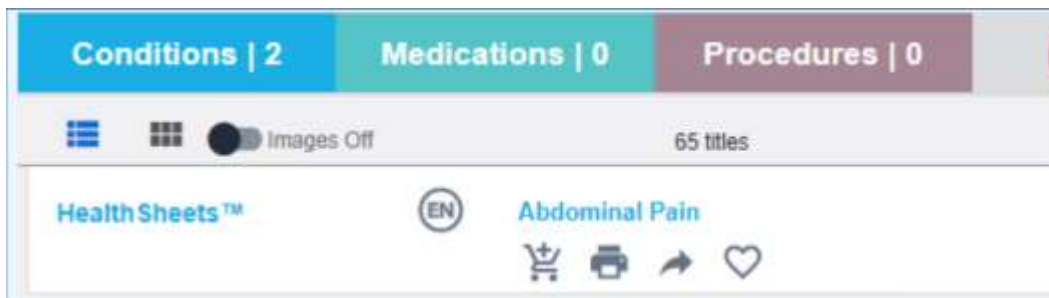
DAILY MOBILITY SCORE (JOHNS HOPKINS HIGHEST LEVEL OF MOBILITY)		
24	8	WALK 250 FEET OR MORE
22-23	7	WALK 25 FEET OR MORE
18-21	6	WALK 10 STEPS OR MORE
16-17	5	STANDING (1 OR MORE MINUTES)
10-15	4	MOVE TO CHAIR/COMMODE
8-9	3	SIT AT EDGE OF BED
6-7	2	BED ACTIVITIES / DEPENDENT TRANSFER
	1	LYING IN BED

AM-PAC MOBILITY SCORE

## Patient Education

Krames patient education is integrated with Epic. All topics are in English and Spanish, and some topics are available in several other languages.

From the discharge navigator, Krames will suggest topics relevant to conditions, medications, procedures, or impressions. CAUTION: do not select too many Krames topics as this can be overwhelming and result in a very lengthy AVS. Be sure to focus on the most important topics.



Selected Krames education topics will print after the AVS prints. There are healthsheets and videos available. Videos can be viewed by patients by using the QR code.

For more information, access the Quick Guide below from NCH Intranet>Education>Patient Education.

<https://intranet.nch.org/PortalComplete/data/componentfiles/4694/Krames%20Quick%20Guide.pdf>

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**1.3. Section 3:**

**Nurse Driven Protocols**

VTE prophylaxis

Immunization

C-difficile

Urinary Catheter Removal

MEWS

Oral Nutrition Supplement

Advanced Directives & DNR

Spiritual Care

Skin/Wound

## Nurse Driven Protocols at NCH

- Evidence-based; approved by appropriate teams/committees
- Provide timely treatment and care
- Increase patient safety; support infection prevention initiatives
- **No need for separate/additional provider order(s)**
- **Place orders “Per protocol, no cosign required”**

## VTE Risk Screening (upon Admission)

The screenshot displays the 'VTE Risk - VTE Risk Screen' form. The left sidebar contains a navigation menu with 'VTE Risk' highlighted. The main form area shows the following details:


- Time taken: 0849, 3/18/2020
- Values By: Create Note
- VTE Risk Screen: VTE Screening: 3/16 1308 - 3/18 0849
- VTE Risk Factor = 1:  A=Patient on general unit,  B=Age 4- 60 y.o. undergoing surgery,  C=Pregnancy or postpartum < 1 month,  D=Varicose veins,  E=Obesity (20% :BW),  F=Oral contraceptive or hormone repl.,  G=Clotting disorder,  None
- VTE Risk Factor = 2:  A=Major surgery or Laparoscopic surgery > 45 min,  B=On bedrest > 72 hours,  C=ICU patient,  D=Immobilized cast or splint,  E=Indwelling central venous catheter,  F=Age > 60 y.o undergoing surgery,  G=COPD, CHF, Pneumonia, or Respiratory Failure,  H=History of malignancy (past or present),  None
- VTE Risk Factor = 3:  A=Patient with MI but not on full dose anticoagulants,  B=History of VTE or PE,  C=Major surgery with AMI, CHF, or severe sepsis,  None
- VTE Risk Factor = 5:  A=Paralysis: CVA or ASCI,  B=Multiple trauma,  None
- VTE Risk Score: 1

- Screen patients for VTE risk factors on admission
- If no exclusion criteria
  - Score of 1: TED hose\*
  - Score of  $\geq 2$ : SCDs
- If exclusion criteria present
  - Request pharmacologic prophylaxis

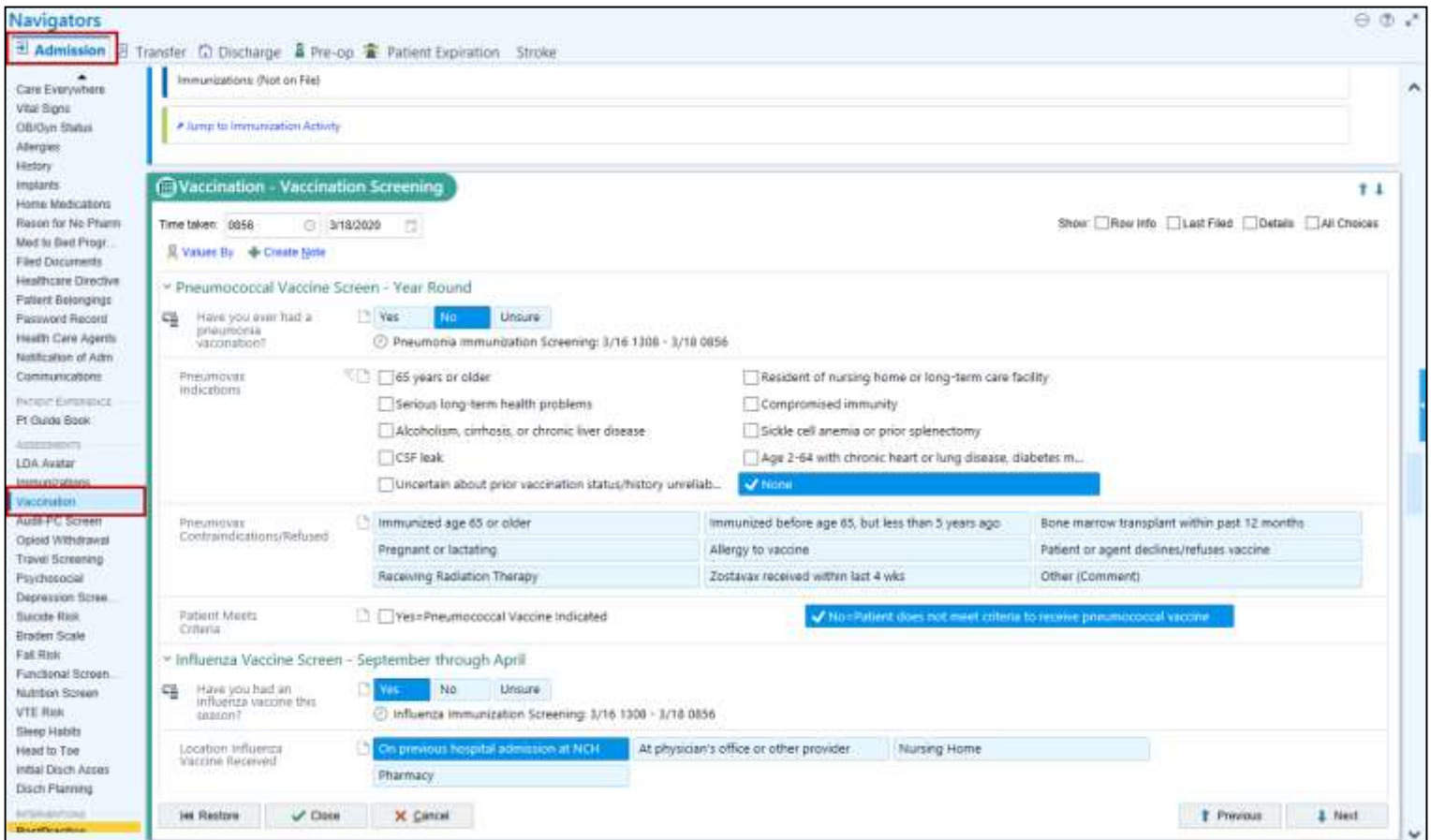
\*Stroke patients require SCDs and/or Rx prophylaxis

\*See Mechanical Venous Thromboembolism (VTE) Prophylaxis Protocol for exclusion criteria

## Immunization Nursing Assessment

Assess and document indications and contraindications for Pneumococcal Vaccine year-round, for Influenza Vaccine September through April. Open all choices within each section 

If patient meets indication criteria and has no contraindications, order and administer vaccine(s).



