# Nursing Skills in Action: A Practical How-To Guide

## Covenant School of Nursing

## Lubbock Texas

**Compiled, edited, and maintained by**

**Tammy Nesbitt, DNP, RN, CNE**

**Lisa Davis, MSN, RN-BC**

**Trent McGuire MSN-Ed, RN**

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## Assessments

### Basic Head to Toe Assessment: Adult

General Assessment of the adult

**Critical Elements**

1) This procedure is NOT delegated to UAP
2) Follow Universal Competencies
3) Perform nursing health history that prompts focused assessment
4) Assess orientation
5) Assess head, neck, and shoulders
6) Auscultate heart sounds, anterior lung sounds, abdominal sounds
7) Posterior lung sounds and skin assessment
8) Assessment of bilateral upper extremities
9) Assessment of bilateral lower extremities
10) Assessment of perineal area

*Based on C. Lenburg's work in the COPA Model*

**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Don gloves if indicated<br>Teach patient | |
| 2) Assess alertness and orientation | Ask name, date of birth, current date, current location | To assess level of consciousness, and orientation to person, place, and time |
| 3) Assess head, neck, and shoulders | Inspect hair and scalp for dryness, hygiene, color, presence of parasites<br>Use penlight to assess:<br>• eyes for PERRL and cardinal gaze<br>• ears for color, drainage, symmetry<br>• nose for drainage, color and moisture of mucous membranes<br>• mouth and throat for color and moisture of mucous membrane, presence and condition of teeth<br>Inspect facial nerves with smile, tongue movement out and side to side, eyebrow raise<br>Inspect and palpate neck for swelling/edema, pain, tenderness<br>Carotid pulse palpation (ONE at a time) bilaterally<br>Assess neck range of motion with movement side to side, chin to chest, neck extension<br>Assess strength or weakness with shoulder shrug against resistance<br>Assess skin turgor at clavicle | Lack of symmetry indicates neurologic deficit |
| 4) Auscultate heart sounds, anterior lung sounds, abdominal sounds | Place a clean stethoscope diaphragm on chest<br>Listen in 4 locations to assess the heart valves (aortic, pulmonic, tricuspid, mitral or PMI) for at least 2 complete cycles at each location<br><br>Place stethoscope diaphragm on chest | Clean stethoscope to minimize risk of infective agent transfer from person to person<br>Swishing, rubs, clicks, and/or irregular heart sounds are not normal in the chest |

| **Basic Head to Toe Assessment: Adult**<br>General Assessment of the adult | | |
|---|---|---|
| | Listen for 1 full breath in 7 locations<br>Listen anteriorly and laterally<br>Move in a side to side, top to bottom pattern, comparing left and right sides to one another<br><br>Inspect abdomen for rashes, lesions, distention<br>Place stethoscope diaphragm over the right lower quadrant (RLQ) above the cecum region<br>Listen for 5-20 seconds in 4 quadrants<br>Absent sounds are defined by no sound in 3-5 minutes<br>Move clockwise around the abdomen<br>Palpate abdomen for pain, tenderness<br>Ask patient about bowel and urinary output habits | Adventitious sounds such as wheezing, crackles, stridor, and/or rubs are not normal<br>Absent or distant sounds are abnormal<br><br>If sounds are heard immediately, continue around abdomen<br>Swishing sounds (bruits) with visual pulsations are not normal in the abdomen and may indicate abdominal aortic aneurysm |
| 5) Assess posterior lung sounds and skin | Place stethoscope diaphragm on back<br>Listen for 1 full breath in 10 locations<br>Listen posteriorly and laterally<br>Move in side to side, top to bottom pattern, comparing left and right sides to one another<br><br>Inspect skin on back, buttocks, and posterior bony prominences for redness, breakdown | Adventitious sounds such as wheezing, crackles, stridor, and/or rubs are not normal<br>Absent or distant sounds are also abnormal<br><br>Bony prominences are the most likely areas to experience skin breakdown and pressure injuries |
| 6) Assessment of bilateral upper extremities | Inspect skin of bilateral upper extremities (BUE) for edema, color, temperature, symmetry<br>Perform range of motion (ROM) – out to side, circles, “touchdown”<br>Wrist ROM – circles, flexion and extension<br>Bilateral hand grasps, resistance pulling and pushing hands<br>Palpate radial pulses at the same time bilaterally<br>Assess fingers/nail bed for capillary refill, nail shape bilaterally | Bilateral assessment to check equality |
| 7) Assessment of bilateral lower extremities | Inspect skin of bilateral lower extremities (BLE) for edema, color, temperature, symmetry with attention to heels<br>Perform ROM – lift, knee bend, hip flexion<br>Ankle ROM – circles, flexion and extension<br>Bilateral toe wiggle, resistance pulling and pushing feet<br>Palpate pedal pulses at the same time bilaterally<br><br>Assess toes/nail beds for capillary refill, nail shape bilaterally | Bilateral assessment to check equality |
| 8) Assessment of perineal area | Inspect urethral meatus and perineal area | Look for redness, swelling, abnormalities, presence of urinary catheter, presence of urine or stool |

| **Basic Head to Toe Assessment: Adult**<br>General Assessment of the adult | | |
|---|---|---|
| 9) Complete procedure | Perform hand hygiene<br>Record results and report if indicated | |

*Created by IM1 Faculty, Covenant School of Nursing, Jan 2019*
*Revised: Jan 2022*
*Reviewed: 2021*
*Fundamentals of Nursing (9th ed.), Potter & Perry, 2017*
*HESI Skills Module, Head to Toe Examination of the Adult, 2019*

**Abdominal Focused Assessment: Adult**

Focused assessment of the abdomen and its structures

**Critical Elements**

1) This procedure is NOT delegated to unlicensed assistive personnel (UAP)
2) Follow Universal Competencies
3) Inspect the abdomen for size, shape, discolorations, surgical scars, wounds, and lesions
4) Auscultate for the presence or absence of bowel and vascular sounds in epigastric region and all four quadrants of the abdomen
5) Perform light palpation over the epigastric region and all four quadrants of the abdomen to assess for presence of tenderness, guarding, distention, or masses

*Based on C. Lenburg COPA Model*

**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Don gloves if indicated<br>Identify patient<br>Teach patient | |
| 2) Inspect abdomen | Visually inspect size, shape, symmetry, scars, wounds, dressings, and drains | Visualization is the least invasive assessment and helps identify areas that might require caution with auscultation and palpation |
| 3) Auscultate abdomen | Place a clean stethoscope diaphragm over the right lower quadrant (RLQ) above the cecum region<br>Listen for 5-20 seconds in 4 quadrants and below the xyphoid process<br>Absent sounds are defined by no sound in 3-5 minutes<br>Move clockwise around the abdomen | Clean stethoscope to minimize risk of infective agent transfer from person to person<br>If sounds are heard immediately, continue around the abdomen<br>Swishing sounds (bruits) with visual pulsations are not normal in the abdomen as they may indicate abdominal aortic aneurysm |
| 4) Palpate abdomen | Begin in RLQ and move clockwise around abdomen<br>Palpate for tenderness, pain, masses, distention, and guarding | Use gentle pressing motion with ends of fingers<br>Never palpate a pulsating abdominal mass |
| 5) Complete procedure | Perform hand hygiene<br>Record results and report if indicated | |

*Created by IM2 Faculty, Covenant School of Nursing Nov, 2015*
*Revised: IM2 Faculty, Mar 2016, July 2016, Feb 2018, Mar 2019*
*Reviewed: Feb 2021*
*Potter and Perry 9th ed., 2017*
*HESI: Clinical Skills for Nursing Collection/Essentials Collection, 2020*

**Cardiac Focused Assessment: Adult**

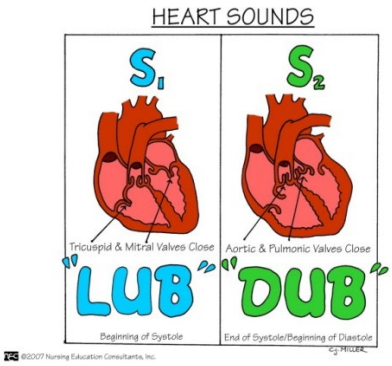
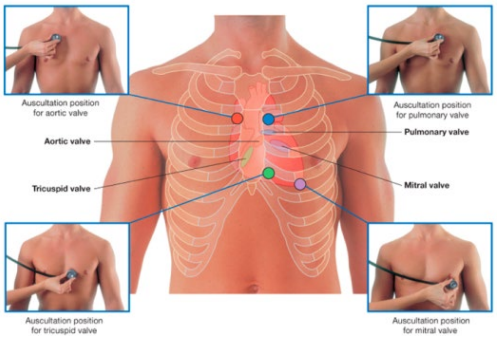
Focused assessment of the status of the heart

