Medical-Surgical Covid-19 Cross-Training

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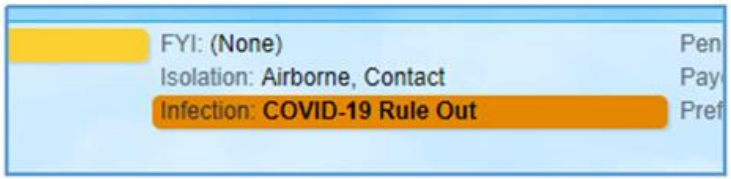
Penn Medicine

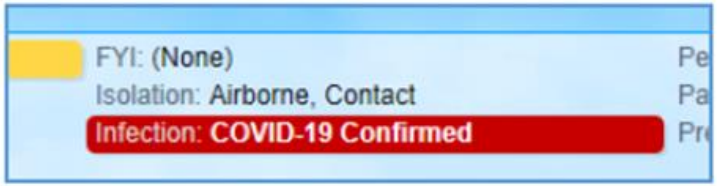
COVID-19

- There is a website on the Penn homepage with information regarding Covid-19 that is updated daily
- Check the website for the most recent information
- http://accesspoint.uphs.upenn.edu/sites/preparedness/coronavirus
- Covid Tip sheets
- Epic banner

COVID-19 Rule Out:



COVID-19 Confirmed:



COVID-19

- **Most common symptoms includes cough, fever and shortness of breath**
- **May appear 2-14 days after exposure**
- **Ranges from mild to severe respiratory illness**

Symptoms	Coronavirus* (COVID-19) Symptoms range from mild to severe	Cold Gradual onset of symptoms	Flu Abrupt onset of symptoms	Seasonal Allergies Abrupt onset of symptoms
Length of symptoms	7-25 days	Less than 14 days	7-14 days	Several weeks
Cough	Common (usually dry)	Common (mild)	Common (usually dry)	Rare (usually dry unless it triggers asthma)
Shortness of breath	Sometimes	No**	No**	No**
Sneezing	No	Common	No	Common
Runny or stuffy nose	Rare	Common	Sometimes	Common
Sore throat	Sometimes	Common	Sometimes	Sometimes (usually mild)
Fever	Common	Short fever period	Common	No
Feeling tired	Sometimes	Sometimes	Common	Sometimes
Headaches	Sometimes	Rare	Common	Sometimes (related to sinus pain)
Body aches and pains	Sometimes	Common	Common	No
Diarrhea	Rare	No	Sometimes for children	No

*Information is still evolving. **Allergies, colds and flus can all trigger asthma, which can lead to shortness of breath. COVID-19 is the only one associated with shortness of breath on its own. *Sources: Asthma and Allergy Foundation of America, World Health Organization, Centers for Disease Control and Prevention*

PPE

Penn Medicine

Focus: PPE for care of Patients with COVID-19

Best Practice **April 2020**

PPE for ROUTINE CARE

Respiratory Protection

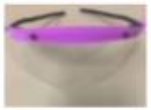
Surgical Mask with Ear loops

Fluid Resistant Surgical Mask with Eye Shield

Surgical Mask with Tie

Eye Protection

Full Face Shield



Non-Sterile Eye Shield

Safety Goggles

PPE for AEROSOLE-GENERATING PROCEDURES

Respiratory Protection AND Face Shield

N95 1870+

OR

N95 1860 Regular or Small

AND

Full Face Shield

OR

With Cuff

PAPR

With Lens

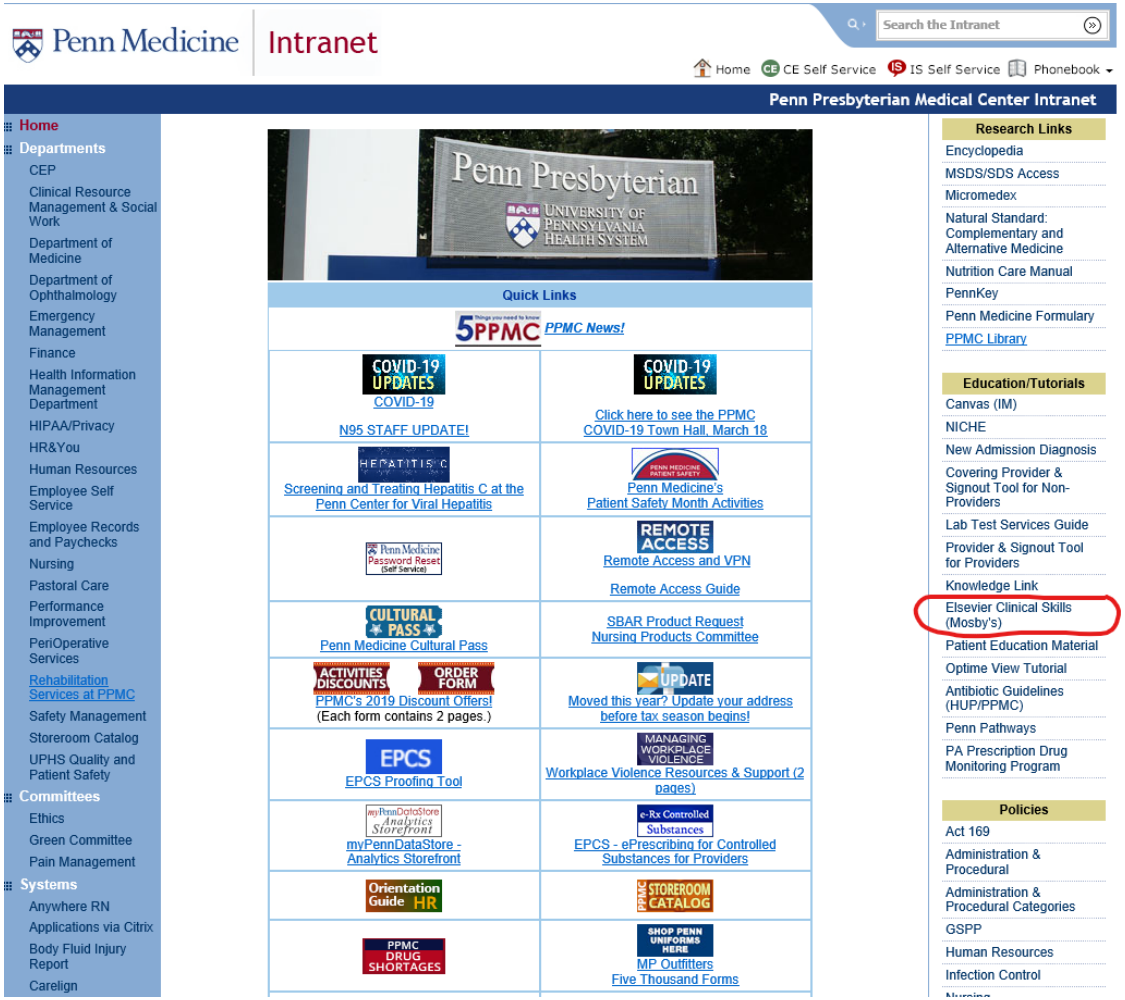
GOWN AND GLOVES REQUIRED FOR ALL CARE

Communication

- Most floors have a daily huddle at change of shift and it is the expectation that you attend
- Documentation should be done in real time (vital signs, etc.)
- Each floor has specific patient populations and protocols
- Please check with the charge RN and/or CNS/CNE for additional resources
- Throughout your shift please keep the lines of communication open with primary RN, charge nurse and CNS/CNE when applicable
- Do not be afraid to speak up if you are hesitant or unsure about something
- We want you to feel safe, comfortable and supported!