**Navigation:** Admission, Transfer, Discharge, Pre-op, Patient Expiration, Stroke

**Immunizations (Not on File)**

[Jump to Immunization Activity](#)

### Vaccination - Vaccination Screening

Time taken: 0858 | 3/18/2025

Show:  Raw Info  Last Filed  Details  All Choices

[Vaccine By](#) [Create Note](#)

#### Pneumococcal Vaccine Screen - Year Round

Have you ever had a pneumonia vaccination?  Yes  No  Unsure

Pneumonia immunization Screening: 3/16 1308 - 3/18 0856

**Pneumovax Indications**

<input type="checkbox"/> 65 years or older	<input type="checkbox"/> Resident of nursing home or long-term care facility
<input type="checkbox"/> Serious long-term health problems	<input type="checkbox"/> Compromised immunity
<input type="checkbox"/> Alcoholism, cirrhosis, or chronic liver disease	<input type="checkbox"/> Sickle cell anemia or prior splenectomy
<input type="checkbox"/> CSF leak	<input type="checkbox"/> Age 2-64 with chronic heart or lung disease, diabetes m...
<input type="checkbox"/> Uncertain about prior vaccination status/history unreliab...	<input checked="" type="checkbox"/> None

**Pneumovax Contraindications/Refused**

<input type="checkbox"/> Immunized age 65 or older	<input type="checkbox"/> Immunized before age 65, but less than 5 years ago	<input type="checkbox"/> Bone marrow transplant within past 12 months
<input type="checkbox"/> Pregnant or lactating	<input type="checkbox"/> Allergy to vaccine	<input type="checkbox"/> Patient or agent declines/refuses vaccine
<input type="checkbox"/> Receiving Radiation Therapy	<input type="checkbox"/> Zostavax received within last 4 wks	<input type="checkbox"/> Other (Comment)

**Patient Meets Criteria**

Yes=Pneumococcal Vaccine Indicated  No=Patient does not meet criteria to receive pneumococcal vaccine

#### Influenza Vaccine Screen - September through April

Have you had an influenza vaccine this season?  Yes  No  Unsure

Influenza immunization Screening: 3/16 1308 - 3/18 0856

**Location Influenza vaccine received**

<input checked="" type="checkbox"/> On previous hospital admission at NCH	<input type="checkbox"/> At physician's office or other provider	<input type="checkbox"/> Nursing Home
<input type="checkbox"/> Pharmacy		

[Restore](#) [Done](#) [Cancel](#) [Previous](#) [Next](#)

Refer to **Pneumococcal and Influenza Vaccine Nurse Driven Protocol** in Policy Stat for more information.

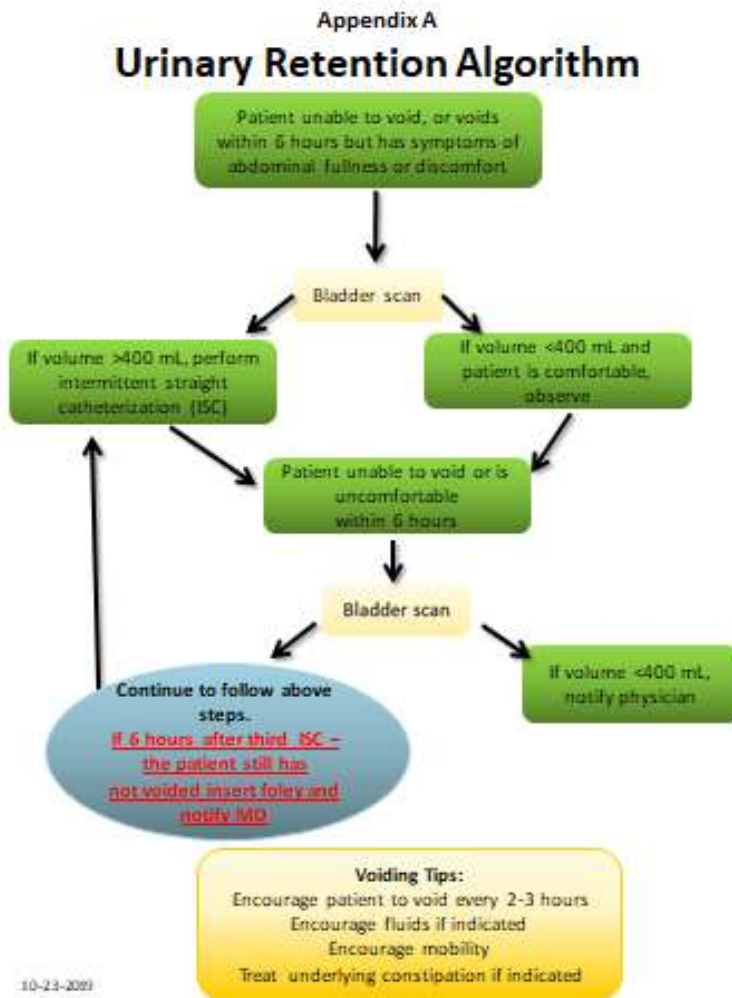
## Urinary Catheter Removal

### Indications for Use of Indwelling Urinary Catheter

- Accurate I/O for **critically ill** patient
- Incontinence with open perineal wounds
- Retention not managed with intermittent cath
- End-of-life comfort
- Retention or obstruction
- Ordered by Uro, Gyne, or Urogynecologist
- Immobilized for trauma or surgery
- Chronic catheter on admission (clarify reason)
- Perioperative use for selected procedures

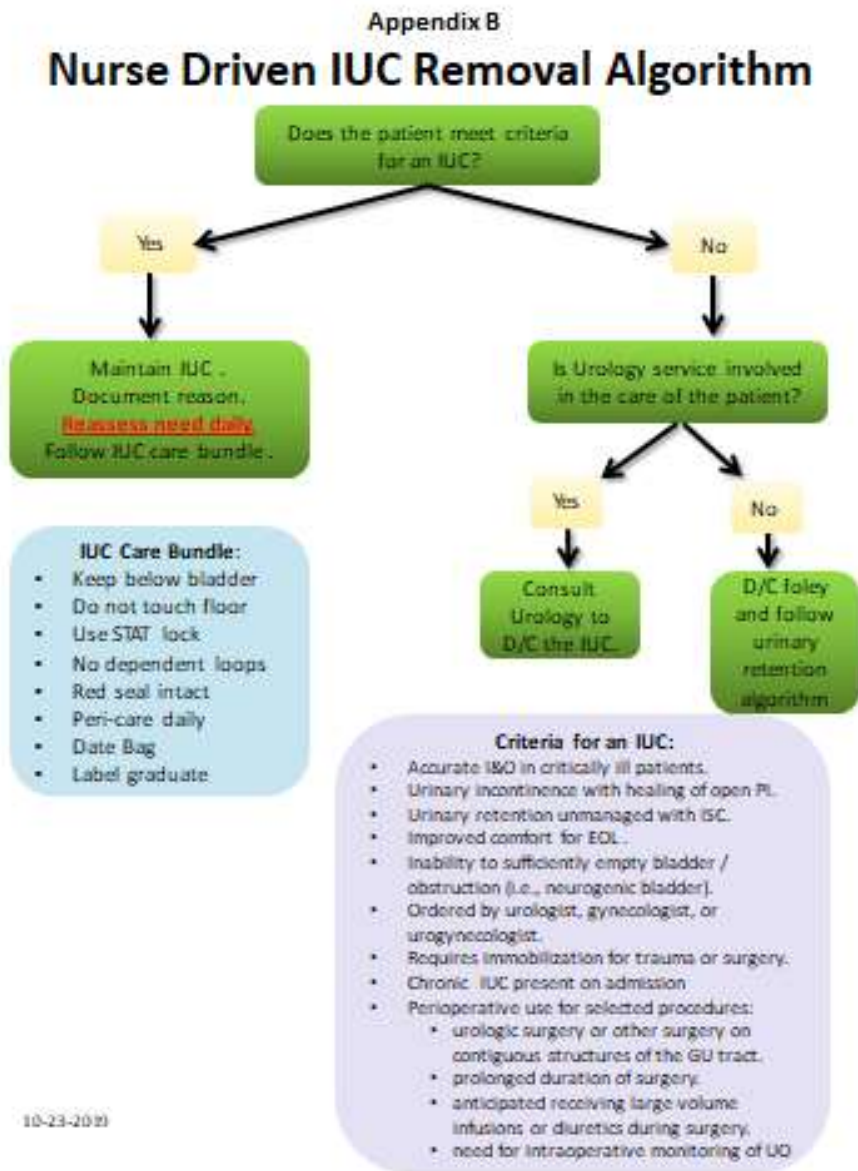
**Use meatal wipes daily and after every stool to prevent CAUTI.**