**Critical Elements**

1) This procedure is NOT delegated to UAP
2) Follow Universal Competencies
3) Perform nursing history that prompts focused assessment
4) Auscultate heart sounds at 4 correct landmarks
5) Count apical heart rate

*Based on C. Lenburg's work in the COPA Model*

**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Don gloves if indicated<br>Identify patient<br>Teach patient | |
| 2) Inspect and auscultate | Inspect chest<br><br>Place a clean stethoscope diaphragm and bell (if available) on the chest<br>Listen in 4 locations for at least 2 complete cycles at each location to assess the heart valves<br>  <br>http://www.slideshare.net/TeleClinEdcardiac-assessment-bmh-tele | Look for scars, bruising, or abnormalities, such as pacemaker implants, wires, etc. Patient Safety, Infection Control<br><br>2nd intercostal on **Rt** (aortic valve)<br>2nd intercostal on **Lt** (pulmonic valve)<br>4th or 5th intercostal on **Lt** (tricuspid valve)<br>5th intercostal mid clavicle on the **Lt** (mitral valve), also known as the apex, the apical site, and the PMI (point of maximal impulse)<br>  <br>https://web.duke.edu/anatomy/Lab03/Lab4_preLab.html<br>Swishing, rubs, clicks, and or irregular heart sounds are not normal in the chest |
| 3) Auscultate apical pulse | Place the stethoscope over the apex of the heart and count each set of "lub-dub" as one heartbeat. Count for one (1) full minute | If an irregular rate or rhythm is assessed during vital signs, an apical rate is always indicated. Extra pulsations and slow or rapid rates are not normal. An apical rate is more accurate than a radial rate |
| 4) Complete procedure | Perform hand hygiene<br>Record results and report if indicated | |

*Created by IM2 Faculty, Covenant School of Nursing, Nov 2015*
*Revised: IM2 Faculty, Mar 2016, Apr 2017, Feb 2018*
*Reviewed: Feb 2021*
*Potter and Perry 9th ed., 2017*
*HESI: Clinical Skills for Nursing Collection/Essentials Collection, 2020*

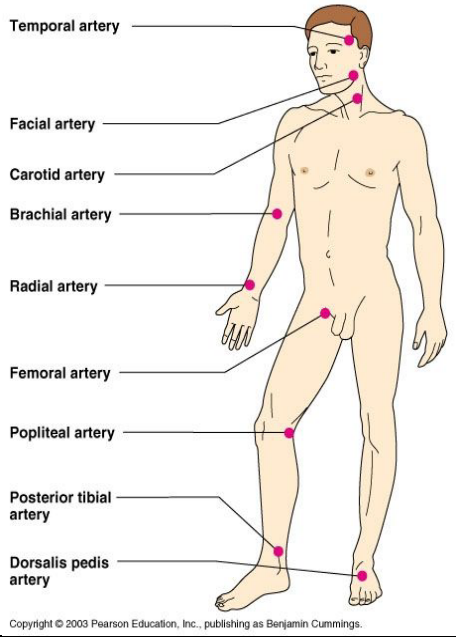
**Peripheral Neurovascular Focused Assessment: Adult** - An examination and comparison of the status of the circulation and innervation to the extremities bilaterally

**Critical Elements**

1) This procedure is NOT delegated to UAP
2) Follow Universal Competencies
3) Perform nursing history that prompts focused assessment
4) Assess six "Ps" (pain, pallor, pulselessness, paresthesia, paralysis, poikilothermia) bilaterally

*Based on C. Lenburg's work in the COPA Model*

**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Don gloves if indicated<br>Identify patient<br>Teach patient | |
| 2) Assess the six "Ps" | Assess for **pain** in the extremity<br>Assess for **pallor** (paleness) of the extremity and check capillary refill<br>Assess peripheral **pulse** for strength and equality<br>Assess for **paresthesia** (numbness or tingling)<br>Assess for **paralysis** (loss of movement)<br>Assess for **poikilothermia** (coolness) in the extremity | Patient safety<br>Assessment abnormalities can indicate insufficient or absent arterial circulation and innervation to the extremity<br>  |
| 3) Complete procedure | Perform hand hygiene<br>Record results and report if indicated | |

*Created by IM2 Faculty, Covenant School of Nursing, Nov 2015*
*Reviewed: IM2 Faculty, Feb 2021*
*CHS Policy: X-E-1, Application, Care and Removal of Casts, 2012*
*Potter and Perry 9th ed., 2017*
*HESI: Clinical Skills for Nursing Collection/Essentials Collection, 2020*

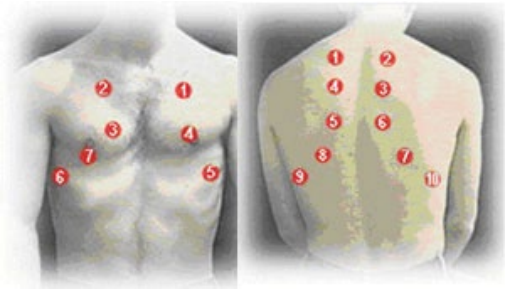
**Respiratory Focused Assessment: Adult** - An examination of the status of the lungs

**Critical Elements**

1) This procedure is NOT delegated to UAP
2) Follow Universal Competencies
3) Assess oxygen saturation ($O_2$ Sat or $SaO_2$)
4) Obtain respiratory rate
5) Observe depth, rhythm, and symmetry of chest movement
6) Auscultate anterior and posterior lung fields, moving systematically from side to side and top to bottom
7) Identify presence or absence of adventitious respiratory sounds
8) Assess for the presence of respiratory distress

*Based on C. Lenburg's work in the COPA Model*

**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Don gloves if indicated<br>Identify patient<br>Teach patient | |
| 2) Obtain respiratory rate and $O_2$ Sat | Perform during assessment based on priority need | Helps detect deterioration of physiological function |
| 3) Inspect upper airway | Assess for purse-lipped breathing, circumoral pallor, cyanosis of lips, oral mucosa, or fingertips<br>Assess position of trachea<br>Assess for cough | Cyanosis indicates hypoxia<br><br>Deviated trachea can indicate a mediastinal shift |
| 4) Inspect chest | Visually inspect size, shape, symmetry, scars, wounds, dressings, IV sites, and drains<br>Observe for intercostal retractions | Visualize before auscultation or palpation |
| 5) Auscultate chest  | Place a clean stethoscope diaphragm on the chest<br>Listen for 1 full breath in each location<br>Listen anteriorly, laterally and posteriorly<br>Move in a side to side, top to bottom pattern, comparing left and right sides to one another | Clean stethoscope to minimize risk of infective agent transfer from person to person<br><br>Adventitious sounds such as wheezing, crackles, stridor, rubs are not normal<br>Absent or distant sounds are also abnormal |
| 6) Complete procedure | Perform hand hygiene<br>Record results and report if indicated | |

*Created by IM2 Faculty, Covenant School of Nursing, Nov 2015*
*Revised: IM2 Faculty Mar 2016, July 2016, Apr 2017, Feb 2018, Mar 2019*
*Reviewed: Feb 2021*
*Potter and Perry 9th ed., 2017*
*HESI: Clinical Skills for Nursing Collection/Essentials Collection, 2020*

## Blood Draws

**Blood Draw from a Subclavian, Jugular, or PICC Central Venous Access Device (CVAD)**

The aspiration of blood into a collection device from an intravenous device located in a central vein to obtain a specimen for testing

**Critical Elements**

1) This procedure is NOT delegated to UAP
2) Gather supplies and prepare workspace
3) Follow Universal Competencies
4) Aseptically collect a blood sample