Resources

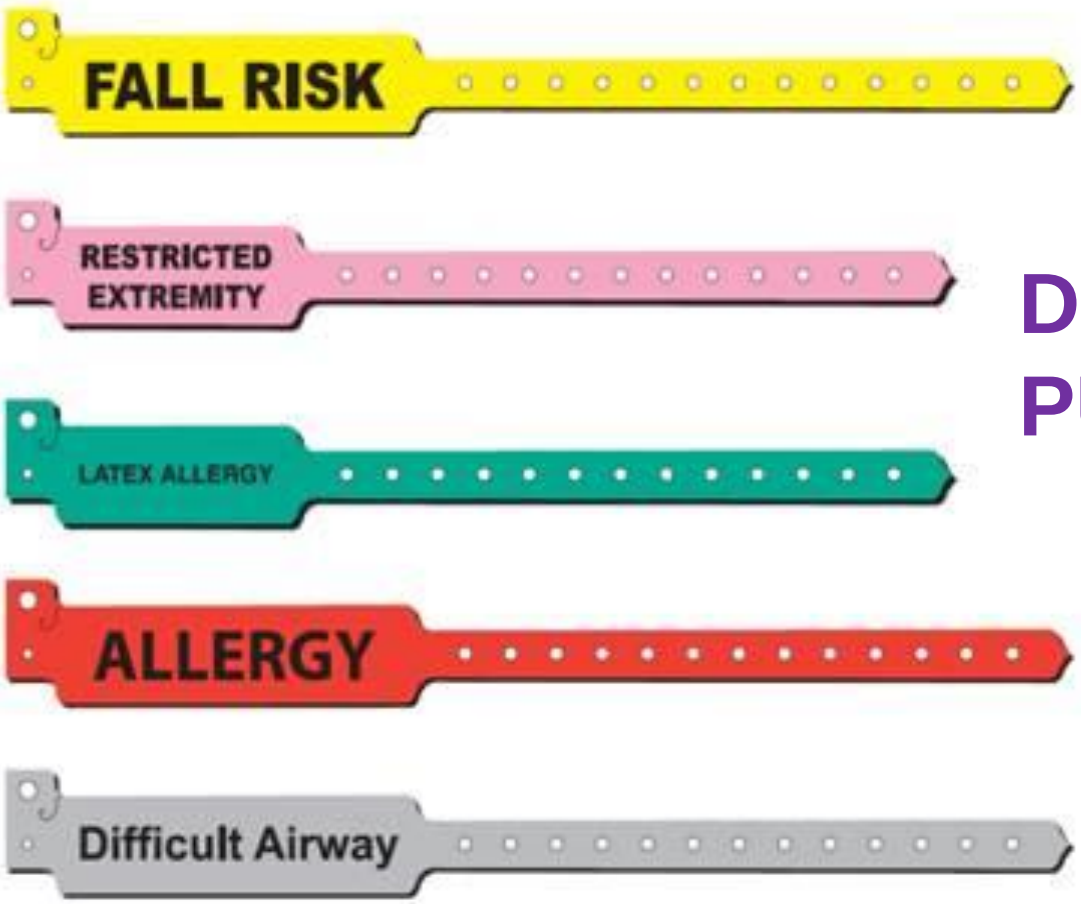
- **Navigating to Elsevier Video Resources- PPMC Intranet- Right hand side- Elsevier Clinical Skills**



Various Tiers explained:

- **Tier I- Primary Nurse (may be the primary nurse caring for a modified assignment)**
- **Tier II- Support the primary RN- completes task as delegated by the primary RN**
- **Tier III- Functions similarly to a CNA to support the primary RN**

Alert Bands



DNR bracelets are PURPLE

Clinical Alarms

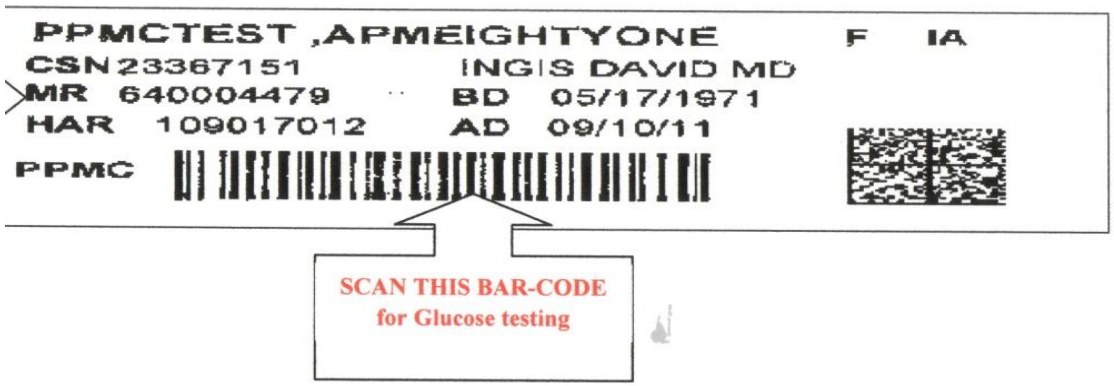
- Alarm volumes should be set at a level so that staff can hear them
- Anytime you hear an alarm you should go to room to assess the patient
- Alert the primary RN to the situation

Head to Toe Assessment

- Neuro- AAOx, pupils
- Cardiac- Listen to the heart sounds, assess rate & rhythm, asses distal pulses and assess for edema
- Respiratory- Listen to the lung sounds anteriorly & posteriorly, take note of diminished lung sounds, crackles, wheezes, etc. Note SOB
- GI- Inspect the abdomen, auscultate and palpate. Ask about last bowel movement and N/V. Check diet order.
- GU- Quality and quantity of output, how are they voiding, any PO intake restrictions, dialysis
- Skin- Assess for wound breakdown (especially bony prominences) and incisions. Assess drains and quality and quantity of drainage output. Note IV access and check for patency.

Accu-Chek® Testing

- **Operator ID is your Penn ID number**
- **Patient ID is CSN #**
- **CSN #= scan**
  - Number is located below Patient's name on wristband
  - Only scan the patient's wristband- never scan a label that is not attached to the patient



Accu-Chek® Testing

- **Meter reading range:**

  10-600 mg/dL

  - "LO" or "HI" if outside range – also possible with an operator error
  - A serum glucose specimen MUST be sent to the Lab for a "LO" or "HI"

- **Critical patient values:**

  less than 40 and greater than 500

  - MUST be reported to RN/MD **immediately**
  - Recommended to send a serum glucose specimen to Lab

Accu-Chek® Testing

- **Base Unit**
  - Return the meter in base unit after testing
  - Recharges battery & automatically uploads the result to Epic

- **Wipe away 1st drop of blood – with GAUZE (not alcohol prep)**
  - 1st drop contains interstitial fluid
  - 1st drop may contain alcohol (from cleaning)
  - Helps more blood to flow

Accu-Chek® Testing

- **When to repeat a test on the meter:**
  - If the Patient's appearance does not correspond to the result
  - If you didn't apply enough blood to the strip
- **When to send a serum glucose specimen to the Lab:**
  - "Lo" or "Hi" result

  - Decreased peripheral blood flow
  - Anytime the result is in question

Accu-Chek® Testing

- **Cleaning / Disinfecting the meter**
  - Must be done after every patient test
  - Use Clorox Bleach wipes OR facility-specific approved wipes
    - Allow to dry for recommended contact time per manufacturer's labeling
    - Be careful – do NOT get solution inside of meter (stay away from openings on meter)

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Chlorhexidine (CHG) Bathing

- Bathing should be done daily for patients with a central line
- Can also be done pre-operatively before certain surgical or invasive procedures
- CHG solutions should only be applied from the chin down
- Apply CHG solution directly to the wet skin for all areas, except the face, eyes, ears, mouth and genital area
- Refer to specific unit practices