**Patients with urinary retention should be straight cathed 3 times before a foley is inserted. See algorithm.**



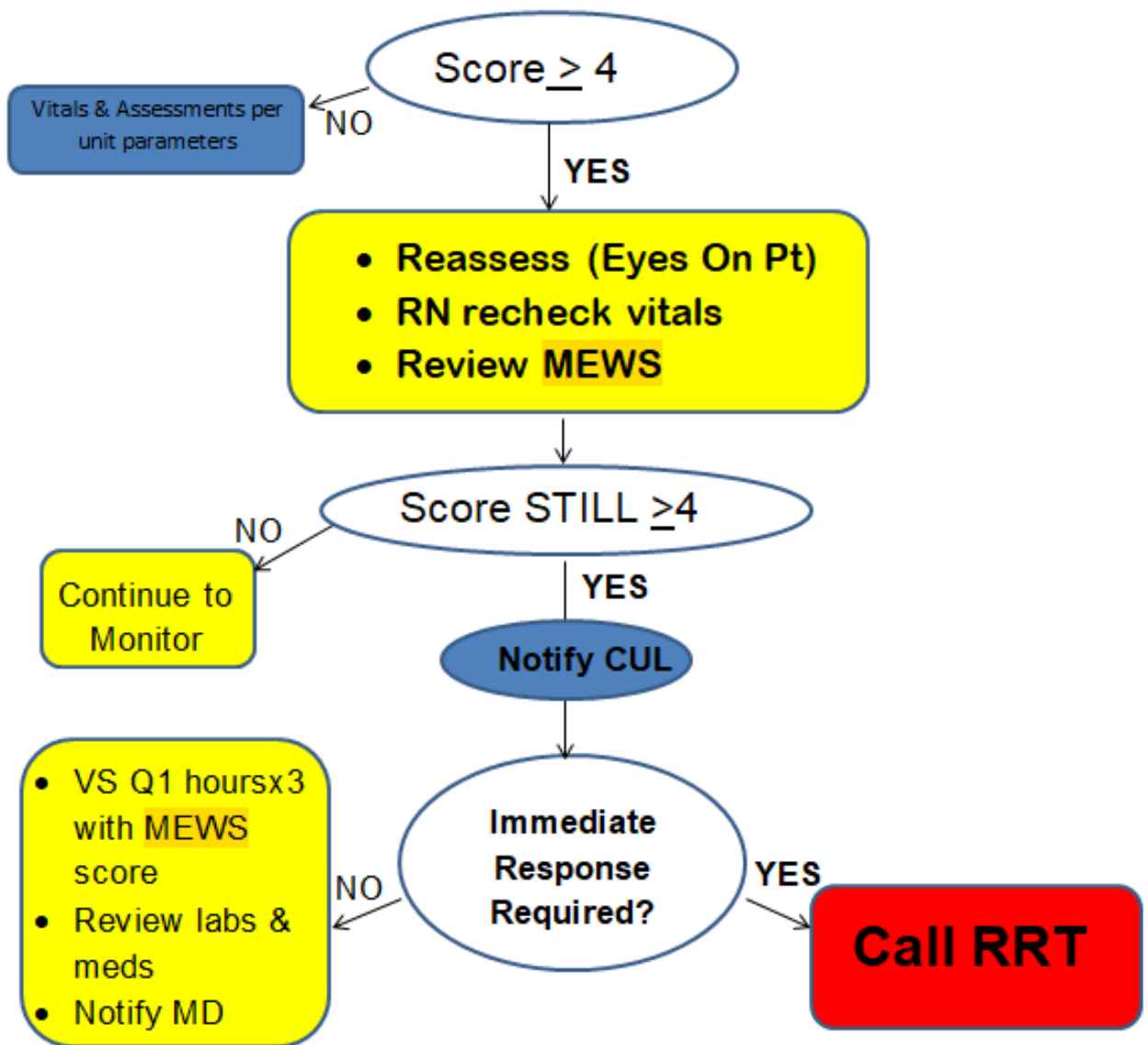
**Catheter should be removed as soon as indications not present!**

- *Transferring unit* will remove if criteria to remain not met
- No separate removal order needed
- Document removal
- Follow bladder scan/straight catheterization algorithm after catheter removal



# MEWS

Modified Early Warning Score



**Consider Possible Sepsis if.....**

1. **New decrease in mental status**
  2. **Systolic Blood Pressure dropping below 90**
  3. **Increased respirations greater than 22**
- ➔ **Notify MD**

2/24/16  
JAK

# Flowsheets

File Add Rows LDAAvatar Add Col Insert Col Data Validate Hide Device Data Last Filed Reg Doc Graph Gg to Date Responsible Refresh More

Screenings - Inpatient Discharge Checklist Lactation QBL/EBL Blood Loss Edinburgh Postnatal D... Blood Admin Predictive Analytics Vital Signs

Vital Signs

Search (Alt+Comma)

Hide All Show All

- VITAL SIGNS
- MEWS
- Total MEWS**
- Oxygen Therapy/Pulse ...
- PAIN
- HEIGHT/WEIGHT
- OBSERVATIONS

Accordion Expanded View All

1m 5m 10m 15m 30m 1h 2h 4h 8h 24h Based On: 0700 Reset Now

Admission (Current) from 5/28/2019 in NCH Medical Observatio...

	1143	7/6/21 1242	1248	Last Filed
BP before activity (Read Only)				120/80 (calcul...)
BP during activity (Read Only)				140/88 (calcul...)
Respirations during activity (Read Only)				22 (calculated...)
SPO2 during activity (Read Only)				97 (calculated...)
<b>Respiratory Assessment Score</b>				
Respiratory Assessment Score				0 (calculated)
<b>Total MEWS</b>				
MEWS Score				1 (calculated)
MEWS Action Taken				
Oxygen Therapy/Pulse Ox				

07/06/21 1242

### MEWS Action Taken

Select Multiple Options: (F5)

- Notified MD
- Notified CUL
- Reassessed no interventions needed
- RRT called
- Full VSs Q 1 hr x 3
- Nursing interventions/medications
- No interventions d/t chronic illness
- Hospice/comfort
- Other (see comment)

Comment (F6)

Want to see the future? —

**Add** column and allow documentation directly from the patient list using flowsheet pop-up.  
**Click** on the column to pull the pop-up window.

☆ 9S Medical 26 Patients Refreshed 2 minutes ago Search 4 Day IP D

Patient Location	Unit	Room/Bed	Problem	MEWS Score	MEWS Action Taken
S913-01	NCH MEDICAL	S913/S913-01	COVID-19	<span style="color: red;">●</span>	Notify MD, Notify CUL

Time taken: 8/25/2021 1635 + Add Group + Add Row + Add LDA Responsible Create Note ☑ Sh

**Total MEWS**

MEWS Score  
4 ! taken today

MEWS Action Taken  
Notify MD; Notify CUL taken today

Notify MD  Notify CUL  Reassessed no interventions ne...  RRT called  Full VSs Q 1 hr x 3

Nursing interventions/medications  No interventions d/t chronic illness  Hospice/comfort  Other (see comment)

## Clostridium Difficile (C.diff) Early Detection

### Indications:

- 18 years or older
- those with acute diarrhea and no obvious alternative explanation such as laxative use.
- those with three (3) or more unexplained liquid or loose stools within 24 hours.
- Only liquid or loose stools which conform to the shape of the collection container will be tested.
- NCH has a two-step C. Diff test to help identify patients who are colonized with C.diff from those with toxigenic C.diff infection (PCR and EIA).
  - ❖ PCR positive and EIA negative = colonization & C.diff isolation
  - ❖ PCR positive and EIA positive = infection & C.diff isolation
  - ❖ PCR negative = No C.diff, no isolation

### Oral Nutrition Supplement (ONS) Protocol

- RN completes Adult Malnutrition Screening Tool (MST)
- If score is  $\geq 2$  with appropriate diet, icon in census list will appear and RN will order ONS BID, based on diet reference
- No need to order nutrition consult unless diet is not referenced
- NPO and renal patients excluded from protocol

## Advanced Directives and DNR

An Advance Directive is a document in which the patient either states choices for medical treatments or designates who should make choices for them, in the event of a loss of decisional capacity.

### Types of Documents

- Living Will – A document which stipulates what kind of life sustaining treatment a person desires, if terminally ill and unable to make medical decisions.
- Durable Power of Attorney for Health Care (D.P.O.A.) – A document which names an agent to make health care decisions for an individual when they are unable to make decisions for themselves. May include instructions about specific treatment choices.