**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Verify orders or protocol | Requires an order or agency protocol | Patient Safety |
| 2) Gather supplies and prepare workspace | **Follow CDC guideline for one syringe, one access, one time**<br>Collection device depending on method<br>Luer-Lok vacutainer sleeve (Safe-T Holder) OR<br>10 mL syringes<br>Blood specimen tubes<br>3 prefilled sodium chloride 10 mL syringes<br>Antiseptic cap<br>Needleless connector if needed<br>Alcohol swabs<br>Patient labels for vacutainer tubes<br>2 biohazard bags for blood tube transport | **Never use anything smaller than a 10 mL syringe to flush (assess) patency of the line**<br>Smaller barrel syringes can increase pressure in the lumen causing dislodgement of a thrombus (if present) and/or rupture the lumen |
| 3) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Identify patient<br>Teach patient | |
| 4) Draw blood | *Stop any intravenous infusion for 2 minutes before blood is drawn*<br>Perform hand hygiene and don clean gloves<br>Remove antiseptic cap and allow access port to dry<br>Clean needleless connector with alcohol pad for 15 seconds using friction and twisting motion, allow to dry before connecting sterile syringe<br>Do not reuse alcohol pads<br>Purge air from prefilled 10 mL sodium chloride flush syringe, attach to needleless connector and aspirate for blood return then flush with the 3 - 5 mL sodium chloride.<br>Without disengaging flush syringe, aspirate 3 - 5 mL of blood and discard<br><br>Aseptically attach new empty 10 mL syringe or Luer-Lok safety holder and obtain blood specimen | Prevents erroneous results<br>Bactericidal effect is achieved with drying<br>Follow CDC guidelines:<br>**One needle, one stick, one time**<br>**One access, one syringe, one time**<br>**One alcohol pad, one time**<br><br>Aspirating establishes presence in vessel<br>**Failure to purge air from any syringe for intravenous use can result in an air embolus**<br>To help prevent hemolysis:<br>Use distal port; allow blood to wash down the side of the blood tube; aspirate sample slowly when using a syringe<br>Scrub access port between every syringe attachment |

**Blood Draw from a Subclavian, Jugular, or PICC Central Venous Access Device (CVAD)**

The aspiration of blood into a collection device from an intravenous device located in a central vein to obtain a specimen for testing

| | | |
|---|---|---|
| | Follow order of draw | Use blunt fill needle on syringes to transfer blood to specimen tubes |
| 5) Complete the job | Flush catheter with 19 mL sodium chloride flush using a pulsing technique<br>Remove flush syringe then clamp lumen<br>Apply antiseptic cap<br>Label blood specimen tubes in presence of patient<br>Place specimen samples in biohazard bag for transport<br>Dispose of used supplies<br>Perform hand hygiene and document | Use 2 10 mL sodium chloride flush syringes - use full 10 from first syringe, scrub hub with alcohol pad, allow to dry, then use 9 mL from second syringe |

*Created by IM2 Faculty, Covenant School of Nursing, Nov 2015*
*Revised: IM2 Faculty, Apr 2016, July 2016, Sep 2016, Apr 2017, Feb 2018, Mar 2019, Apr 2020,* ***Feb 2021***
*CDC: "Central Line-associated bloodstream infections: Resources for Patients and Healthcare Providers", Mar 2016*
*pp. 1122-1124, Clinical Nursing Skills: Basic to Advanced, Smith, et. Al., 9th ed., 2017*
*CHS Policy: Use, Care, Maintenance, Removal of All Central Venous Catheters, 2016*
*CHS Policy: Blood Draws, 2015*
*CDC: One and Only Campaign, Safe injection practices: what they are and why follow them, 2016*
*HESI: Clinical Skills for Nursing Collection/Essentials Collection, 2020*

**Blood Draw from a Peripheral Vein**

The insertion of a needle into a peripheral vein and aspiration of blood into a collection device to obtain a specimen for testing

**Critical Elements**

1) This procedure is NOT delegated to UAP
2) Gather supplies and prepare workspace
3) Follow Universal Competencies
4) Aseptically collect a blood sample

**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Verify orders or protocol | Requires an order or agency protocol | Patient Safety |
| 2) Gather supplies and prepare workspace | Needle with safety device<br>Collection device depending on method<br>Syringe<br>Butterfly<br>Vacu-holder™<br>Blood specimen tubes<br>Alcohol pad/chlorhexidine<br>Tourniquet<br>Elastic self-adhering wrap<br>Cotton balls<br>Patient labels for blood tubes<br>Biohazard bags<br>  <br>Vacu-holder™ | |
| 3) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Identify patient<br>Teach patient | |
| 4) Draw blood | Don clean gloves<br>Apply tourniquet<br>Select the vein<br><br>Clean skin with alcohol swab and allow to dry<br>Anchor the vein<br>Pierce the skin with bevel up, holding device at a 15-30-degree angle<br>Obtain blood specimen adhering to order of draw<br>Release the tourniquet | 2-4 inches above chosen site<br><br>Median or middle area of antecubital site is normally used<br>Bactericidal effect is achieved with drying<br><br><br>Prevents erroneous results |
| 5) Complete the job | Place cotton ball over puncture site<br>Apply gentle pressure to the surface of the skin, remove needle, obtain hemostasis, instruct patient not to bend elbow<br>Leave cotton ball in place and wrap with an elastic self-adhering wrap<br>Tilt tubes with additives so that blood washes down the side of tube<br><br>Label blood specimen tubes in presence of patient | If using Vacu-holder™, remove vacutainer prior to removing needle from puncture site<br>Bending elbow may cause bleeding or hematoma<br><br>Helps mix specimen with additives in tubes to prevent hemolysis and clotting<br>Patient Safety |

**Blood Draw from a Peripheral Vein**

The insertion of a needle into a peripheral vein and aspiration of blood into a collection device to obtain a specimen for testing

| | | |
|---|---|---|
| | Place in biohazard bag for transport<br>Dispose of used sharps and syringes in sharps container<br>Dispose of other contaminated supplies<br>Perform hand hygiene and record | |

*Created by IM2 Faculty, Covenant School of Nursing, Nov 2015*
*Revised: IM2 Faculty, Mar 2016, July 2016, Feb 2018, Mar 2019, Apr 2020*
*Reviewed: Feb 2021*
*pp. 695-697, Clinical Nursing Skills: Basic to Advanced, Smith, et. Al., Pearson Publishing, 9th ed., 2017*
*CHS Policy: Blood Draws, 2015*
*HESI: Clinical Skills for Nursing Collection/Essentials Collection, 2020*

## Central Venous Access Device Dressing Change

The aseptic cleaning of a central venous catheter

### Critical Elements

1) This procedure is NOT delegated to UAP
2) Gather supplies and prepare workspace
3) Follow Universal Competencies
4) Clean site
5) Allow to completely dry
6) Apply antimicrobial disc
7) Apply occlusive dressing

**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Verify protocol | Agency Policy is to change every 7 days or as needed based on assessment | The procedure requires aseptic technique |
| 2) Gather supplies | Central Line Dressing kit | |
| 3) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Identify patient<br>Teach patient | |
| 4) Prepare for care | Clean work surface with antiseptic and allow to dry<br>Open Cleaning pack and apply mask<br>Mask application to patient<br>Perform hand hygiene and don sterile gloves<br>Inspect site for redness or drainage and palpate for tenderness | Infection Control<br>Nurse dons mask first, performs hand hygiene, then ensures patient mask placement<br>**Applying the mask after gloving will contaminate the gloves and the patient** |
| 5) Remove old dressing | Loosen edges of dressing and remove **TOWARD** the insertion site (toward neck/axilla). Avoid touching insertion site during removal<br>Grasp used dressing in glove and pull gloves over dressing<br>Visually re-inspect site for drainage, odor, and condition of sutures | Removing toward the insertion site will help prevent dislodging the catheter |
| 6) Perform dressing change | Open sterile pack and create sterile field<br>Perform hand hygiene<br>Don sterile gloves<br>Activate chlorhexidine sponge<br><br><br><br>Scrub the insertion site using friction for 30 seconds<br><br>Allow to dry completely (May take as long as 3 minutes) | <br><br><br><br>Use alcohol pads if patient is allergic to chlorhexidine<br>May use alcohol pads to pre-clean if excessively soiled<br>Back and forth friction scrub works the solution into the skin. A 30 second scrub is evidence-based from the manufacturer<br>Must dry completely for antisepsis |
| 7) Apply dressing | Cover insertion site with antimicrobial product (disk, gel, etc.) and transparent | **Do not use if patient is allergic antimicrobial agent** |

## Central Venous Access Device Dressing Change

The aseptic cleaning of a central venous catheter

| | | |
|---|---|---|
| | dressing; press from site outward and seal edges<br>Label dressing with initials, date, and time | Antimicrobial dressings are used to prevent microbial growth and must come in contact with the skin<br>Transparent dressing acts as a barrier to microbes, allows skin to "breathe" and allows visualization of site |
| 8) Assess need to change needleless ports and antiseptic caps | Refer to facility policy. Covenant policy: Change needleless ports every 7 days, for precipitate in connector, cracks, leaks, defects, contamination, or removal of needleless port | Safety and maintenance guidelines vary widely, refer to specific protocols |
| 9) Complete procedure | Dispose of used supplies<br>Perform hand hygiene<br>Record results and report if indicated<br>Teach patient to keep site dry and avoid touching site and tubing as much as possible<br>Teach patient to report changes to healthcare workers, such as: loose dressing, wetness, soreness, redness, and onset of fever or chills | Moisture at site encourages bacterial growth. Touching tubing and site will contaminate with bacteria from hands. Early intervention with impaired integrity of dressing will help prevent bacterial invasion. Early intervention with signs of infection will help prevent sepsis |