Oral Hygiene & Denture Care

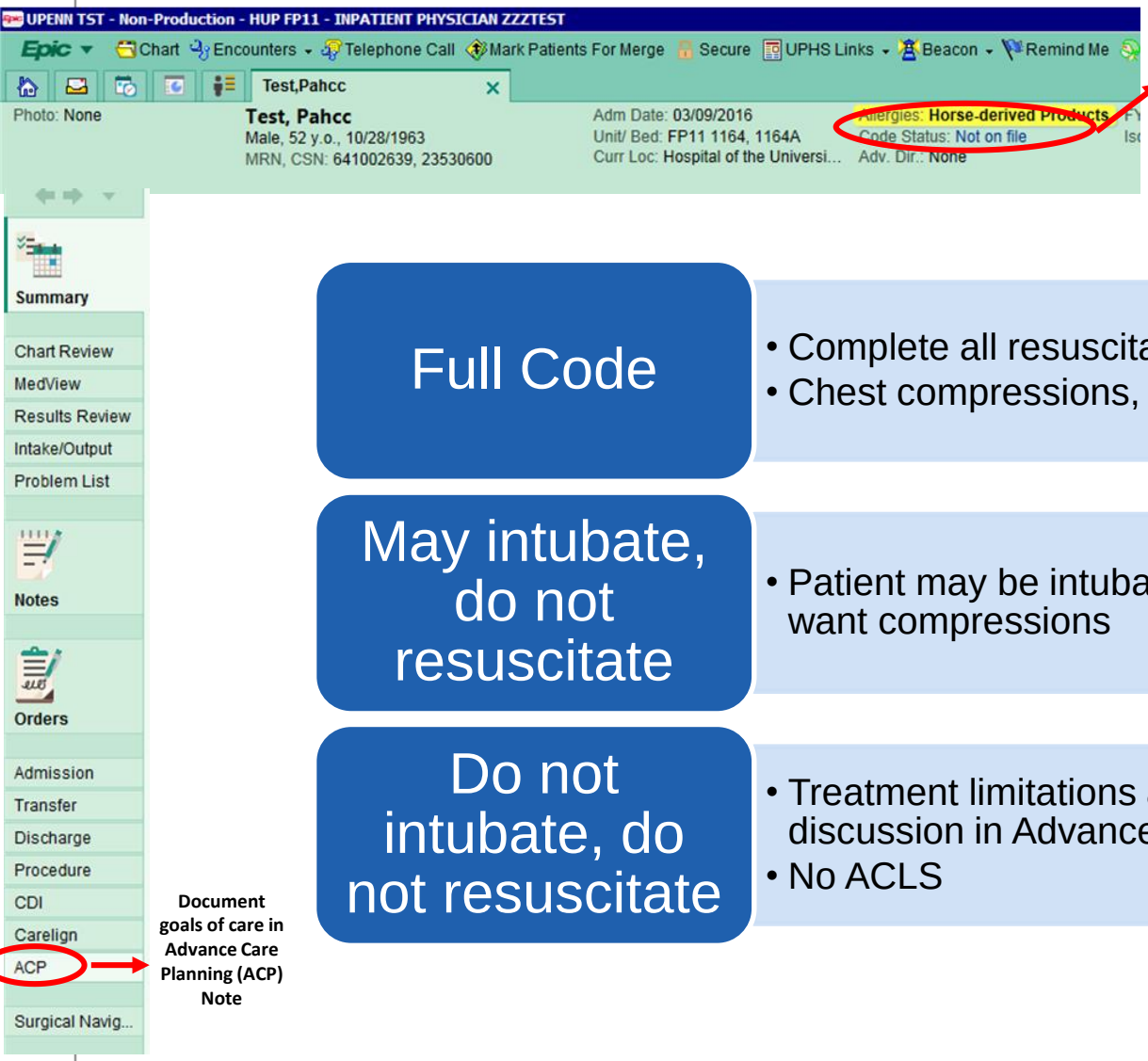
- Hand hygiene
- Set up supplies
- Have patient to brush teeth or assist patient with brushing
- Allow patient to floss unless contraindicated
- Have patient rinse thoroughly-emesis basin
- Determine if patient can clean dentures independently or needs assistance
- Instruct patient to remove dentures or provide assistance in removing them
- Adhesive seal to place dentures back in or soak in denture cup of warm water

- **ORAL CARE AM AND PM AND EVERY 4 HOURS IF NPO!**

Feeding Assistance for Oral Nutrition

- Perform hand hygiene
- Determine readiness and ability to eat independently
- If patient is at risk for compromised swallowing, raise HOB and have suction readily available
- Obtain any assistive devices the patient may need
- Assist the patient to perform hand hygiene.
- Ensure that meal tray is complete and correct
- Assist a patient who cannot eat independently
- Check orders for special diet or fluid restrictions

Code Status in Penn Chart



Full Code

- Complete all resuscitation efforts
- Chest compressions, intubation

May intubate, do not resuscitate

- Patient may be intubated, but does not want compressions

Do not intubate, do not resuscitate

- Treatment limitations and goals of care discussion in Advance Care Planning Note
- No ACLS

**In the event of an emergency, "Not on file" and "Prior" should be treated as full code*

Clinical Emergencies:

Rapid Response/Code Call

- Code Call
- Rapid Response
- Falls Response
- Stroke Alert
- Airway Emergency
- Anesthesia STAT