### Assessing Advance Directives

The existence of Advance Directives will be assessed at each admission by the nurse completing the admission process. Any related information will also be recorded. A copy of the document(s) should be placed in the medical record and then placed in the pickup

bin for scanning into the EMR. Once scanned, there will no longer be a paper document in the paper chart. If the patient has not provided a copy, this also should be recorded in the EMR and a reasonable attempt to obtain the document should be made.

### **Patients Requesting Information/Assistance in Completing Advance Directive**

- Place an order in EMR for a Spiritual Care consult; an alert notification will go directly to Spiritual Care Services (SCS)
- Spiritual Care Services representative will visit the patient, provide AD information, counsel the patient/family, and assist them in completing the form (POA)
- EMR profile will be updated by SCS

### **Witnesses to Advance Directives**

Direct care providers such as the patient's physician should NOT act as witnesses to the signature of the patient on a POA. Hospital staff other than the physician may serve as witnesses, such as nurses, therapists, chaplains, unit secretaries, and admitting representatives.

*\* The IL POA form states who can NOT act as a witness of the POA's signature: patient's Physician, or Mental Health provider or any relative of either of those, or the owner of the facility where they reside.*

### **DO NOT RESUSCITATE (DNR) ORDER**

Cardiopulmonary resuscitation is a medical intervention indicated for some patients, but ineffective or not beneficial for others. In the latter case, a DNR order may be appropriate and desired.

The DNR order for the "CODE STATUS" may (should) be entered for any patient that does **not** want to be resuscitated. This electronic order for CODE STATUS is entered and displayed on the individual patient's banner of their EMR during that inpatient hospital stay.

A DNR order DOES NOT indicate that other treatment(s) will be withheld or withdrawn from the patient. Measures to promote a patient's comfort and dignity will be provided for all patients at all times. A completed POLST form is **NOT** required for a DNR to be entered on an inpatient. A POLST form is a voluntary medical order form by a patient and not required or forced.

### **POLST (Practitioner Orders for Life Sustaining Treatment)**

This standardized form available to all of the citizens of Illinois (from the IDPH website) allows an individual with a terminal illness or a frail elder to make a decision that CPR should or should not be attempted if his/her breathing or heart stops with an order from a physician, NP, or PA that agrees.

This form, when properly completed (AFTER a Goals of Care conversation with a clinician), must be honored across the health care continuum and should be completed when a patient will be transferring to another facility or home and does **NOT** want to be

resuscitated. This voluntary medical order form is the **ONLY** way to communicate that a patient does **NOT** want resuscitation in the community (including outside nursing facilities).

A copy of this form is acceptable. **Patient stickers must be placed on each page of the document.**

## **Procedures**

### Patient presents with POLST at admission

- Nurse completing the admission history reviews form with patient/legal representative at admission
- Copy of the form, along with current patient sticker, is placed in the medical record until it can be scanned into the EMR
- A scanned POLST form may already be in the EMR. If found, the nurse reviews the POLST form with patient or legal representative to verify the document is still accurate.
- Nurse completing the admission will inform the attending physician if the POLST indicates DNR at the time of the patient's admission
- Physician will place a DNR code status order in the EMR if the current POLST is accurate
- Code status appears in the banner in the EMR

### DNR Order initiated during current hospitalization

An electronic CODE STATUS order may be entered by the attending physician anytime during the inpatient stay. POLST Order Form should be completed ***if the patient is being transferred or discharged outside the hospital and does not want to be resuscitated.***

The form is considered valid when the following components are complete:

- Sections A, D, and E
- ONE witness signature. Individual must be 18 years of age or older, but there are no other limitations. (witness cannot be the practitioner that is signing the order)
- Attending practitioner signature (after they have had the conversation with patient)

Copy of the completed form is placed in the skinny medical record until it is scanned into the EMR after Discharge.

### DNR patients undergoing surgery/procedures requiring consent

- Attending physician to clarify patient's wishes regarding DNR status during surgery/procedure. Will discuss with patient during the consent process.
- Anesthesiologist will specifically discuss Pre-arrest Emergency Care Section of DNR Orders for Surgical/Procedural Patients (Preprinted Order Set)

- Form to be signed and dated by physician/surgeon and anesthesiologist
- Form to be placed in the medical record until it can be scanned

## **SPIRITUAL CARE SERVICES**

- The Chaplains provide emotional and spiritual support for patients, families and staff 24/7
- They are available to provide numerous services and consultations. Some of their responsibilities include:
  - Responding to all Code Blue and RRT situations.
  - Responding to requests for assistance with completion of POA forms.
  - Providing essential role in decedent care (**MUST** be informed of every patient death ASAP, whether or not family is present).
  - Assisting with incident debriefings.

*Note: Chaplains do NOT initiate or complete the POLST conversation; however, they may be a supportive role in process.*

*Review the Spiritual Care Services webpage on the NCH Intranet for additional information on Advance Directives*

## **SKIN/WOUND**

- Full wound assessment with measurements upon admission and every Wednesday (referred to as Wound Wednesdays).

- Braden scale performed on all patients, every shift and with change in condition.
- No more than three layers under patient (fitted sheet, draw sheet, incontinence pad).
- Use only ONE premium incontinence pad at a time, for incontinent patients only.
- RN may order low air loss mattress for patients with Stage 3, 4, deep tissue injury, and unstagable pressure injuries AND for patient with low Braden mobility subscore of 1 or 2, or total Braden score of 16 or less.
- Wound/Ostomy nurse available Mon-Fri, 0830-1600, for Stage 3, 4, DTI and all hospital acquired pressure injuries, and any difficult skin issues. Consult via EMR order: search for Consult to wound/Ostomy Nurse
- NPWT (wound vac) must be checked every two hours for dressing integrity and proper suction. If a dressing is not intact (no suction to wound) for two hours or more then it must be removed and replaced with a hydrogel on gauze dressing. Report change of dressing to wound nurse at 3215.
- All pressure injuries are to be staged. Wounds that are not pressure injuries should not be staged, instead labeled as full or partial thickness.

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**1.4. Section 4: Medication and Order sets**

Medication Administration

Heparin/Argatroban Protocols

Hypoglycemia Protocols

Flush Bag Standard

Equashield Device

Central Telemetry Monitoring

CIWA-Ar Medical Detox orders

Stericycle

# Medication Administration

## DESCRIPTION OF PHARMACY SERVICES

### *Central Pharmacy*

- Operates 24/7. Provide services when floor-based pharmacists are unavailable.

### *Unit-based pharmacists*

- Usually available from 7:30 am – 4:00 PM Monday - Friday
- Although they are responsible for several units, they are stationed on a specific unit and carry a mobile phone.

### *Specialty Areas*

Satellite pharmacies are available for OR (6a-6p) and Critical Care, Oncology, Women's Care Services (L&D, NICU, MBU) during specified hours. Infectious Disease pharmacist on staff.

## MEDICATION ORDER FLOW

### **Process for Obtaining Meds**

- Medication orders are obtained from the prescribing practitioner. Orders are placed directly into EMR Order Entry system.
- If necessary, written orders on "Physician Orders" form (chemo orders only) or Preprinted Order form (downtime) will be sent to Pharmacy.
- The Pharmacist will profile all medication orders into the EMR (e-MAR).
- Medications will sent to nursing area or become available for Pyxis removal.

### **Medication Location on Unit**

- Majority of oral, injectable, IVs, and IVPBs are dispensed from Pyxis.
- DO NOT pull meds for an entire shift and store those meds in patient rooms.
- Narcotics should not be pulled from Pyxis until the patient has been appropriately assessed for pain.
- Meds may be delivered via Translogic Tube system. Secure tube function available for narcotics; pharmacy informs nurse of code.
- DO NOT store meds in patient rooms unless those meds are bulk products and labeled as "Take Home Medications" (eg inhalers, creams).
- Bins or drawers are located in the nursing stations to minimize places nurses need to look for patient-specific medications sent from pharmacy. If you retrieve a med from the tube or pharmacy, please place in the correct bin.

### **Automated Dispensing Cabinets (ADC), IV Tower, and refrigerator**

- Contains approximately 70% of scheduled, PRN, comfort, narcotic, emergency, stat, and first dose medications.
- This includes high-usage IVPBs and stock IV solutions.
- Remove medications for one patient at a time, when administration due.

### **Medications Not Available in Pyxis**

Oral meds are sent as a 24-hour supply after 2300 daily.