*Created by IM2 Faculty, Nov 2015*
*Revised: IM2 Faculty, Apr 2016, July 2016, Sep 2016, Apr 2017, July 2017, Feb 2018, Mar 2019, Apr 2020, Feb 2021*
*CDC: "Central Line-associated bloodstream infections: Resources for Patients and Healthcare Providers", Mar 2016*
*pp. 1119-1120, Clinical Nursing Skills: Basic to Advanced, Smith, et. Al., Pearson Publishing, 9th ed., 2017*
*CHS Policy VIII-E-5, Revised April 2015*
*HESI: Clinical Skills for Nursing Collection/Essentials Collection, 2020*

## Central Venous Access Device Removal: Subclavian, Jugular, and PICC lines

The aseptic removal of a central venous catheter

**Critical Elements**

1) This procedure is NOT delegated to UAP
2) Gather supplies and prepare workspace
3) Follow Universal Competencies
4) Position patient supine
5) Clean site
6) Remove line and apply petroleum-based gauze or ointment
7) Apply occlusive dressing and hold pressure

**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Verify order and protocol | Intravenous catheters are usually discontinued before discharge. An order must be written to keep it. Some lines can only be removed by specialists | The procedure requires aseptic technique |
| 2) Gather supplies | Central Line Dressing kit<br>Suture Removal Set with 2x2 gauze<br>Petroleum-based gauze or ointment | Sterile cup if catheter culture ordered |
| 3) Follow Universal Competencies | Introduce self and identify patient<br>Perform hand hygiene<br>Teach patient: when to hold breath and positioning following procedure | |
| 4) Remove old dressing and prepare site | Follow CVAD Dressing Change NII steps | |
| 5) Remove line | Position patient supine<br>Remove sutures or securement device<br>Place folded 4x4 gauze over site<br>Have patient hold breath<br>Remove line and verify that it is intact (must measure length for PICC lines)<br>Hold pressure 5 min (10 min for anticoagulated patients and PICC lines)<br>Apply petroleum-based gauze or ointment to insertion site<br>Apply transparent dressing **(must add 4x4 folded gauze over transparent dressing and secure with elastic self-adhering wrap for PICC lines)**<br>Have patient remain supine for 30 min after removal<br><br>Teach patient about home care | Prevent air embolus<br><br><br>Helps prevent air embolism<br>Notify healthcare provider if not intact<br>May need more than 10 min pressure for anticoagulated patient<br><br>Transparent dressing and petroleum-based gauze or ointment act as barriers to air entry, microbes, and allow skin to “breathe”<br><br>Supine position is precautionary to prevent potential embolism migration to head<br>Dressing should remain in place for 24 hours **(48 hours for PICC lines)**, Don’t get dressing wet |

| **Central Venous Access Device Removal: Subclavian, Jugular, and PICC lines**<br>The aseptic removal of a central venous catheter | | |
|---|---|---|
| 6) Culture of tip, if required | As catheter is removed, avoid contamination and drop onto sterile field<br>Using sterile scissors cut off at least 2 inches from tip end of catheter, allowing tip to drop into sterile specimen container<br>Seal container<br>Apply identification label to container and place in Bio-hazardous specimen bag | |
| 7) Complete procedure | Dispose of used supplies<br>Perform hand hygiene and record | |
| *Created by IM2 Faculty, Covenant School of Nursing, Nov 2015*<br>*Revised: IM2 Faculty, Apr 2016, July 2016, Feb 2018, Mar 2019*<br>*Reviewed: Feb 2021*<br>*Central venous catheter removal: procedure and rationale., BJN, Vol. 9, (22), 2000*<br>*CHS Policy VIII-E-5, Revised April 2015, System-wide update monthly education, Apr 2016*<br>*ATI Skills Modules: Central Venous Access Devices, 2016*<br>*HESI: Clinical Skills for Nursing Collection/Essentials Collection, 2020* | | |

## Intravenous Therapy

### Intravenous (IV) Catheter Insertion

The insertion of a catheter into a vessel for the continuous or intermittent infusion of fluids or administration of medications

**Critical Elements**

1) This procedure is NOT delegated to UAP
2) Gather supplies and prepare workspace
3) Follow Universal Competencies
4) Aseptically start an IV

**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Verify orders or protocol | Requires an order or agency protocol | The procedure requires an order or a protocol |
| 2) Gather supplies and prepare workspace | IV start kit<br>Containing a tourniquet, chlorhexidine swab, occlusive dressing, 2x2 gauze, and tape<br>IV catheter<br>Needleless port<br>Antiseptic caps<br>Sodium chloride flush | <br><br><br><br>Size of catheter is dependent upon vein chosen or intent of use – 22 to 20 gauge is a good starting place, but if blood is going to be given, an 18 g is preferred |
| 3) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Identify patient<br>Teach patient | |
| 4) Prepare for care | Apply tourniquet and select vein<br>Release tourniquet<br>Perform hand hygiene<br>Prepare supplies for use<br>Scrub insertion site with chlorhexidine prep pad and allow to dry<br>Re-apply tourniquet<br>Don clean gloves | <br><br><br><br>Bactericidal effect is achieved with drying<br>Apply approx. 4-6 inches above insertion site |
| 5) Insert catheter | Anchor the vein<br>Prepare the device for use<br>Pierce the skin with stylet bevel up, holding device at an angle of no greater than 5 degrees<br>Observe for blood return<br>Lower and advance the entire catheter and needle unit slightly<br>Hold needle assembly stationary<br>Advance catheter off needle<br>Continue to advance catheter off the needle until the hub meets the skin<br>Release the tourniquet<br>Remove or retract stylet and ensure activation of safety mechanism | Prevents vein from rolling<br><br><br><br><br>Confirmation of vessel entry<br>Ensures catheter tip is in vessel<br><br><br>Observation of blood return between the needle and catheter confirm catheter is in the vessel |

**Intravenous (IV) Catheter Insertion**

The insertion of a catheter into a vessel for the continuous or intermittent infusion of fluids or administration of medications

| | | |
|---|---|---|
| 6) Complete the job | Dispose of needle in sharps container<br>Use prefilled sodium chloride syringe to flush lumen, then clamp<br>Stabilize catheter and apply transparent dressing<br><br>Label dressing with initials, date, and time<br>Apply antiseptic cap to needleless connector<br>Dispose of used supplies<br>Perform hand hygiene | |

*Revised by IM2 Faculty, Covenant School of Nursing, Nov 2015, Apr 2016, Apr 2017, Feb 2018, April 2020*
*Reviewed: Feb 2021*
*CHS Policy: Peripheral IV Venipuncture- Starting and Maintaining, 2015*
*Potter and Perry 9th ed., 2017*

## Converting a Continuous Infusion to an INT

**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Verify orders or protocol | Verify order<br>Review any guidelines mandated by agency protocol | |
| 2) Gather supplies | 10 mL Sodium chloride flush<br>Antiseptic caps | |
| 3) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Identify patient<br>Assess allergies<br>Teach patient | |
| 4) Convert line | Assess the site<br>Stop infusion<br>Disconnect primary tubing<br>Flush extension with sodium chloride according to flush protocol<br>Close clamp on INT extension<br>Apply antiseptic cap | Verify healthy IV site<br>Verify patency of IV site<br>Safety and maintenance guidelines vary widely, refer to specific protocols |
| 5) Complete procedure | Discard used supplies<br>Perform hand hygiene<br>Record results and report if indicated | |

*Revised by IM2 Faculty, Covenant School of Nursing, Nov 2015, Mar 2016, Apr 2017, Feb 2018*
*Reviewed: Feb 2021*

*CHS Policy: IVPB Medications by Gravity or Pump 2013*
*Potter and Perry 9th ed., 2017*
*HESI: Clinical Skills for Nursing Collection/Essentials Collection, 2020*