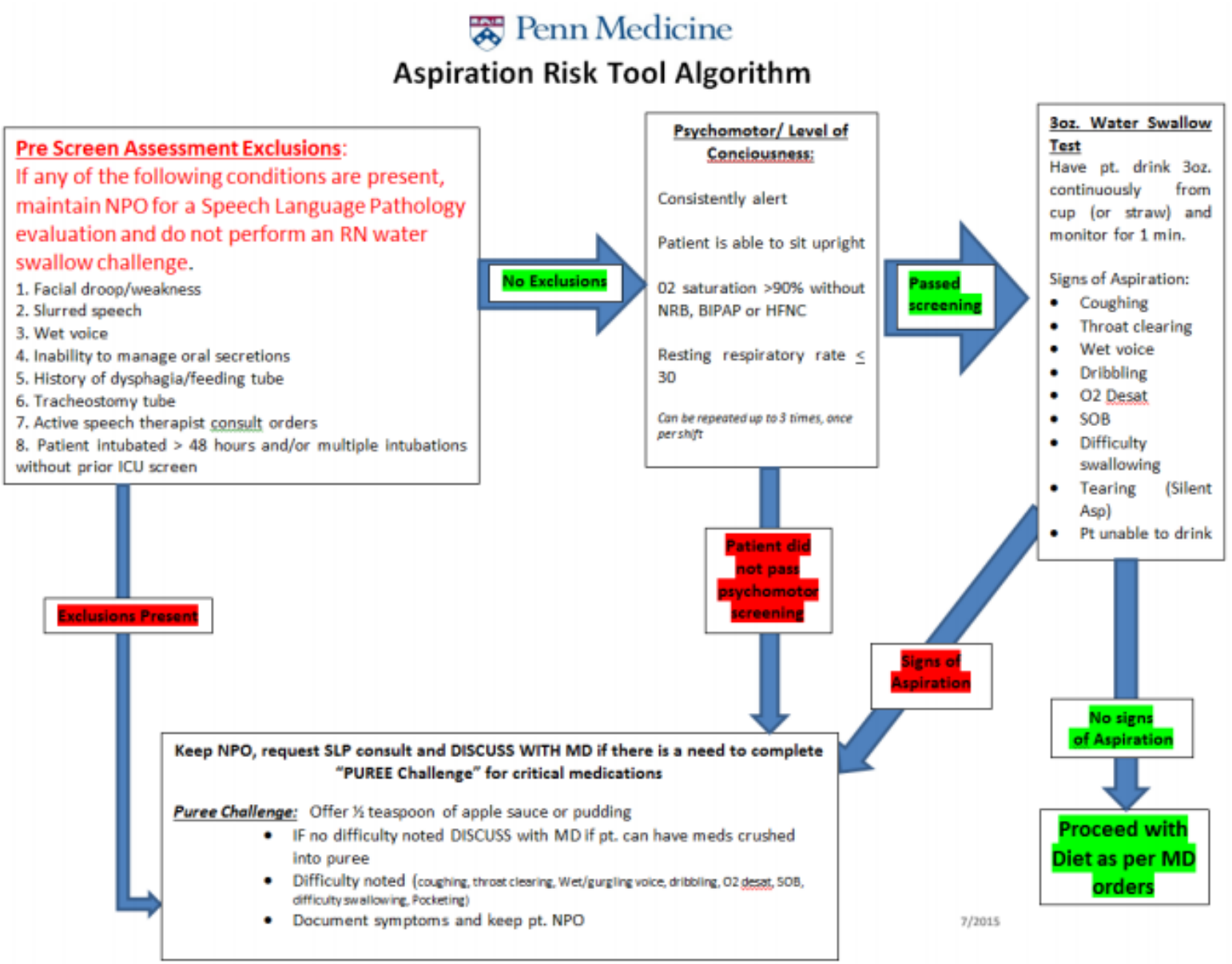
- Give location

Criteria for Initiating RRT

- Chest Pain
  - HR >140, <40
  - BP >200 systolic, >100 diastolic; <80 diastolic *with symptoms*
- Respiratory Problems
  - Rate >35, <8
  - Difficulty breathing/Dyspnea (new onset)
  - Pulse ox <85%
  - Increased oxygen requirements
- Neurologic Problems
  - Acute loss of Consciousness / Syncope
  - Seizure
  - New onset of lethargy/difficulty waking
  - Sudden loss of movement / weakness of face, arm, leg
  - New difficulty speaking
- Other problems
  - Fall with injury or change in neurological status
  - Unexplained agitation, confusion or delirium
  - Loss of pulses
  - Uncontrolled bleeding

ANYTIME the nurse is concerned about the patient!

Aspiration Risk Tool (ART screen)



Telemetry Lead Placement

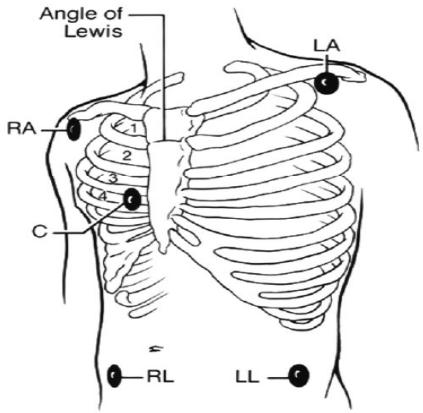
- Prior to placing the monitor on the patient ensure that is the right patient, right monitor, and right room number
- Apply ECG electrodes to pre-selected and prepared skin sites
- Clip hair in a 2x2 inch square for each electrode, if appropriate
- Cleanse areas with soap and water, dry with towel while abrading the skin lightly. Clean areas with alcohol only if extremely oily
- We can also prep with skin prep

STANDARD ELECTRODE PLACEMENT WITH A 5 LEAD SET

Electrode Position:

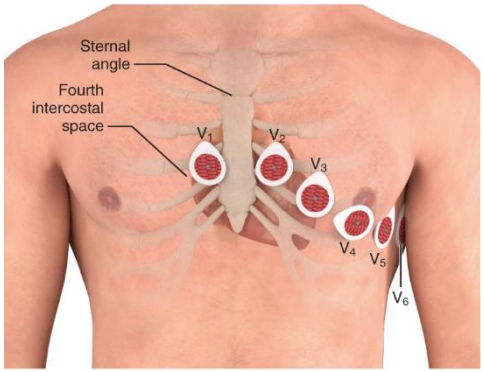
- ***Right Arm - RA electrode (white):*** right shoulder close to the junction of the right arm and torso (infraclavicular fossa near right shoulder)
- ***Left arm - LA electrode (black):*** left shoulder close to the junction of the left arm and torso (infraclavicular fossa near left shoulder)
- ***Left leg - LL electrode (red):*** at the level of the lowest rib, on the left abdominal region or on the hip
- ***Right leg - RL*** (or ground) ***(green) :*** at the level of the lowest rib, on the right abdominal region or on the hip)

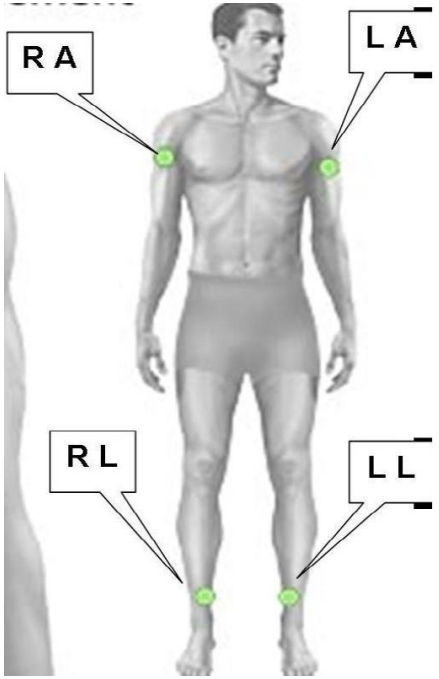
*Women with pendulous breasts should have electrodes placed under, rather than on top of the breast to obtain the appropriate placement.



EKG- What are indications?

EKG video

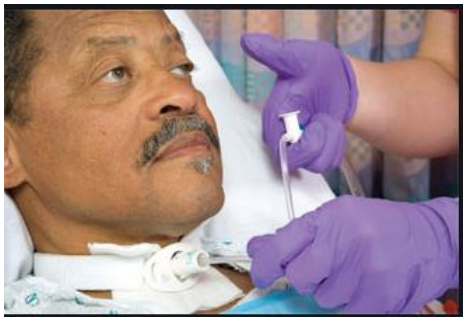




V1-R	4th intercostal space, just to the **left** of the sternum.
V2-R	4th intercostal space, just to the **right** of the sternum
V3-R	Midway between V2 and V4
V4-R	**Right** Mid clavicular line, 5th intercostal space
V5-R	**Right** Anterior axillary line, between V4 & V6
V6-R	**Right** Mid axillary line, horizontal with V4

Tracheostomy Suctioning

- Connect one end of the connecting tubing to the suction canister
- Turn the suction device on and adjust the vacuum regulator to less than 150 mm Hg
- Prepare the disposable suction catheter.
- Using aseptic technique, open the sterile catheter package on a clean surface, using the inside of the wrapping as a sterile field; open the package just enough to expose the connecting end and connect the catheter to the suction tubing.
- Unwrap or open the sterile basin and place it on the bedside table. Be careful not to touch the inside of the basin. Fill the basin with sterile 0.9% sodium chloride solution or sterile water.
- Remove gloves, perform hand hygiene, and don sterile gloves.
- Connect the suction catheter to the connecting tubing.
- With the dominant hand, pick up the suction catheter, taking care to avoid touching any nonsterile surfaces.
- Wrap the suction catheter around the sterile dominant hand to help prevent inadvertent contamination of the catheter.
- With the nondominant hand, pick up the connecting tubing and connect it to the suction catheter.