IV solutions and IVPBs mixed by pharmacy will be delivered to the unit shortly before administration time with batch delivery times (0800, 1530, 2100)

### **Patient's Own Meds**

- Should be limited to medications not on Formulary or those without therapeutic substitutions
- Order must include name, strength, frequency, and specify that the patient may use their own drug
- Must be identified, approved and labeled by pharmacy (1 med per container)
- Stored in the patient's locked medication bin/drawer
- Medication will be administered and documented within MAR
- Home meds not used during stay should be sent home or secured with personal belongings
- Do not tube patient's home meds
- Example: own eye drops for glaucoma

### **Dietary Supplements (Herbal Medications)**

- Are not formulary items
- Are not allowed at NCH due to possibility of drug interactions, inconsistent quality, inability to identify, and non-FDA approval
- Physicians will NOT be allowed to order; patients will NOT be allowed to take their own supplements

## **GUIDELINES FOR MEDICATION ADMINISTRATION**

Key resources for nursing practice

- *Medication Management*- Nursing policy surrounding medication administration (located in Policy Stat).
- *Administration and Prescribing Restrictions on Medications*– lists specific units where restricted meds are allowed (located on Pharmacy Website).

- *Nursing Guidelines for Medication Administration and Prescribing* –lists injectables with routes and administration/monitoring guidelines (located on Pharmacy Website).

**Special Circumstances:** In the event of a medical emergency, under the direction of a Physician Code Director, the RN may administer any medication as ordered by the Code Director.

## MEDICATION ADMINISTRATION

The electronic Medication Administration Record (MAR) is the principle form-for documentation of medication administration, utilizing barcode medication administration technology.

At the start of each shift, medication communication is to be included in the report hand-off between the off-going and on-coming clinician.

All patients are identified using TWO identifiers prior to administration of medication, including scanning of the patient’s ID band.

### Times

- Administration times will be +/- 60 minutes of the scheduled dosing times.
- Stat medications are administered ASAP – no later than 60 minutes of the ordering time.
- If needed, the RN will utilize the *Staggering Dose Grid* to transition medications back to the standard administration times.

MEDICATION ADMINISTRATION: STAGGERING DOSES													
Hang first dose of antibiotic ASAP (<1 hour)- don't wait to get on schedule													
Ordered q12h (0900 / 2100)					Ordered q8h (0600 / 1400 / 2200)					Ordered q6h (0600 / 1200 / 1800 / 0000)			
Given at	2nd Dose	3rd Dose	4th Dose		Given at	2nd Dose	3rd Dose	4th Dose		Given at	2nd Dose	3rd Dose	4th Dose
0100	1100	2100	0900		0100	0700	1400	2200		0100	0600	1200	1800
0200	1200	2100	0900		0200	0800	1400	2200		0200	0700	1200	1800
0300	1700	0700	2100		0300	1200	2200	0600		0300	0700	1200	1800
0400	1800	0800	2100		0400	1300	2200	0600		0400	1100	1800	0000
0500	1900	0900	2100		0500	1400	2200	0600		0500	1200	1800	0000
0600	2000	0900	2100	Standard	0600	1400	2200	0600	Standard	0600	1200	1800	0000
0700	2100	0900	2100		0700	1400	2200	0600		0700	1200	1800	0000
0800	2100	0900	2100		0800	1500	2200	0600		0800	1300	1800	0000
0900	2100	0900	2100	Standard	0900	1500	2200	0600		0900	1300	1800	0000
1000	2100	0900			1000	1600	2200	0600		1000	1700	0000	0600
1100	2200	0900			1100	2000	0600	1400		1100	1800	0000	0600
1200	2200	0900			1200	2100	0600	1400	Standard	1200	1800	0000	0600
1300	2300	0900			1300	2200	0600	1400		1300	1800	0000	0600
1400	0000	0900		Standard	1400	2200	0600	1400	Standard	1400	1900	0000	0600
1500	0500	1900			1500	2200	0600	1400		1500	1900	0000	0600
1600	0500	1900			1600	2300	0600	1400		1600	0000	0600	1200
1700	0700	2100			1700	2300	0600	1400		1700	0000	0600	1200
1800	0700	2100			1800	0000	0600	1400	Standard	1800	0000	0600	1200
1900	0900	2100			1900	0400	1400	2200		1900	0000	0600	1200
2000	0900	2100			2000	0500	1400	2200		2000	0100	0600	1200
2100	0900	2100	0900	Standard	2100	0600	1400	2200	Standard	2100	0100	0600	1200
2200	0900	2100	0900	Standard	2200	0600	1400	2200		2200	0500	1200	1800
2300	0900	2100	0900		2300	0600	1400	2200		2300	0600	1200	1800
0000	1100	2100	0900		0000	0700	1400	2200	Standard	0000	0600	1200	1800
<b>Sig:</b>					<b>Sig:</b>								
q day or q am		0900			q 24H					Time assigned will be initial starting time or obtain pharmacist help if staggering of time is needed			
BID		0900, 1700			q 12H		0900, 2100						
TID		0900, 1300, 2100			q 8H		0600, 1400, 2200						
QID		0900, 1300, 1700, 2100			q 6H		0000, 0600, 1200, 1800						
5x daily		0600, 1000, 1400, 1800, 2200			q 4H		0100, 0500, 0900, 1300, 1700, 2100						
q hs		2100			q 3H		0000, 0300, 0600, 0900, 1200, 1500, 1800, 2100						
					q 2H		0000, 0200, 0400, 0600, 0800, 1000, 1200, 1400, 1600, 1800, 2000, 2200						

## **CONTROLLED MEDICATIONS**

Controlled substances are stored in locked cabinet or within ADC

Pharmacy may dispense controlled substance via secured tube system. Only RN may “unlock” code and verification of the count must take place when medication removed from tube

CUL or designee will run discrepancy report for ADCs every shift and will investigate discrepancies

### **Wasting of Controlled Medications**

- Two signatures required to document wastage
- If controlled substance removed from ADC, waste documented in ADC
- If medication dispensed from Pharmacy, document waste at bottom of “Narcotic Control Form” (pink sheet).
- IV narcotic solutions and PCA/Epidural waste can be done in EMR flowsheet, using “waste volume” field.

## **MEDICATION SAFETY**

The Joint Commission requires Medication Management Standards; our Pharmacy is responsible for implementing these standards.

### **High Alert meds**

- These medications include anticoagulants, injectable narcotics, and neuromuscular blockers, among others
- Pharmacy has a policy with specific processes for handling each of the medications on the list; pharmacy maintains this list and adds additional meds based on the literature and trends in medication errors
- The following *infusions* require an independent check by a second RN: PCA, insulin, chemotherapy, epidural, anticoagulants, and TPN.

## **SETTING UP YOUR PYXIS PASSWORD**

1. Go with your Clinical Unit Leader or preceptor to the PYXIS station touch screen.
2. Login screen appears:
3. Enter your EPIC login ID and password
4. A dialog box will appear stating that your password has expired. For this, you must now select a new password.
5. Using the keyboard, enter your new password. Press Enter.
6. You will then be prompted to register your Bio ID. Follow the instructions.
7. Any questions: see your Unit Leader or call Pharmacy.

# Heparin/Argatroban Protocols

## Key Points:

### Unfractionated Heparin Infusion Pharmacy Dosing Procedure

- I. OVERVIEW  
This clinical practice guideline is intended to provide a standardized process for the initiation, maintenance and monitoring of intravenous unfractionated heparin. The recommendations within this guideline apply to adult patients receiving intravenous unfractionated heparin infusions with the intent to titrate to a therapeutic goal.
- II. PROTOCOL EXCLUSION CRITERIA
  - a. Do not initiate on patient with epidural catheter.
  - b. Do not initiate on patient with concurrent orders for subcutaneous heparin, LMWH (enoxaparin/dalteparin), apixaban, dabigatran, rivaroxaban, argatroban, bivalirudin
  - c. Do not initiate on patient with platelets <100,000 or PTT >72 seconds.
  - d. Do not initiate on patients with suspected or proven Heparin Induced Thrombocytopenia (HIT).
- III. LABORATORY PRIOR TO AND DURING INFUSION
  - a. Pharmacist to order STAT baseline CBC, PTT, and PT/INR if not completed within previous 24 hours.
  - b. CBC, PT/INR daily while patient on heparin infusion.
  - c. PTT q6h after initiation of heparin until PTT is in therapeutic range (50-75 seconds) for two consecutive draws.
  - d. PTT daily once PTT is within therapeutic range for two consecutive draws.
  - e. If heparin infusion held, resume PTT monitoring q6h after re-starting heparin infusion.
  - f. PTT to be drawn from arm opposite of heparin infusion.
  - g. All critical lab values will be reported to pharmacist by laboratory
- IV. INITIATION OF HEPARIN THERAPY
  - a. Discontinue all anticoagulant orders prior to initiation of heparin infusion. Bridging therapy recommendations can be found under section IX.
  - b. Select heparin nomogram - dose adjustment nomogram based on indication for UFH use
    1. Low Intensity heparin nomogram [CVA, High Risk Bleeding, Post-OP Surgical Patients]
    2. Medium Intensity heparin nomogram [ACS, Unstable Angina, STEMI, NSTEMI]
    3. High Intensity heparin nomogram [DVT/PE, Bridge Therapy, Mechanical Valve, AFIB]
- V. HEPARIN DOSING
  - a. Dosing is based on actual body weight. Maintain dosing regimen on initial weight.
  - b. Pharmacist to assess and order each PTT level and communicate with RN to confirm new infusion rates or boluses
  - c. Bolus doses will be completed with heparin 1,000 unit/ml vials. Infusion doses will be completed with Heparin 25,000 units/250 ml (100 units/mL)
- VI. HEPARIN NOMOGRAM  
Administer Heparin bolus IV Push x 1 (rounded to nearest 500 units), followed by infusion. Adjustment of infusion rate on PTT lab results as shown in the below table.