**Pump Use with Primary Intravenous Infusions**
**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Verify primary crystalloid (solution) | Verify order<br>Review any guidelines mandated by agency protocol<br>Check relevant lab work | 7 Rights (Right patient, medication, dose, route, time, reason, documentation) |
| 2) Gather supplies | IV Pole<br>IV Pump<br>IV solution<br>Pump tubing<br>Tubing label and IV solution label<br>Antiseptic cap | |
| 3) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Identify patient<br>Assess allergies<br>Teach patient | |
| 4) Basic Setup | Assess IV site<br><br>**Close roller clamp on tubing**<br><br>Label bag with flow rate and tubing with date and time<br>Remove tab from bag<br>Remove cap from sterile spike<br>Aseptically spike IV solution bag<br>Hang solution<br>Squeeze and release middle of drip chamber until it fills to 2/3 full<br>Invert tubing portion covered with blue plastic sleeve and open roller clamp<br>SLOWLY prime tubing to the end<br><br>Close roller clamp<br>Remove blue plastic sleeve from tubing<br>Open module door<br>Position white slide clamp into the cassette and listen for click<br>Position upper fitment into top of the cassette<br>Close module door and lock securely<br>Select “System On” then<br>Select “Yes” for new patient – “No,” if not<br>Select “Channel Select” on module<br>Select “Guardrails IV Fluids” or “Basic Infusion”<br>Select “Maintenance IVF”<br>Select “Yes”<br>Select “Rate” and enter the number<br>Select “VTBI” and enter the number | Inversion of sleeve-covered tubing and in-line filters during filling will help prevent accumulation of air bubbles in line<br>Do NOT remove cover off connecting end of tubing to prime tubing |

**Pump Use with Primary Intravenous Infusions**
**Nursing Intervention Instruction**

| | | |
|---|---|---|
| | Remove antiseptic cap or clean INT connection site<br>Connect infusion to INT<br>Open roller clamp<br>Press "Start"<br>Verify rate on module display is correct<br>Verify Guardrails selection is correct<br>Verify machine is delivering drops<br>Check IV site after infusion starts<br>Apply antiseptic cap to any unused access ports | |
| 5) Discontinue IV fluid | Select "Channel Off" on module and hold for a few seconds<br>Close roller clamp<br>Disconnect from INT and flush<br>Open module door<br>Lift upper fitment from recess and remove cassette | |
| 6) Complete procedure | Discard used supplies if required Perform hand hygiene<br>Record results and report if indicated | |

*Created by IM2 Faculty, Covenant School of Nursing, Nov 2015*
*Revised: IM2 Faculty, Mar 2016, Feb 2018*
*Reviewed: Feb 2021*
*pp. 1071-1074, Clinical Nursing Skills: Basic to Advanced, Smith, et. Al., Pearson Publishing, 9th ed, 2017*
*CHS Policy: Carefusion (Alaris) Pump Delivery with Guardrails 2014*
*Alaris Carefusion® Quick Reference Guide, 2009*

| **Global Medication Administration Rights and Responsibilities:** The administration of oral, parenteral, or topical medications to designated patients |
|---|
| **Critical Elements** |
| 1) Follow Universal Competencies<br>2) Prior to administration, verify accuracy of drug and dose prescribed for the right patient<br>3) Identify patient and assess allergies at bedside<br>4) Administer right dose of medication using right route and right location<br>5) Administer medication at the right time to right patient within +/- 60 minutes of scheduled time<br>6) Comply with established protocols related to medication administration per Nursing Intervention Instruction<br>7) Assess patient response within 30 minutes after administration<br>*Based on the work of C. Lenburg in the COPA Model* |

**Intradermal (ID) Injection Medication Administration**

Nursing Intervention Instruction

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Verify medication | Verify order in EMR<br>Review any guidelines mandated by agency protocol | 7 Rights (Right patient, medication, dose, route, time, reason, documentation) |
| 2) Gather supplies and prepare workspace and clean as required | Select needle and syringe appropriate for targeted tissue and body mass<br>Needle<br>Syringe<br>Syringe label<br>Alcohol swabs<br>Band-Aid if needed | Needle:<br>25 g x 5/8"<br>Syringe:<br>1 mL Tuberculin with needle<br>or<br>1 mL syringe with attachable needle as specified above<br>Site:<br>Middle third, ventral aspect of the forearm |
| 3) Prepare medication for administration | Obtain medication<br>Perform hand hygiene<br>Aseptically prepare syringe<br>Aseptically draw up medication<br>Label syringe<br>Transport syringe and vial to room in labeled container | |
| 4) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Identify patient<br>Assess allergies<br>Teach patient | |
| 5) Administer Medication | Scan armband and verify patient on eMAR<br>Scan medication vial and verify on eMAR<br>Perform hand hygiene and don clean gloves<br>Select site and prep with alcohol swab<br><br>Stretch skin taut over site with forefinger and thumb<br>Hold syringe parallel with skin with bevel up | Patient Safety |

**Intradermal (ID) Injection Medication Administration**

Nursing Intervention Instruction

| | | |
|---|---|---|
| | Pierce skin and advance needle approx. 1/8 " into skin<br><br>Slowly inject serum into skin, forming a bleb<br><br><br><br>Withdraw needle at same angle<br><br>Activate safety device<br>Apply Band-Aid if needed | Degree is low, 5-15 degrees at most - depending on thickness of skin<br>You should see outline of needle under the skin<br>**Do not aspirate**<br>A bleb or wheal with blanching indicates medication is in the dermis<br>If no wheal, the medication was not administered correctly<br>Prevents tissue trauma<br>**Do not massage site**<br>Prevent needle stick |
| 6) Complete procedure | Dispose of used supplies<br>Perform hand hygiene<br>Record results and report if indicated | |

*Created by IM2 Faculty, Covenant School of Nursing, Nov 2015*
*Revised: IM2 Faculty, Mar 2016, Apr 2017, Feb 2018*
*Reviewed: Feb 2021*
*Potter and Perry 9th ed., 2017*

| **Global Medication Administration Rights and Responsibilities:** The administration of oral, parenteral, or topical medications to designated patients |
|---|
| **Critical Elements** |
| 1) Follow Universal Competencies<br>2) Prior to administration, verify accuracy of drug and dose prescribed for the right patient<br>3) Identify patient and assess allergies at bedside<br>4) Administer right dose of medication using right route and right location<br>5) Administer medication at the right time to right patient within +/- 60 minutes of scheduled time<br>6) Comply with established protocols related to medication administration per Nursing Intervention Instruction<br>7) Assess patient response within 30 minutes after administration<br>Based on the work of C. Lenburg in the COPA Model |

**Intramuscular (IM) Medication Administration in the Adult**
**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Verify medication | Verify order in EMR<br>Review any guidelines mandated by agency protocol<br>Check relevant lab work | 7 Rights (Right patient, medication, dose, route, time, reason, documentation) |
| 2) Gather supplies and prepare workspace and clean as required | Select needle and syringe appropriate for targeted muscle and viscosity of medication<br>Syringe<br>Needle<br>Filtered or blunt fill needles, if required<br>Alcohol swabs<br>Syringe labels<br>Band-Aid® | Filter needle for ampules<br>Blunt fill (if available) for vials<br>Needle gauge:<br>Deltoid – 25 g to 20 g<br>Ventro – 21 g to 18 g depending on viscosity<br>Needle length:<br>Deltoid – 1 in<br>Vastus lateralis or Ventrogluteal – 1 to 1 ½ in depending on muscle mass<br>Syringe size:<br>3 mL is typical<br>Less than 1 mL solution - use 1 mL syringe for accuracy<br>Maximum volume in well-developed adult:<br>Vastus lateralis or Ventrogluteal: up to 3 mL<br>Deltoid: up to 1 mL |
| 3) Prepare medication for administration | **Follow CDC guideline for one needle, one stick, one time**<br>Obtain medication<br>Perform hand hygiene<br>Aseptically attach needle to syringe<br>Aseptically draw up medication<br>Label syringe<br>Transport syringe and vial to room in labeled container | |