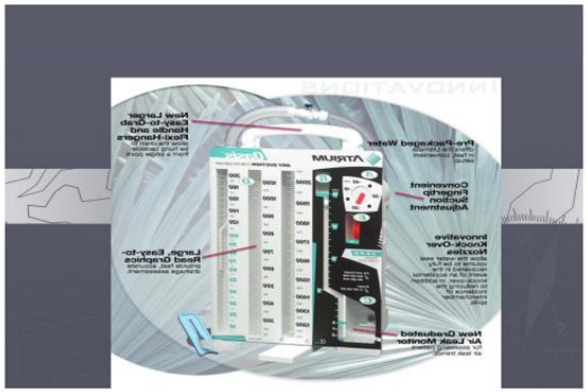


Tracheostomy Suctioning

- Check the equipment for proper functioning by suctioning a small amount of sterile solution from the container.
- With the dominant hand, gently but quickly insert the catheter into the tracheostomy tube with the control vent of the suction catheter open. Do not apply suction during insertion.
- In a patient at high risk for suction-related complications, insert the catheter into the tracheostomy tube until it emerges out of the end of the airway.
- In a patient not at risk for suction-related complications, insert the catheter into the tracheostomy tube until resistance is met and then pull back 1 to 2 cm.
- Using the nondominant thumb, depress the control vent of the suction catheter to apply continuous suction while completely withdrawing the catheter. Ensure that each suction pass does not last longer than 15 seconds to minimize decreases in oxygen saturation. Do not instill 0.9% sodium chloride solution before suctioning.
- Perform one additional pass of the suction catheter if secretions remain in the airway and the patient is tolerating the procedure. Allow a minimum of 20 to 30 seconds between passes for the patient to recover before the next pass.
- Consider administering 100% oxygen to the patient between each pass of the suction catheter. At the completion of the suctioning procedure, consider administering 100% oxygen for 30 seconds.
- Return supplemental oxygen to the baseline level.
- Assess the volume, consistency, and color of the airway secretions. Notify the practitioner of changes in the airway secretions
- Trach Suctioning

Chest Tube Management

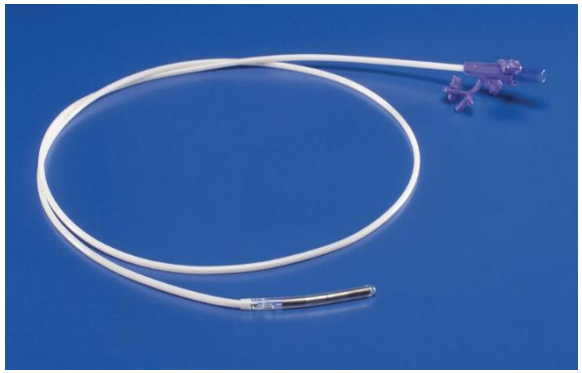
- Indications: pneumothorax, hemothorax, tension, pleural effusion, s/p cardiac or thoracic surgery
- Monitor for s/s of respiratory distress
- Encourage the patient to cough and deep breathe
- Monitor for subcutaneous emphysema and air leak every shift or as needed
- Assist patient with Incentive Spirometry per order
- Activity as allowed (should not disconnect from suction without a physician's order, use portable suction machines)
- Chest percussive therapy (PT) if appropriate as ordered
- Dressing changes QD



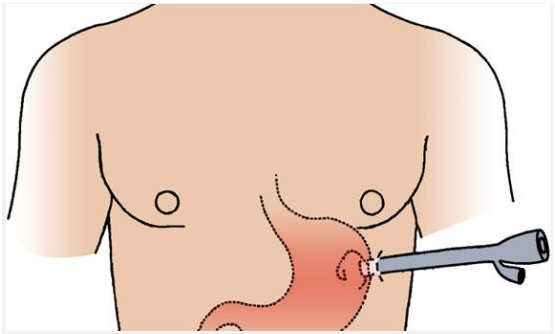
Enteral Nutrition

- **Verify patient name, MRN, formula type, as well as expiration date, route and rate of delivery**
- **Keep head of bed 30 degrees or greater, unless contradicted**
- **Deliver via pump**

Dobbhoff (Feeding Tube)



Percutaneous Endoscopic Gastrostomy Tube (PEG)



Gastrostomy tube. (From Wiegand, D.L. [Ed.]. [2017]. *AACN procedure manual for high acuity, progressive, and critical care* [7th ed.]. St. Louis: Elsevier.)

Ostomy Care

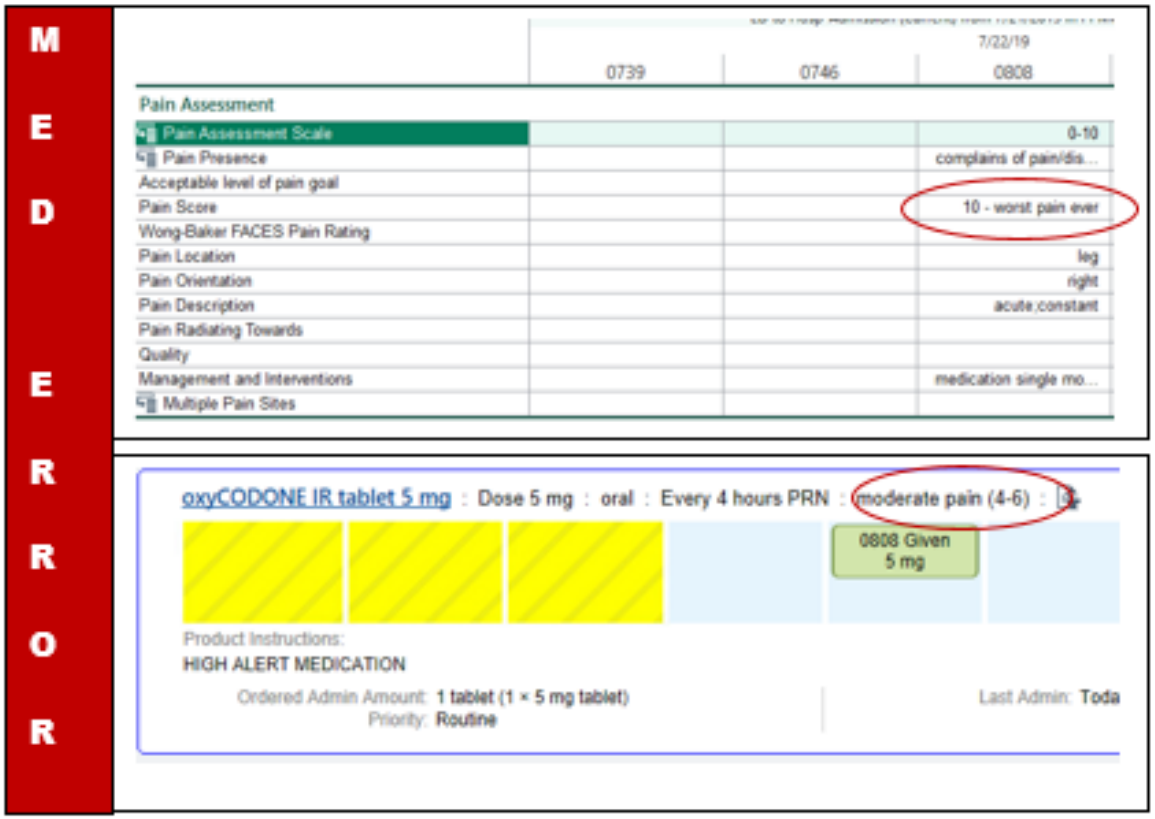
- Perform hand hygiene and don clean gloves
- Explain the procedure to the patient, remove present appliance and discard
- Clean skin and stoma with warm water (no soap is required)
- Remove gloves, perform hand hygiene and don new clean gloves
- Inspect stoma and peristomal skin (skin should be red/pink and moist)
- Measure stoma using stoma guide
- Select and prepare new appliance and cut to proper size
- Remove paper backing from the wafer, apply a small bead of stoma paste to the wafer directing next to the hole that was cut (this will help prevent leaks)
- Roll up bottom of drainable pouch and check seal
- Remove gloves and perform hand hygiene
- Ostomy Care

Care of Surgical Drains

- Types of Drains- The most common drains on the floors are JP drains and Hemovac drains
- Start with putting on appropriate PPE, remove old dressings while assessing the drain site and quality and quantity of output. Empty the drain and record output in the I and O flowsheet in Epic
- https://point-of-care.elsevierperformancemanager.com/skills/414/videos?skillId=GN_37_3#scrollToTop

Pain Management Orders: Scope of Practice

PRN Medication dose administered to patient MUST correspond with the pain-range in provider order



Medication was ordered for pain score of 4-6
Medication was given for pain score of 10
This is considered a medication error and Nurses working out of their Scope of Practice

- Contact provider if PRN order does not support patient reported level of pain
- Practice The 5 Rights of Medication Administration

Pain Assessment and Reassessment

The patient's pain level must be documented prior to administering PRN pain medication and reassessed after administration.