Intensity	Initial Bolus	Starting Dose	Maximum Initial Rate
Low	No Bolus	12 units/kg/hour	1,000 units/hour
Medium	60 units/kg Max Initial Bolus: 4,000 units	12 units/kg/hour	1,000 units/hour
High	80 units/kg Max Initial Bolus: 10,000 units	18 units/kg/hour	2,000 units/hour

- Physician orders Heparin/Argatroban Protocol at Low, Medium, or High Intensity.
- If ordered as “Pharmacy to dose/monitor” then:
  - Pharmacy orders associated lab blood work
  - Pharmacy calculates Heparin rate and communicates with Nursing

PTT [Sec]	Low Intensity (CVA, High Risk Bleeding, Post-OP Surgical Patients)	Medium Intensity (ACS, Unstable Angina, STEMI, NSTEMI)		High Intensity (DVT/PE, Bridge Therapy, Mechanical Valve, AFIB)		Next PTT due
		Rate change	BOLUS	Rate change	BOLUS	
< 31	↑ rate by 3 units/kg/hour	60 units/kg Max: 7,500 units	↑ rate by 3 units/kg/hour	80 units/kg Max: 10,000 units	↑ rate by 4 units/kg/hour	6 hours
31-38	↑ rate by 2 units/kg/hour	30 units/kg Max: 4,000 units	↑ rate by 2 units/kg/hr	40 units/kg Max: 5,000 units	↑ rate by 3 units/kg/hour	6 hours
39-49	↑ rate by 1 units/kg/hour	No Bolus	↑ rate by 1 unit/kg/hour	No Bolus	↑ rate by 2 units/kg/hour	6 hours
Goal 50-75	No rate change					q6h until therapeutic x 2 then check qAM
76-84	↓ rate by 2 unit/kg/hour					6 hours
85-100	HOLD Infusion x 1 hour, then decrease rate by 3 units/kg/hour					6 hours after restarting
> 100	HOLD Infusion X 1 hour, check STAT PTT, then decrease rate by 3 unit/kg/hour. If STAT PTT still >100, Pharmacist to call MD for further orders					STAT after 1 hour hold then q6h thereafter

#### VII. INFUSION PUMP & EMAR DOCUMENTATION

- Heparin is a high alert medication. A double check is required by nursing upon initiation, boluses or rate changes that should be documented in EMAR.
- All Heparin infusions will be programmed into the infusion pump and reflect in EMAR as units/hour

#### VIII. NOTIFY PHYSICIAN WHEN:

- Baseline INR > 1.3 OR follow up INR ≥ 2
- Baseline PTT < 35 seconds OR PTT > 100 seconds for two consecutive draws
- Baseline or follow up platelets are < 100,000 or ≥ 50% decrease from baseline
- If patient is not therapeutic after 24 hours of heparin therapy, to discuss possible protocol variations.
- Heparin infusion > 25 units/kg/hour is required to attain a therapeutic PTT
- Decrease in hemoglobin ≥ 2 gm/dL within 24 hours
- Signs of bleeding or change in neurologic status [e.g. trauma or fall]
- Patient is pregnant (may require protocol deviation)
- Problems with maintaining IV lines for infusion or PTT draws
- IM injection is ordered or administered

#### IX. WARFARIN BRIDGING

- Overlap heparin and warfarin for at least 4-5 days **and** until 2 therapeutic INRs are achieved 24 hours apart
- If patient will be discharged prior to 4 days, use LMWH to bridge
- IV heparin to SubQ LMWH conversion - give first LMWH injection, then discontinue heparin immediately
- Dependent on clinical management, bridging therapy may be continued as outpatient

#### X. PERIOPERATIVE MANAGEMENT OF HEPARIN

- Discontinue Heparin 6hrs prior to surgery
- Reorder Heparin 12 hours after surgery (if there is no evidence of bleeding)

#### XI. PROCEDURES (CATH LAB/Interventional Radiology)

- Nursing will alert pharmacist if PTT labs need to be rescheduled if heparin infusion will be held for procedures.
- In the event Heparin infusion is held for a procedure, restarting rate can be determined by ordering physician.
- Pharmacist to confirm re-starting rate with ordering physician

#### XII. REVERSAL OF HEPARIN

- Protamine 1mg for every 100 units of heparin administered over the last 2 hours given as IVPB over 10 minutes  
Max = 50 mg Protamine.
- Re-check PTT 15 minutes after Protamine infusion completed.

\*\*Initial and subsequent dosing may deviate from standard recommendations in other clinical applicable circumstances. Patients who do not meet protocol will be managed by ordering physician.\*\*

# HYPOGLYCEMIA PROTOCOL: PREVENTING HYPOGLYCEMIA IN PATIENTS ON INSULIN THERAPY

# 1

## Glucose Checks

- Best practice supports checking blood glucose within one hour of meal time.
- Routine early am glucose checks should be avoided;** check BG when patient orders their food & administer insulin when the tray is received.
- IF patient NPO/not eating:**
- \*Hold prandial (mealtime) insulin
- \*Clarify long acting insulin doses with provider (may need to be reduced),
- \*Transition correction doses (sliding scale) to Q6H: don't hold or discontinue
- Pay attention to carbohydrate content on patient tray (totals are printed on tray ticket)

# 2

## Pharmacy Practices

- ❖ All long acting insulin (Detemir, Glargine) is auto substituted with Degludec (Tresiba), 1:1. This product lowers BG in a flatter, more predictable way with less incidence of hypoglycemia at night time.
- ❖ Pharmacist should speak with provider and ANY home insulin doses should be decreased by 20%, or by 50% if AKI (acute kidney injury)
- ❖ Pharmacist should obtain order to Hold Metformin & all Sulfonylureas (Glyburide, Glimepiride, Glipizide) during inpatient stay.

# 3

## Prompt Treatment

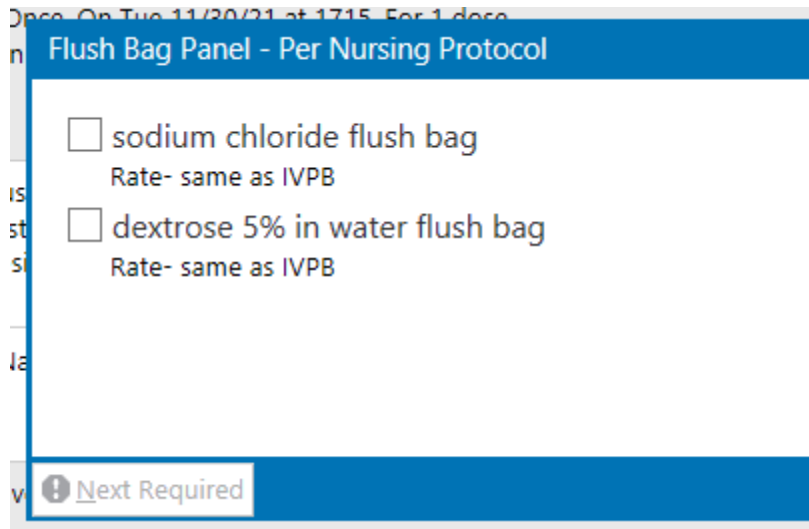
- Treat all BG less than 70mg/dl.
- Repeat BG Q15 minutes until >70.
- Treatment** depends on mental status & swallowing restrictions: 4oz juice, 8 oz milk, 2 graham crackers, 4 Glucose tabs, Glucose gel, IV dextrose, glucagon injection
- Document** under **Shift Event** "Hypoglycemia"

Hypoglycemia	
Alert & responsive	
Asymptomatic	
📄 4oz juice	

- Notify provider if BG <50mg/dl following critical results policy.**
- If D50 was administered, recheck BG (1) one hour post.
- If patient is made NPO or refuses to eat and BG <100, start IVF D5W at 40cc/hr and notify provider

## FLUSH BAG STANDARD: Intermittent IV Medication Administration

- All intermittent IV medications will be administered as a secondary through a **primary flush line**
- Nurse will enter a flush bag order “per nursing protocol” to hang as primary->