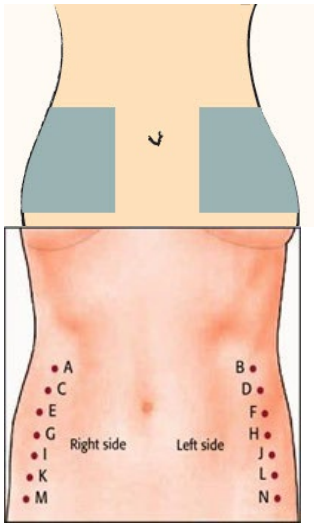
**Intramuscular (IM) Medication Administration in the Adult**
**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 4) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Identify patient<br>Assess allergies<br>Teach patient | |
| 5) Administer Medication | Scan armband and verify patient on eMAR<br>Scan medication vial and verify on eMAR<br>Select site and prep with alcohol swab<br>Displace the skin at site of injection (Apply Z-track)<br>Holding the syringe with the index finger and thumb of the dominant hand, insert the needle at a 90-degree angle and stabilize the syringe with non-dominant thumb and index finger while continuing to displace skin<br><br>Aspirate for at least 5 seconds- if blood returns, withdraw immediately and discard<br><br>Inject medication slowly<br>Leave needle in place for approximately 3-5 seconds before withdrawing at same angle<br>Release Z-track<br>Activate safety device<br>Apply Band-Aid® if needed | Patient Safety<br><br><br>Z-track is recommended because it minimizes pain and helps prevent irritation of subcutaneous tissue.<br>Z-track is not required for immunizations<br>Aspiration is NOT required for immunizations<br>Prevents tissue trauma<br>Prevent needle stick<br>Aspiration of blood indicates the needle has penetrated a vein<br><br>Leaves a zigzag track that traps the medication in the muscle<br>Leave needle in muscle until all medicine has been administered to ensure all medication administered |
| 6) Complete procedure | Dispose of used supplies<br>Perform hand hygiene<br>Record results and report if indicated | |

*Created by IM2 Faculty, Covenant School of Nursing, Nov 2015*
*Revised: IM2 Faculty, Apr 2016, July 2016, Apr 2017, Feb 2018, Apr 2020*
*Reviewed: Feb 2021*
*Potter and Perry Fundamentals of Nursing, 9th ed., 2017*
*Pink Book, CDC, cdc.gov, 2016*
*p.622, Clinical Nursing Skills: Basic to Advanced, Smith, et. Al., Pearson Publishing, 9th ed., 2017*
*p. 651, Fundamentals of Nursing: Theory, Concepts, and Applications, Vol. 1, 3rd ed., 2016*

| **Global Medication Administration Rights and Responsibilities:** The administration of oral, parenteral, or topical medications to designated patients |
|---|
| **Critical Elements** |
| 1) Follow Universal Competencies<br>2) Prior to administration, verify accuracy of drug and dose prescribed for the right patient<br>3) Identify patient and assess allergies at bedside<br>4) Administer right dose of medication using right route and right location<br>5) Administer medication at the right time to right patient within +/- 60 minutes of scheduled time<br>6) Comply with established protocols related to medication administration per Nursing Intervention Instruction<br>7) Assess patient response within 30 minutes after administration<br>*Based on the work of C. Lenburg in the COPA Model* |

**Subcutaneous (SubQ) Enoxaparin Medication Administration**
**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Verify orders | Order written by healthcare provider or mandated by agency protocol<br><br>Check relevant lab work | Part of 7 Rights (Right patient, drug, dose, route, time, reason, documentation)<br>CBC: Platelets below 100,000 warrants a hold for the medication |
| 2) Gather supplies and prepare workspace and clean as required | Alcohol swabs<br>Band-Aid®<br>Medication | |
| 3) Prepare medication | Calculate medication dose | Joint Commission Standard |
| 4) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Identify patient<br>Assess allergies<br>Teach patient | |
| 5) Administer Medication<br>  | Scan armband and verify on eMAR<br>Scan manufacturer's pre-filled medication and verify on eMAR<br>Place patient in lying position<br>Select site on either side of the **lateral abdomen** (love handles), avoiding the umbilicus by more than 4 inches<br><br>Prepare solution in syringe so that nitrogen bubble is next to plunger<br>Prep with alcohol swab<br>Bunch a fold of tissue and administer the medication at a 90-degree angle maintaining the bunch for the duration of the injection (Follow facility policy)<br>Withdraw needle at same angle<br>Activate safety device<br>**Do NOT aspirate or massage** – Teach patient not to rub site | Patient Safety<br>Syringe with needle is pre-filled at factory<br><br>Injection close to the umbilicus can result in intra-abdominal bleeding<br>May use anterior or posterior lateral aspect of abdomen<br>Nitrogen serves as "air lock" for solution- "air lock" is last to go into the tissue<br><br>Prevents tissue trauma and injection behind the peritoneum<br><br>Needle stick prevention<br><br>Prevent bleeding or hematoma |
| 6) Complete procedure | Dispose of used supplies | |

**Subcutaneous (SubQ) Enoxaparin Medication Administration**
**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| | Perform hand hygiene<br>Record results and report if indicated | |

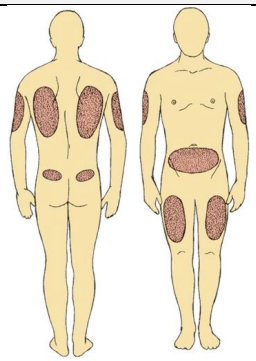
*Created by IM2 Faculty, Covenant School of Nursing, Nov 2015*
*Revised: IM2 Faculty, Apr 2016, July 2016, Apr 2017, Feb 2018, Mar 2019, Feb 2021*
*Reviewed: Feb 2021*
*https://druginserts.com/lib/rx/meds/lovenox-3/*

| **Global Medication Administration Rights and Responsibilities:** The administration of oral, parenteral, or topical medications to designated patients |
|---|
| **Critical Elements** |
| 1) Follow Universal Competencies<br>2) Prior to administration, verify accuracy of drug and dose prescribed for the right patient<br>3) Identify patient and assess allergies at bedside<br>4) Administer right dose of medication using right route and right location<br>5) Administer medication at the right time to right patient within +/- 60 minutes of scheduled time<br>6) Comply with established protocols related to medication administration per Nursing Intervention Instruction<br>7) Assess patient response within 30 minutes after administration<br>*Based on the work of C. Lenburg in the COPA Model* |

**Subcutaneous (SubQ) Insulin Medication Administration**
**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Verify orders | Order written by healthcare provider or mandated by agency protocol<br>Check relevant lab work<br>Monitor blood glucose prior to administration | Part of 7 Rights (Right patient, drug, dose, route, time, reason, documentation) |
| 2) Gather supplies and prepare workspace and clean as required | Alcohol swabs<br>Syringe label<br>Band-Aid®<br>Select insulin syringe to match insulin vial | Insulin syringe: **U-100 (u=units) for U-100 Insulin Vials** |
| 3) Prepare medication for administration | Prepare medication per protocol | NPH insulin should be gently agitated before withdrawing the medication<br>**DO NOT SHAKE THE VIAL** – can disturb protein bonds<br>Methods for restoring suspension to normal cloudy state include gently rolling in palms of hands or inverting vial back and forth 10 or more times until solution appears uniform |
| 4) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Identify patient<br>Assess allergies<br>Teach patient | |
| 5) Administer Medication | Scan armband and verify on eMAR<br>Scan medication barcode and verify dose on eMAR<br><br>Select subcutaneous site and prep with alcohol swab | Patient Safety<br>**Second nurse must verify and co-sign at bedside**<br><br>Most consistent absorption is in the abdomen – may use other acceptable subcutaneous sites<br>Rotate sites – no closer than 1 inch to last injected site |

**Subcutaneous (SubQ) Insulin Medication Administration**
**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| | Inject at 90 degrees and administer slowly<br>Leave the needle in place for 3-5 seconds<br>Withdraw needle at same angle<br>Do not rub or massage<br>Activate safety device<br>Apply Band-Aid® if needed |  <br>May need to bunch the skin in the lean adult or when administering to a child<br><br>Prevents needle stick |
| 6) Complete procedure | Dispose of used supplies<br>Perform hand hygiene<br>Record results and report if indicated | |

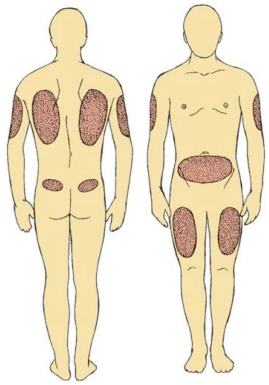
*Created by IM2 Faculty, Covenant School of Nursing, Nov 2015*
*Revised: IM2 Faculty, Apr 2016, July 2017, Feb 2018*
*Reviewed: Feb 2021*
*Potter and Perry 9th ed., 2017*
*p. 688, Pharmacology for Nursing Care, Lehne, 10th ed, p. 2019*
*HESI: Clinical Skills for Nursing Collection/Essentials Collection, 2020*

| **Global Medication Administration Rights and Responsibilities:** The administration of oral, parenteral, or topical medications to designated patients |
|---|
| **Critical Elements** |
| 1) Follow Universal Competencies<br>2) Prior to administration, verify accuracy of drug and dose prescribed for the right patient<br>3) Identify patient and assess allergies at bedside<br>4) Administer right dose of medication using right route and right location<br>5) Administer medication at the right time to right patient within +/- 60 minutes of scheduled time<br>6) Comply with established protocols related to medication administration per Nursing Intervention Instruction<br>7) Assess patient response within 30 minutes after administration<br>*Based on the work of C. Lenburg in the COPA Model* |