			7/22/19
	1432	1505	1532
Pain Assessment			
Pain Assessment Scale	0-10		0-10
Pain Presence	complains of pain/dis...		acceptable level of pai...
Acceptable level of pain goal	4		
Pain Score	8		4
Pain Location	leg		leg
Pain Orientation	right		right
Pain Description			
Pain Radiating Towards			
Quality			sore
Management and Interventions	medication single mo...		
Multiple Pain Sites			

Patient complained of 8/10 right leg pain
Patient reported an acceptable level of pain was a 4
Patient was given 5mg of PO oxycodone IR for severe pain (7-10)
Patient's pain level was reassessed within 2 hours
Patient reported an acceptable level of pain of 4 at the time of reassessment

- Patient reporting pain require an individualized care plan
- Complete a <u>comprehensive pain assessment</u> on patients who report pain on admission or have pre-existing pain prior to admission

Transfusions

- Prior to picking up the blood product for transfusion verify that there is consent in the medical record or paper chart for this admission
- If asked to pick up a product from the blood bank, please hand the product to the nurse upon arrival
- The transfusion should be started within 30 minutes from picking the product up from the blood bank

- Follow policy regarding strict 2 RN administration
- Prior to administering a blood transfusion, check & document baseline vital signs
- Stay with the patient for the first 15 minutes of transfusion and document vitals again after 15 minutes, at one hour and every hour during transfusion, as well as at completion of transfusion
- Possible reactions- fever/chills, changes in BP and HR, pruritis & hives, SOB, pain (All transfusion reactions should be considered as potentially serious)

High Alert Medications

- All patients must have the LGH ID band and should be identified using 2 patient identifiers before ANY medication administration
- A high alert medication, or HAM, is a medication that carries a heightened risk of causing significant harm if it is used in error. Medications classified as HAMs have a narrow therapeutic index. Drugs with a narrow therapeutic index are dangerous because small changes in dosage or blood drug levels can lead to dose- or blood concentration-dependent critical events. With HAMs, adverse events are persistent, life threatening, permanent, and can lead to disability, the need for hospitalization, or death.

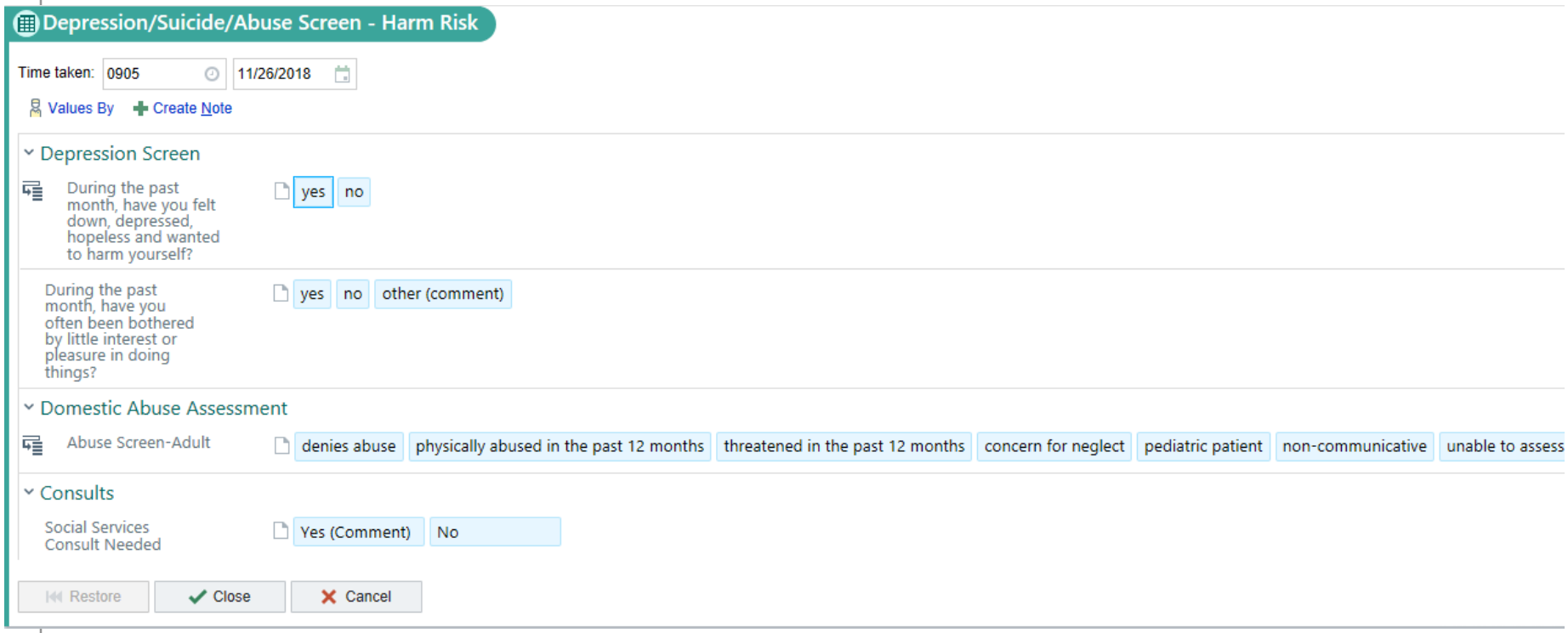
High Alert Medications

- All anticoagulants are HAMs because the high incidence of severe and fatal bleeding events in patients on these medications. If the wrong type of anticoagulant or wrong dose is given, the inability of the blood to clot can be devastating
- Unfractionated heparin (UFH) is associated with a high rate of drug-related problems due to either its inherent pharmacologic properties or an extension of these properties often caused by medication errors.
- Unfractionated heparin has been classified as a high-alert drug by the Institute for Safe Medication Practices.