On Tue 11/20/21 at 17:15 For 1 dose

Flush Bag Panel - Per Nursing Protocol

sodium chloride flush bag  
Rate- same as IVPB

dextrose 5% in water flush bag  
Rate- same as IVPB

Next Required

- Enter volume to be infused (VTBI) as secondary volume and add additional mls to ensure patient receives as much med as possible (~20ml)
- When administering more than one secondary medication **back-prime the secondary tubing with each medication, using only one secondary tubing**
- Primary tubing end will be capped with alcohol impregnated sterile cap
- Primary and secondary tubing will be discarded after 24 hours

Found in the Medication Administration policy in PolicyStat



## Equashield device – Closed system transfer device for the safe handling of hazardous drugs.



Short instructional videos are available off the NCH Intranet. Intranet > Contents > Equipment/Technology Resources > Click on each link:

[Equashield – NIOSH – Secondary Tubing – 2021](#)

[Equashield – NIOSH – Y-Site Tubing – 2021](#)

[Equashield – NIOSH – IV Push or Bolus – 2021](#)

### Equipment Links

- [Accutorr V Instructions & Manual - Instruction Sheet & Accutor Manual](#)
- [Alaris Dataset Upload Instructions - NCH \(08/2016\)](#)
- [Alaris IV Pump: Infusion Resource Library](#)
- [Alaris IV Pump: User Manuals](#)
- [Equashield-NIOSH - Secondary Tubing - 2021](#)
- [Equashield -NIOSH - Y- Site Tubing - 2021](#)
- [Equashield -NIOSH - IV Push or Bolus - 2021](#)

# Central Telemetry Monitoring Policy/Procedure: Summary

(Entire policy is located on Intranet under PolicyStat.)

**Purpose:** NCH uses Centralized Telemetry (CT) to monitor patient's from a remote location, allowing the patient to remain on the appropriate specialty unit. Continuous pulse oximetry can also be monitored in select patients.

## What is the role of the Central Telemetry (CT) personnel?

- Bring transmitters to the nurse
- Identify and document cardiac rhythms (within 30 min. upon initiation, q 8 hours, when alarms are generated, and prn); the CT nurse manager or a Medical Observation Unit (MOU) RN will verify all cardiac rhythm strips
- Scan interpreted rhythm documents to HIM with each admit, abnormal rhythm and every 8 hours
- Clean transmitters between use
- Notify RN or unit for changes in rhythm (see Emergency Measures below)

## What is the role of the RN on a patient care unit?

- View rhythms as needed from the monitors located at the nurse's station
- Can view all rhythm strips in EPIC. Go to chart review>Media>double click on telemetry monitoring strips
- Notify attending physician of any change in the patient's rhythm and subsequent clinical assessment; document name of physician and results of discussion in the EMR.
- If patient's condition changes, RNs can call Central Telemetry to obtain information about the cardiac rhythm
- Assess integrity of monitoring equipment before application and PRN
- Assess skin at electrode sites daily and monitor for allergic reaction to adhesive or gel
- Change electrode application site every 48 hours and PRN
- Assess electrode placement every shift
- Notify CT personnel when a patient is transported to tests, another unit or bed, and/or the telemetry transmitter is removed (*proper room and bed assignment is critical to proper alerting of rhythm changes and emergencies*)
- Educate the patient on purpose of telemetry and when to notify RN

## Central Telemetry Orders

- Orders for central telemetry (CT) require the provider to select 24, 48 or 72 hours of monitoring.
- The CT orders become "expiring orders" 18 hours before they expire. This gives the provider an opportunity to renew or D/C the orders.
- If there is no update to the order, the nurse should remove the monitor as the order is complete.
- Best practice is to review the telemetry history, and if questionable, call a resource (such as Central Tele) or the provider.

## EMERGENCY MEASURES

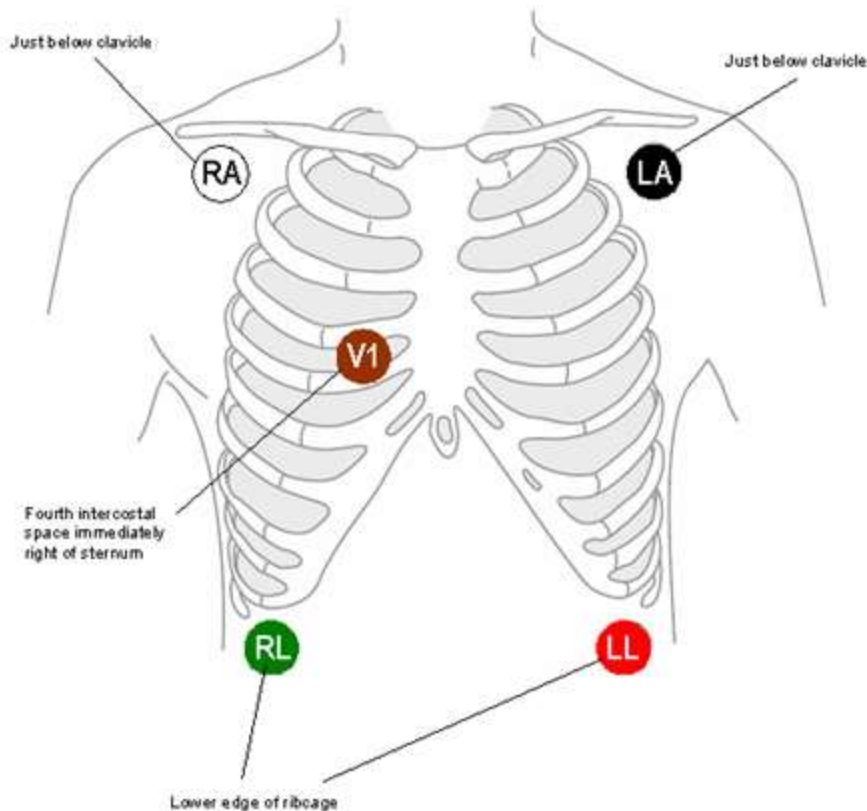
Central Telemetry calls all changes in rhythms or notable events regardless of code status. Upon detection of a life threatening arrhythmia, a **Tele Alert** will be called :

Central telemetry personnel will:

- Call the nursing unit and state “there is a **Tele Alert** in room \_\_\_\_\_.
- Send a text to the assigned nursing indicating a tele alert in room \_\_\_\_\_.
- Activate the call light system to flash orange and green outside the patient’s room and audibly alarm.
- Send a group text to ALL nursing staff on unit indicating the tele alert room \_\_\_\_\_.
- Send a posted ECG rhythm strip to the nursing unit via the Translogic Tube System, FAX, or given to nurse.

The unit RN will assess the patient for responsiveness and Code Status:

- Call a Code Blue if indicated.
- Place the patient on the bedside monitor.
- Assess the patient’s vital signs; or
- Notify the patient’s attending physician and call RRT or Code Blue as appropriate.
- If not a code, calls Central Telemetry back to obtain details of the rhythm.



## CIWA-Ar, Medical Alcohol Detox Orders

### Assessment Frequencies and Medication Administration

**Each assessment must include the following:**

1. VS (HR & B/P minimum)
2. CIWA-Ar Score
3. RASS Score

**Pharmacologic response:**

<b>CIWA –Ar Score</b>	<b>Administer</b>	<b>Reassess</b>
0 – 4	No medication indicated	<b>2 hours<sup>2</sup></b>
5 – 7	LORazepam (Ativan) 0.5 mg PO or IV	<b>1 hour</b>
8 - 10	LORazepam 1 mg PO or IV	<b>1 hour</b>
11 - 15	LORazepam 2 mg PO or IV	<b>1 hour</b>
15 – 20 <sup>3</sup>	LORazepam 4 mg IV only	<b>1 hour</b>
≥ 20 <sup>3</sup>	LORazepam 4 mg IV only	<b>15 minutes</b>

**IMPORTANT NOTES:**

1. If patient is asleep, gently awaken patient to conduct CIWA assessments at appropriate intervals
2. Notify MD if patient has received 16 mg in 4 hours for CCU evaluation.
3. Sedation goal for RASS score: -2 to 0 (light sedation to alert).
4. Mr. Strong Criteria
  - Staff or patient safety is in question
  - RASS ≥ +3
  - Patient escalates into delirium and is not controlled with current medication orders.
5. RRT criteria:
  - Moderate sedation where patient has minimal response to voice and is difficult to arouse and maintain wakefulness, RASS ≤ -3
  - Patient is unable to protect own airway
  - Any seizure activity
  - HR < 40 or > 130, RR < 8 or > 30, BP < 90/60 or > 200/100, Temp > 100.5, O2 sat <88%.