**Subcutaneous (SubQ) Injection for Other Medications**
**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Verify orders | Order written by healthcare provider or mandated by agency protocol<br>Check relevant lab work | Part of 7 Rights (Right patient, drug, dose, route, time, reason, documentation) |
| 2) Gather supplies and prepare workspace and clean as required | **Follow CDC guideline for one needle, one stick, one time**<br>Select appropriate equipment for targeted subcutaneous tissue and medication viscosity<br>Syringe<br>Needle<br>Filter Needle if required<br>Alcohol swabs<br>Syringe labels<br>Band-Aid® | Filter needle for ampules<br>Blunt fill needle for vials<br>Needle gauge:<br>27 g to 25 g depending on viscosity<br>Needle length:<br>3/8" – 5/8" depending on site<br>Syringe size:<br>1-3 mL is typical<br>Less than 1 mL solution - use 1 mL syringe for accuracy<br>Maximum Volume: 1.5 mL |
| 3) Prepare medication for administration | Obtain medication and take to patient room in labeled container or bag | |
| 4) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Identify patient<br>Assess allergies<br>Teach patient | |
| 5) Administer Medication | Scan armband and verify on eMAR<br>Scan medication vial and verify on eMAR<br>Select site and prep with alcohol swab<br>Inject slowly at 45 to 90 degrees<br>Withdraw needle at same angle<br>Apply Band-Aid if needed | Patient Safety<br><br><br>90 degrees is acceptable if adipose is ample (bunching of adipose is 2 inches or greater), 45-degree angle for adipose bunching if less than 2 inches<br><br>In obese patients, do not bunch, use 90-degree angle and needle length |

**Subcutaneous (SubQ) Injection for Other Medications**
**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| | | that is sufficient to reach subcutaneous tissue  |
| 6) Complete procedure | Dispose of used supplies<br>Perform hand hygiene<br>Record results and report if indicated | |

*Created by IM2 Faculty, Covenant School of Nursing, Oct 20, 2015*
*Revised: Apr 2016, July 2016, Apr 2017, Feb 2018*
*Reviewed: Feb 2021*
*Potter and Perry 9th ed., 2017*
*HESI: Clinical Skills for Nursing Collection/Essentials Collection, 2020*

| **Global Medication Administration Rights and Responsibilities:** The administration of oral, parenteral, or topical medications to designated patients |
|---|
| **Critical Elements** |
| 1) Follow universal Competencies<br>2) Prior to administration, verify accuracy of drug and dose prescribed for the right patient<br>3) Identify patient and assess allergies at bedside<br>4) Administer right dose of medication using right route and right location<br>5) Administer medication at the right time to right patient within +/- 60 minutes of scheduled time<br>6) Comply with established protocols related to medication administration per Nursing Intervention Instruction<br>7) Assess patient response within 30 minutes after administration<br>*Based on the work of C. Lenburg in the COPA Model* |

**IV Push Medication Administration**
**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Verify medication | Verify order in EMR<br>Review any guidelines mandated by agency protocol<br>**Follow CDC guideline for one access, one syringe/needle, one time**<br>Check relevant lab work | 7 Rights (Right patient, medication, dose, route, time, reason, documentation) |
| 2) Gather supplies | Prescribed medication<br>Syringe medication label<br>Syringe<br>2 – 10 mL prefilled sodium chloride syringes<br>Blunt fill needle<br>Blue sterile cap<br>Alcohol pad<br>Antiseptic cap | **One flush syringe, one access, one time**<br><br>Keeps tip of syringe sterile after admixture |
| 3) Prepare medication | Prepare workspace and clean as required<br>Verify dose, dilution, and rate of administration<br>Prepare medication per manufacturer's recommendations; Use a dose appropriate syringe to administer a medication. Do not prepare medication in a prefilled sodium chloride flush syringe<br><br>Label syringe<br>Take supplies to room in a labeled container | Correct dilution is very important<br>Commercially available prefilled syringes of sodium chloride are regulated by the US FDA as a medical device, not as a medication. They are approved for flushing vascular access devices, but NOT approved for reconstitution, dilution, and/or subsequent administration of IV push medications. (ISMP)<br><br>Joint Commission Standard |
| 4) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Identify patient<br>Assess allergies<br>Teach patient | |
| 5) Administer medication | Scan armband and verify patient on eMAR | Patient Safety |

**IV Push Medication Administration**
**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| | Scan medication and verify on eMAR<br>Assess IV site<br>Remove antiseptic cap and scrub port with alcohol pad for 15 seconds. Allow to dry<br>Assess patency of IV catheter:<br>**Peripheral INT**: Use a pre-filled 10 mL sodium chloride syringe and flush with 9 mL<br><br>**Central line**: Using pre-filled 10 mL sodium chloride syringe, aspirate for blood return, flush with 9 mL<br>If continuous infusion, select closest port to patient<br>Scrub needleless port for 15 seconds and allow to dry<br>Aseptically attach medication syringe<br>Push medication at recommended rate<br>Flush with 9 mL sodium chloride, remove syringe, clamp lumen, apply antiseptic cap | Verify healthy IV site<br><br>Aspiration not required to verify patency of peripheral site<br>**Remember** – only use 10 mL syringes to verify patency with central venous access devices; once patency is established may use dose appropriate syringe for medication administration<br>No flush required with compatible continuous infusions<br>Safety and maintenance guidelines vary widely, refer to specific protocols – clean ports and allow to dry prior to each connection with a syringe<br>Asepsis |
| 6) Complete procedure | Discard used supplies if required. Any labels with patient name go in confidential bin<br>Perform hand hygiene<br>Record results and report if indicated | HIPAA |

*Created by IM2 Faculty, Covenant School of Nursing, Nov 2015*
*Revised: Apr 2016, July 2016, Sep 2016, Apr 2017, Feb 2018, Mar 2019, Apr 2020*
*Reviewed: Feb 2021*
*CHS Policy: IVPB Medications by Gravity or Pump 2013*
*Potter and Perry 9th ed., 2017*
*HESI: Clinical Skills for Nursing Collection/Essentials Collection, 2020*

| **Global Medication Administration Rights and Responsibilities:** The administration of oral, parenteral, or topical medications to designated patients |
|---|
| **Critical Elements** |
| 1) Follow Universal Competencies<br>2) Prior to administration, verify accuracy of drug and dose prescribed for the right patient<br>3) Identify patient and assess allergies at bedside<br>4) Administer right dose of medication using right route and right location<br>5) Administer medication at the right time to right patient within +/- 60 minutes of scheduled time<br>6) Comply with established protocols related to medication administration per Nursing Intervention Instruction<br>7) Assess patient response within 30 minutes after administration<br>*Based on the work of C. Lenburg in the COPA Model* |

**IVPB Medication Administration via Gravity to a Peripheral INT**
**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Verify medication | Verify order in EMR<br>Review any guidelines mandated by agency protocol<br>**Follow CDC guideline for one access, one syringe, one time**<br>Check relevant lab work | 7 Rights (Right patient, medication, dose, route, time, reason, documentation) |
| 2) Gather supplies | IVPB medication<br><br><br><br>IV primary tubing for gravity infusion<br>IV tubing label<br>2 10 mL Sodium chloride flush<br>Alcohol swabs<br>Antiseptic cap | Gravity infused medications can only be used with peripheral lines in adults – some medications mandate use of pumps<br>Long tubing allows patient to move freely without hindrance<br>Joint Commission Standard |
| 3) Prepare tubing | Prepare workspace and clean as required<br>Calculate rate, verify dose and dilution<br>Perform hand hygiene<br>Label tubing<br>**Close roller clamp** | <br><br><br><br>**Prevents air in tubing and loss of medication** |
| 4) Prepare medication for administration | Pull protective covering off access site on bag where spike will enter<br>Remove cover off spike of IV tubing<br>Aseptically spike medication bag<br>Pinch chamber and fill to line<br>Open roller clamp and prime tubing<br>Close roller clamp<br>Take supplies to room in a labeled container | <br><br><br><br><br>Prime to expel existing air from tubing<br>Joint Commission Standard |
| 5) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Identify patient<br>Assess allergies<br>Teach patient | |