High Alert Medications

- Insulin comes in several different preparations, each of which works slightly differently: some last up to a whole day (long-acting), some last up to eight hours (short-acting) and some work quickly but don't last very long (rapid-acting)
- If the wrong kind or amount of insulin is given at the wrong time, their blood sugar can drop to low levels that could result in altered mental status, seizure, coma, or death

Admission- Suicide Assessment



Environmental Safety Check- Suicide Flow sheet

- **Environmental Checks**

  - Occur with EVERY change of caregiver
  - String less 3 hole gown, jumpsuit, sweat suit (lock away clothes, belts, shoelaces, etc.)
  - Knives, razors, scissors removed
  - Glassware removed (including mirrors)
  - Medication and toxic substances locked away
  - No matches or lighters
  - Ligature risks removed
  - No silverware (plastic tray and plastic ware for meals)
  - Belongings brought in cleared by RN
  - Patient observed for signs of injury or hidden objects
  - Lift device disabled and lift sling removed

- **Mitigation**

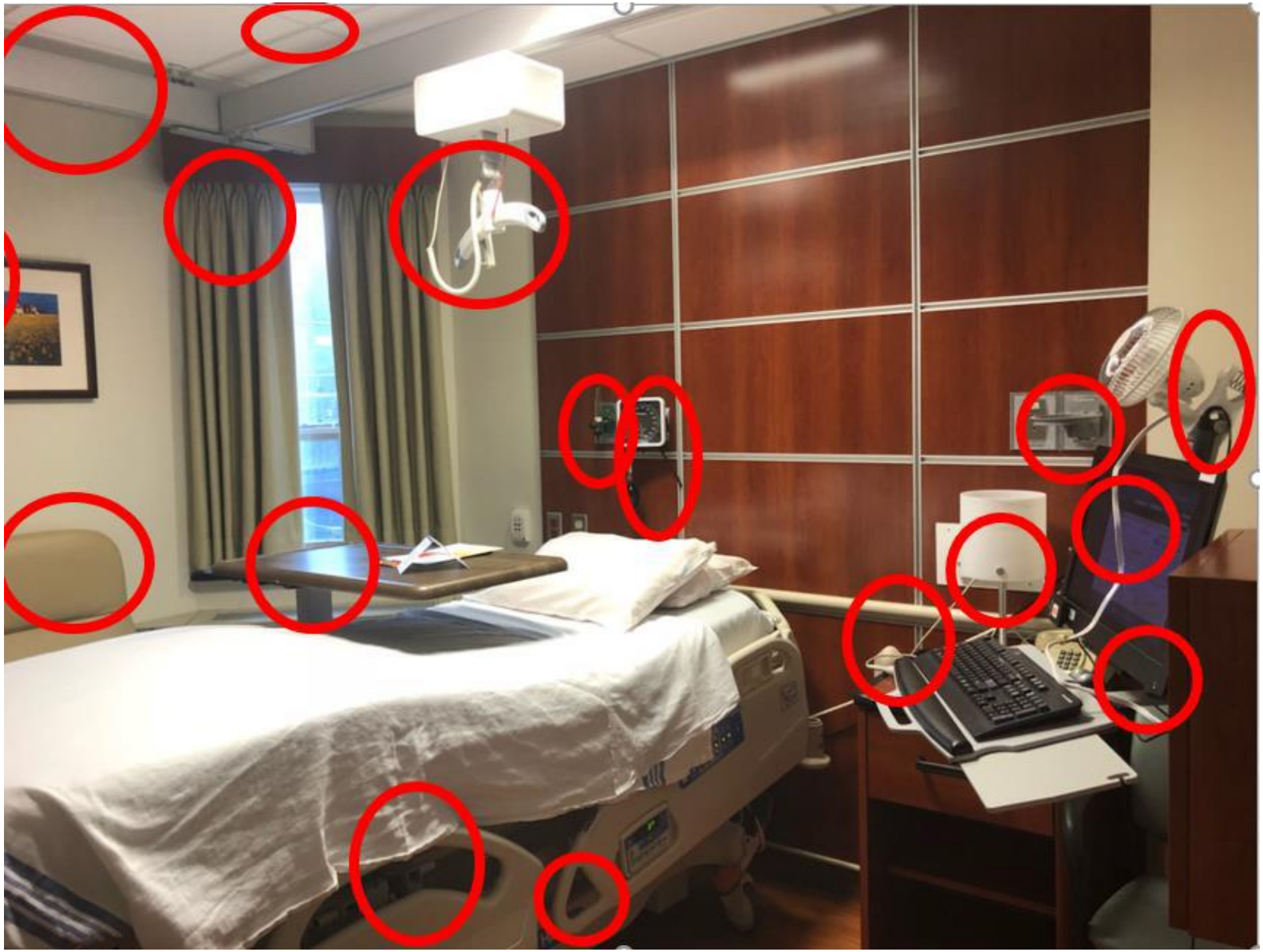
What is a ligature?

- *"A ligature risk is defined as anything which could be used to attach a cord, rope, or other material for the purpose of hanging or strangulation*." – CMS Manual System, Transmittal 176

- Examples:
  - Hand rails
  - Door knobs
  - Door hinges
  - Shower curtains
  - Exposed plumbing/pipes
  - Soap and paper towel dispensers on the wall
  - Power cords
  - Call bell cords
  - Light fixtures or projections from the ceiling

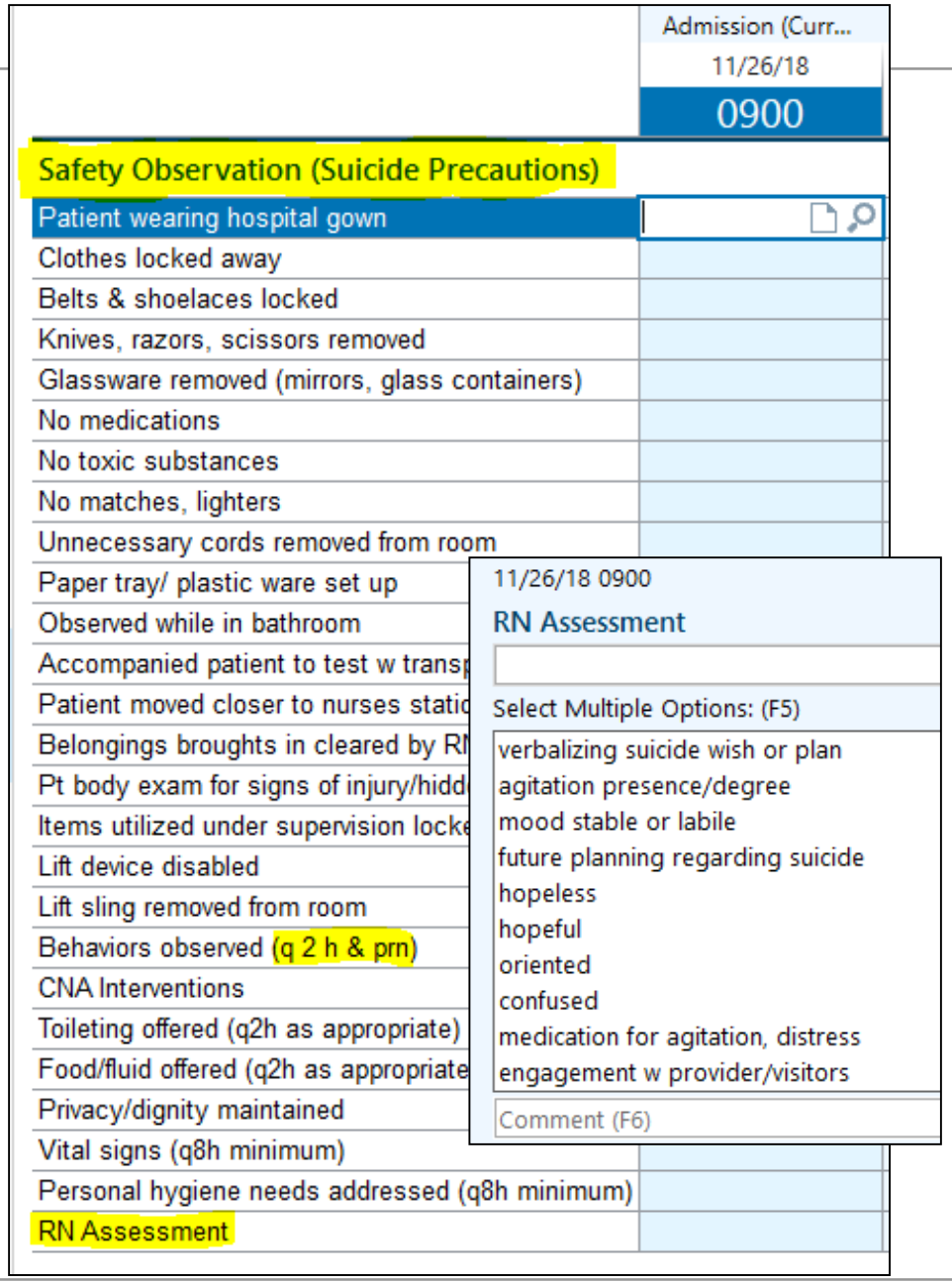
- Remove any ligature risks that you are able to and be aware of those that cannot be removed

Ligature Risks



Documentation

- Safety Observation Flow sheet
  - Initiation & Change of observers
- Behaviors Observed
  - Q2 hrs & PRN
- RN Assessment
  - Once a shift & PRN
- All ‘Patient and Family Education’
  - Outlined in Policy
- Add “Potential for Suicide’ problem to plan of care



Restraints: What is it?