## Pharmaceutical Waste Stream Management Stericycle Update



- Regular Garbage / Sewer System
  - EMPTY IV Bags (leave tubing connected)
    - Examples: Empty IV bags of antibiotics, insulin, heparin, maintenance fluids such as Normal Saline and Dextrose, and fluids containing electrolytes (i.e. KCL, Mg, Ca)
    - Full/partial bags of maintenance fluids including fluids with electrolytes – Remaining fluid can be poured down the drain and empty bag/tubing is placed in regular trash
    - If IV tubing is removed from an IV bag, the spike from the tubing should be cut off and placed in the Red Sharps container. The remaining part of the tubing can be thrown in regular trash.

- Blue Container
  - All medications with no waste designation specified in Epic administration instructions
  - Full/partial medicated IV Bags (leave tubing connected)

- Black Container
  - All medications designated as “Dispose Black” in Epic administration instructions
    - Examples: insulin, warfarin & packaging, nicotine & packaging

- Red Sharps container
  - All Hypodermic / Intravenous Syringes – WITH OR WITHOUT A NEEDLE
  - Any remaining syringe contents should be expunged into an absorbent pad/gauze and disposed of in the appropriate blue or black bin. The empty syringe would be placed into the Red Sharps container.

- Controlled Substance Container
  - All controlled substances such as hydromorphone, morphine, lorazepam, and fentanyl including all formulations such as injectable, oral (tablets/liquids) and topical patches
  - Medication should be expunged directly into controlled substance container.

**No patient labels or identifiers can be left on medications in regular trash, red, blue or black bins.**

**Call Environmental Services at x2301 for full Stericycle Containers**

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## **1.5. Resources**

Finding Policies on Intranet

Translogic Tube System

Wireless Phone



# Employee Intranet

Login:   
Password:  Sign

- Home
- Contents
- Phone Directory
- Education
- Physician Information
- Human Resources
- Emergency Codes
- Bed Board
- Road to the Future
- Aim for Excellence
- Epic



### NCH Wins National Patient Safety Award

Congratulations to all NCH employees! Take pride in knowing that with your help, NCH received the Healthgrades 2015 Patient Safety Excellence Award – ranking in the top 10% of hospitals in the nation. NCH has performed excellence in 14 patient safety indicators for Healthcare Research and Quality. [See all our awards.](#)

Healthgrades also recognized NCH for providing quality care to patients, including naming NCH in the top 5 percent of hospitals in the nation for GI medical treatment. Healthgrades awards hospitals for performance in safeguarding patients against serious and potentially preventable complications during stays.

### Quick Links

- Citrix Applications (Including Epic)
- President's Award Nomination Form
- Ideas Count
- CareLink Website
- NCH Email
- MyTime
- UpToDate
- E-Pay/E-Benefits
- System Metrics
- Care Logistics
- PACS
- Syngo Dynamics, Cardiology
- PolicyStat**
- Health Resource Library
- Occurrence Reporting (x4444)
- Compliance (Hotline: (888) 203-2523)



## Nursing Policies, Procedures and Protocols

Key resources that guide nursing practice at NCH are: *Nursing Policies and Procedures* and *Administrative Policies & Procedures*. They are all housed in

PolicyStat, found on our Intranet home page.

## PolicyStat Home page

**ncih**  
The Police Community Partnership  
Empowering Communities.  
Excellence in Policing.

Home Title Policy Area Lead Entities

Easily search by Keywords Search

Welcome!

Our new policy management system (PolicyStat) is here! [Have an account? Login here.](#)

Access policies NOW by using the SEARCH bar above.  
*Enter any word or phrase in the title or body of a policy. Filter your search by clicking on the Title, Policy Area, or Owner tabs.*

Need to LOGIN? Click the 'Login here' link to the right, and enter your login and password.

Polices can also be found  
in Lippincott

### THINGS TO DO TODAY

- Get your flu shot
- Get your flu shot
- Get your flu shot

Don't wind up on Santa's naughty list  
NCH team members have until December 15 to get their flu shot. See the CEHS expanded hours and flu cart rounding below.

Inside INTEGRATION

Inside NCH  
News for and about employees

nch CARES

#### Intranet Sites

- NorthShore
- Search
- Quick Links
- 2FA
- Chart/Epic
- Email
- Index
- Intouch (E/MET)
- IT Access Request
- IT Pylis Security Request
- IT Security/Backup/Agent Request
- IT Self-Service Portal
- Kathleen Hall
- Kronos
- MDS Online
- Password Portal
- Rosen Streamlines
- Savills

#### Clinical Links

- Antibiotic Stewardship
- Care Logistics
- CaseLink Website
- Health Insurance Library
- Insurance Cost Savings
- Lippincott Solutions
- Microbiology

**EMPLOYEE FLU VACCINATION SCHEDULE - DEADLINE DEC. 15**  
If you received your flu shot outside of NCH, upload the details. Be sure to bring your Employee ID badge when getting vaccinated.

## P Lippincott Procedures

To help deliver the most effective patient care, we provide real-time access to step-by-step guides for over 2,000 evidence-based procedures and skills in a variety of specialty settings.

[Go to product →](#)

## Lippincott Procedures

Search Query  All Procedures and Advisor Content

Select a Discipline (drag and drop to reorder)

## Translogic Tube System



There are at least 2 tube stations per unit. Tube stations are locked at all times (you will receive a code to open the station).



### BAG IT!

When packing the carrier:

- 1) Immobilize the items to be transported.
- 2) Bag all specimens with 2 biohazard bags before inserting into the green bag.
- 3) Place documents around the green bag.
- 4) Roll & close the plastic green bag.
- 5) Single articles (gloves, documents) **must** be bagged.

### Translogic Tube System “Dos” & “Don’ts”

- Return Surplus Tubes promptly. “0” SEND on old style stations, EMPTY SEND on new style stations
- NEVER Carry tubes from station to station. All tube transactions are controlled & monitored by the “TransLogic Computer”. It always knows how many tubes are “assigned” and “present” at all active stations. It CANNOT TRACK a tube that is carried by hand, on cart, etc...from one station to another. This causes false tube counts at stations and the TransLogic computer cannot fix that.



For Technical Support call: X4892 (Help Desk) For Function Support call: Lynn X4844 or Jan X4827 (between

#### Turning phone On/Off

- Press and hold the end call key
- "Switch on/off?" is displayed, press "Yes"/"No."

#### Answer a Call

- Press the call key to answer.

#### End a Call

- Press the end call key.

#### Make a Call

- Dial the number and press the call key or the Soft key "Call".

#### Answering a second call while on a call

- Hear tone
- Press soft key under "more"
- Arrow down to "switch" press soft key "select"
- To hand up and go back to first call
- Press soft key under "more"
- Arrow down to "End Call" press soft key "end call"

#### Transfer a Call

- Press the soft key under the letter "r"
- Dial the number you want to sent the call to
- Press end call key

#### Change the Volume during a Call

- Press the Volume Buttons on the side of the phone up or down.

#### Lock/Unlock the Keypad Manually

- Lock -- Press the star key "\*" and then
- Press the Soft key under "Lock"
- Unlock -- Press the star key "\*" and then
- Press the soft key under "Yes"
- Icon ? indicates a locked keypad.

#### Turn on Loudspeaker during a Call

- Press the soft key under the "Loudspeaker" icon
- To return, Press the soft key under the "Loudspeaker on" icon

#### To Forward a Wireless Phone to another Wireless Phone Extension

- Press \*21\*, the extension you are forwarding to and then the pound sign #
- Press "Call" key and then the display will show executed and then hang-up.

#### To Cancel Forwarding of a Wireless Phone from going to another Wireless Phone Extension

- Press #21# and then the display will show executed and then hang-up.

- Never store ANYTHING in bottom of stations. When biohazard bags are stored in bottom of stations, incoming tubes are not allowed to land properly. This causes back-ups of tubes and unnecessary Full Station alarms.
- When items are removed from tubes, place empty tube on rack. Empty and empty open tubes left in bottom of station are more likely to be damaged by loaded incoming tubes.
- Leave all tubes @ tube station. Remove items from tubes @ tube station. Do Not put tubes in cabinets, drawers, closets, etc...
- For spills: Call Engineering x7500, **Shut down your station!**

**Wireless Phone** (HINT: more details on equipment)

*used in direct care is located on NCH Intranet under Contents >Equipment/Technology)*

The words "The End" are written in a large, colorful, 3D-style font. Each letter is a different color: 'T' is pink, 'h' is red, 'e' is yellow, 'E' is green, and 'n' is blue. The letters have a slight shadow underneath them, giving them a three-dimensional appearance.

Please follow up with the unit **Clinical Practice Specialist (Educator, APRN)** on any questions you may have about the content of this manual or any other concerns you may have. The content is current only as of date last edited. Please seek out unit resources to find the most up-to-date information while you are working.