**IVPB Medication Administration via Gravity to a Peripheral INT**
**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 6) Administer medication | Scan armband and verify patient on eMAR<br>Scan medication and verify on eMAR<br>Assess IV site<br>Clean port, allow to dry and flush INT with 9 mL sodium chloride<br>Attach IV tubing<br>Open clamp and regulate flow rate<br>Monitor for approximately 1 minute to ensure infusion rate is correct | Patient Safety<br><br>Site must be healthy<br>Verify patency<br><br><br>Avoid rapid infusion and adverse effects |
| 7) Discontinue Infusion | Close tubing clamp<br>Disconnect tubing, protect tip, and prepare tubing for next dose, if indicated.<br><br>Clean port, allow to dry and flush INT with 9 mL sodium chloride, remove syringe, clamp lumen<br>Apply antiseptic cap | <br>Asepsis: IV tubing for multiple doses of same medication can be used for 24 hours<br>Clears medication and maintains patency<br>Safety and maintenance guidelines vary widely, refer to specific protocols |
| 8) Complete procedure | Discard used supplies if required (patient labels to confidential bin)<br>Perform hand hygiene<br>Record results and report if indicated | |

*Revised by IM2 Faculty, Covenant School of Nursing, Nov 2015, Apr 2016, July 2016, Feb 2018, Apr 2020*
*Reviewed: Feb 2021*
*CHS Policy: IVPB Medications by Gravity or Pump 2013*
*Potter and Perry 9th ed., 2017*

| **Global Medication Administration Rights and Responsibilities:** The administration of oral, parenteral, or topical medications to designated patients |
|---|
| **Critical Elements** |
| 1) Follow Universal Competencies<br>2) Prior to administration, verify accuracy of drug and dose prescribed for the right patient<br>3) Identify patient and assess allergies at bedside<br>4) Administer right dose of medication using right route and right location<br>5) Administer medication at the right time to right patient within +/- 60 minutes of scheduled time<br>6) Comply with established protocols related to medication administration per Nursing Intervention Instruction<br>7) Assess patient response within 30 minutes after administration<br>*Based on the work of C. Lenburg in the COPA Model* |

**IVPB Medication Administration via Infusion Pump**
**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Verify medication | Verify order in EMR<br>Check relevant lab work<br>Review any guidelines mandated by agency protocol<br>**Follow CDC guideline for one access, one syringe, one time** | 7 Rights (Right patient, medication, dose, route, time, reason, documentation) |
| 2) Gather supplies | IVPB medication – verify compatibility with primary infusion<br>Secondary IV Set with hanger<br>24 hour IV tubing label<br>Antiseptic cap if needed | |
| 3) Prepare tubing | Prepare workspace and clean as required<br>Verify pre-calculated rate of administration<br>Perform hand hygiene<br>Label tubing<br>**Close roller clamp** | **Prevents air in tubing and loss of medication** |
| 4) Prepare medication for administration | Pull protective cover off access site on bag where spike will enter<br>Remove cover off spike of IV tubing<br>Aseptically spike medication bag<br>Pinch chamber and fill to line<br>Open roller clamp and prime tubing<br>Close roller clamp<br>Take supplies to room in a labeled container | Asepsis<br>Prevent entrance of air into line<br>Prime to expel existing air from tubing<br>Joint Commission Standard |
| 5) Follow Universal Competencies | Introduce self<br>Perform hand hygiene<br>Identify patient<br>Assess allergies<br>Teach patient | |
| 6) Administer medication | Scan armband and verify patient on eMAR<br>Scan medication and verify on eMAR<br>Assess IV site | Patient Safety<br><br>Verify healthy site and patency |

**IVPB Medication Administration via Infusion Pump**
**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| | Place Primary infusion bag on hanger<br>Hang IVPB<br>Remove antiseptic cap from port above pump and connect IVPB tubing in port above the pump<br>Press "Channel Select" on module<br>Select "Secondary"<br>Choose medication from alphabetical list<br>Verify concentration and drug dose<br>Select "Yes" if correct<br>Select "Next" to confirm<br>Verify rate and VTBI is correct<br>Open secondary roller clamp and start infusion<br>Verify infusion is running correctly from the secondary bag | Secondary bag must hang higher than primary for it to infuse<br><br>When secondary infusion is complete, pump will automatically revert back to primary infusion parameters |
| 7) Complete procedure | Clamp the roller on Secondary tubing and disconnect from the IV port<br>**Immediately place sterile blue cap over end of tubing if intended for multiple doses**<br>Discard used supplies if required (patient labels to confidential bin)<br>Perform hand hygiene<br>Record results and report if indicated | Tubing is replaced every 24 hours and can be used for multiple doses of the same medication during that 24 hours<br>HIPAA |

*Created by IM2 Faculty, Covenant School of Nursing, Nov 2015*
*Revised: IM2 Faculty, Apr 2016, July 2016, Feb 2018*
*Reviewed: Feb 2021*
*CHS Policy: IVPB Medications by Gravity or Pump 2013*
*pp. 675-683, Potter and Perry 9th ed., 2017*

## SBAR Report Protocol

**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Identify protocol | SBAR format | Patient Safety – Communication<br>Joint Commission stated industry best practice for standardized communication |
| 2) S | Identify self, unit, patient, room number<br>Clearly and briefly describe the situation | Patient Safety, Communication, Prioritization |
| 3) B | Pertinent background information related to the situation:<br>Admitting diagnosis<br>Pertinent medical history<br>Brief description of current treatment<br>Recent VS<br>Pertinent Lab results | Communication of relevant background information to frame situation |
| 4) A | Nursing assessment of the problem or situation warranting notification to healthcare provider<br>Signification changes in VS, lab values, medication regimen, operative site, family dynamics, etc. | Communication of your assessment of the problem |
| 5) R | What is the nurse's recommendation?<br>Briefly and concisely state what the nurse believes would benefit patient to resolve problem or situation<br>Examples: order a lab test, healthcare provider needs to visually assess patient, a consult needs to be ordered, a new medication needs to be ordered, etc. | Proposition for action or resolution of problem |

*Created by IM2 Faculty, Covenant School of Nursing, Nov 2019*
*Revised: Mar 2019*
*Reviewed: Feb 2021*
*CHS Policy: Standardized Handoff Communication, 2014*
*Institute for Healthcare Improvement:*
*http://www.ihi.org/resources/Pages/Tools/SBARToolkit.aspx*

## Sterile Gloving

The aseptic application of sterile gloves for use in a sterile procedure

**Critical Elements**

1) This procedure is NOT performed by UAP
2) Check for Latex allergies
3) Gather supplies and prepare workspace
4) If associated with an aseptic procedure, follow Universal Competencies
5) Don gloves without contamination

**Nursing Intervention Instruction**

| Steps | Key Points | Rationale |
|---|---|---|
| 1) Verify need for asepsis | Aseptic procedures use sterile gloves | |
| 2) Prepare to don gloves<br>Clean work surface | Check patient for latex allergy<br>Select correctly sized gloves<br>Keep glove packaging dry and **intact (no tears)**<br>Perform hand hygiene<br>Remove sterile glove package from outer wrapper | Patient Safety<br><br>Moist packaging contaminates the gloves |
| 3) Don sterile gloves | Working at waist level, grasp flaps of package without touching inner surface and pull open<br>Grasp the edge of cuff on the glove with the dominant hand touching only the inside of the cuff<br>Pick glove straight up from the package<br>Carefully pull the glove over the hand and wrist by the fold of the cuff<br>Use gloved hand to pick up remaining glove by inserting all fingers under the cuff of the remaining glove and extend the thumb of the gloved hand as you pull the remaining glove over the hand and wrist<br>Fix fingers and palms – AVOID wrists and back of hand<br>When gloves are on, interlock hands above waist level and away from body | Sterile technique: inner surface of wrapper is sterile<br><br><br><br><br><br>Placing fingers in the cuff keeps sterile to sterile<br>Hitchhiker technique: Keeping thumb extended while glove is being applied protects thumb from contamination<br>Interlocking prevents accidental contamination of gloved |

*Revised by IM2 Faculty, Covenant School of Nursing, Nov 2015, Apr 2017*
*Reviewed: Feb 2021*
*Revised: Feb 2018*
*CHS Policy: Latex Allergy Management, revised Aug 2015*
*pp.467-476; 481-482 Potter and Perry, 9th ed., 2017*
*HESI: Clinical Skills for Nursing Collection/Essentials Collection, 2020*

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