- **Definition**
  - Any manual method, physical or mechanical device, material, or equipment that immobilizes or reduces the ability of the patient to move his or her arms, legs, body or head freely

- **Unnecessary restraint is false imprisonment**

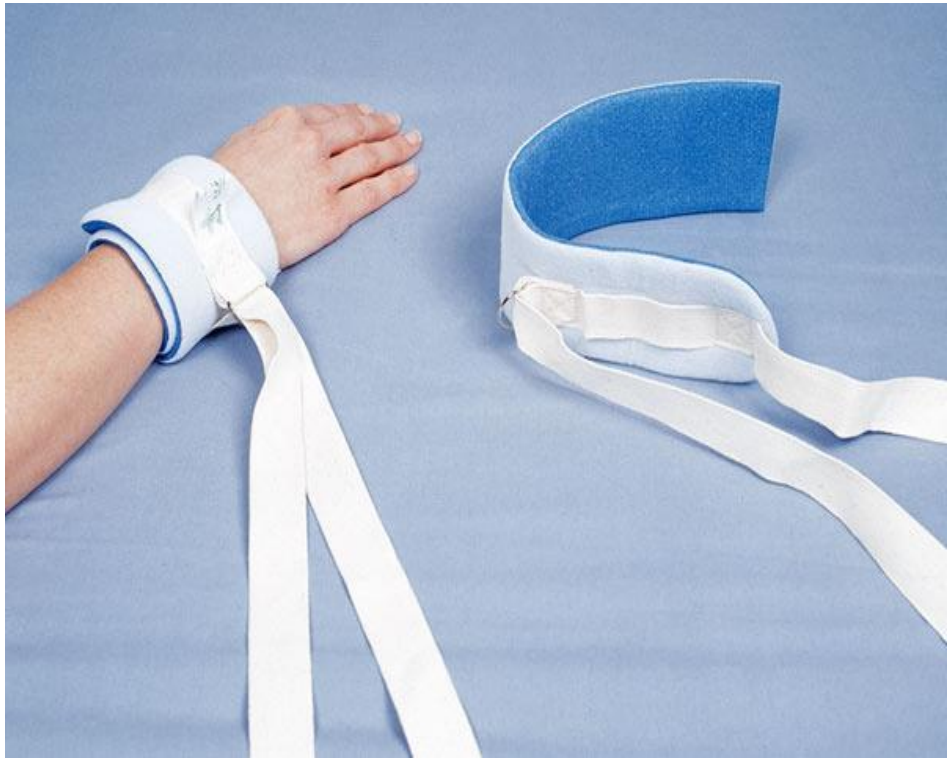
For further information, see policy 11.134 Management of Restraints and Seclusion (Violent & Non-violent Behavior)

Mitts

- Typically used to restrain behavior that would interrupt medical/surgical care
- Any use of the mitt is a restraint, not just if it's secured

Soft Limb Restraints

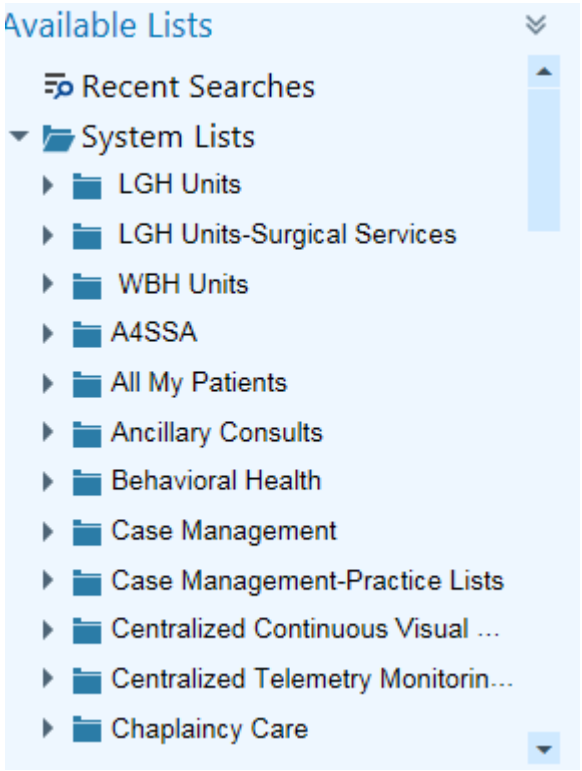
- Can be used on one to all four limbs
- Secure to non-movable part of the bed with quick-release buckles or ties



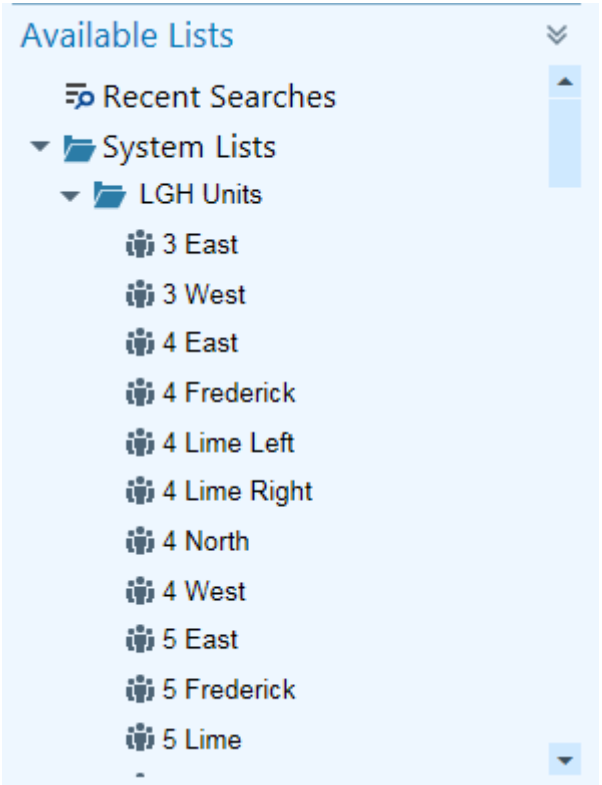
Neoprene Restraints

- Posey Quick-Release
  - Will be stocked in each unit
  - Ankle (red) and wrist (blue) restraints secure with extra-long hook and loop and quick-release buckles
- Can be used for violent or non-violent restraint order
- Can be used for patients who are too big or strong for the soft limb restraints
- Neoprene cuffs gentle on patient's skin

Changing log in Context



System lists > LGH Units > Choose the floor you are working on



BCMA/Rover

- All medications administered on units utilizing barcode medication administration (BCMA) must follow scanning procedures at time of administration or bag hang
- Barcoding does not replace any of the other steps of medication administration safety described
- Knowledge link modules available
- Rover is an application on the I-phone for barcoding

Various Tiers explained:

- **Tier I- Primary Nurse (may be the primary nurse caring for a modified assignment)**
- **Tier II- Support the primary RN- completes task as delegated by the primary RN**
- **Tier III- Functions similarly to a CNA to support the primary RN**