Form and Exercise Handouts Provided to Supplement

You CAN Teach Med–Surg Nursing! The Authoritative Guide and Toolkit for the Medical–Surgical Nursing Clinical Instructor

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Contents

CHAPTER 1

Instructor Contracts and Evaluations

SELF-ASSESSMENT FORM

Name of faculty member: _____

Date: _____

Course title/number: _____

Number of students: _____

	Never	Occasionally	Usually	Always
1. Maintains an up-to-date syllabus; corrects assignments, maintains submission dates and additional readings; follows clearly stated course objectives and goals				
2. Uses the syllabus as a tool to guide and communicate with students				
3. Maintains a communication pathway with the students by in-person communication or university e-mail				
4. Follows unit policies and procedures related to missed classes, plagiarism, and midsemester advising				
5. Remains current with developments in nursing, and shares developments in class discussion and projects				
6. Provides timely feedback to students				

Comments:

_____

_____

_____

_____

_____

_____

SAMPLE OBSERVATION FORM

Name of faculty member: _____

Name of evaluator: _____

Date: _____

Course title/number: _____

Number of students: _____

Category	Approaches standard (1)	Meets standard (2)	Exceeds standard (3)	Rating
Knowledge of content	Professor displays basic content and professional knowledge but familiarity with the field's most recent developments is not apparent.	Professor displays solid content and professional knowledge and makes appropriate connections to prior learning.	Professor displays broad content knowledge and makes appropriate connections to prior learning. Professor demonstrates awareness of recent field developments and encourages students to understand and learn more about evidence-based practices.	
Objectives	Objectives are vague, conflicting, or not related to the topics addressed in class or real-life situations.	Objectives are significant and clearly communicated to students; relate to the syllabus as well as to the topics addressed in class; have real-life implications; and show connections to current trends in the discipline.	Objectives are clear, concise, appropriately aligned, and interconnected to larger themes in teaching and learning. They generate interest and enthusiasm in students.	
Organization of classroom	Classroom is not organized in a way that engages student learning. Professor appears unprepared for class; does not begin and end on time; vaguely explains assignments and activities; attempts to but does not make good use of class time.	Classroom organization reflects an awareness of best models to engage student learning. Professor appears to have planned the lesson and is prepared for class; begins and ends on time; clearly communicates assignments and activities; and makes effective use of class time.	Professor is well-prepared and highly organized and uses space, pedagogy, and tools to maximize and encourage student learning within and beyond the classroom. Activities and discussion captivate students so that time is not an issue.	

Category	Approaches standard (1)	Meets standard (2)	Exceeds standard (3)	Rating
Appropriate teaching methods, including the use of technology	Professor does not make the best selection of instructional strategies and does not show awareness of how to teach to multiple learning styles. Instructor attempts to integrate technology and collaboration but the implementation is not effective.	Professor selects appropriate instructional strategies and implements them effectively; integrates technology and collaboration well; demonstrates an awareness of how to teach to multiple learning styles.	Professor selects instructional strategies that best match the objectives and implements them with ease; employs the use of technology and collaboration in ways that enhance learning; effectively teaches to multiple learning styles.	
Uses formal or informal assessment	Professor attempts to but does not clearly determine what students have learned.	Professor uses informal and/or formal assessments to ensure that students are learning.	Professor embeds assessments in the lesson and uses them effectively to further student learning.	
Faculty interaction with students	Professor engages some but not all students in classroom activities and discussions; attempts to communicate concepts and ideas but is not always clear; and does not demonstrate concern for students.	Professor engages all students in classroom activities and discussions; communicates concepts and ideas in clear ways using professional language and logical progressions; and demonstrates respect for individuals.	Professor works with students as they explore new material, raise questions, and make connections to real-life situations; students correspond with other health professionals in a clear and organized manner; and establishes a culture of mutual respect for multiple views.	

Comments:

PRECEPTOR EVALUATION FORM

Name of clinical facility: _____

Course: _____

Date: _____ Site: _____

Completed by: ☐ Student ☐ Faculty

_____

Please circle the most appropriate answer that best describes your viewpoint regarding your preceptor experience. Space is provided after each statement if you choose to add any written comments.

1. Did the preceptor smooth the progress of the orientation process?

   Never Occasionally Always

   Comment: _____

2. Did the preceptor show expertise in his or her nursing role?

   Never Occasionally Always

   Comment: _____

3. Did the preceptor work in partnership and assist you in planning/learning objectives and experiences?

   Never Occasionally Always

   Comment: _____

4. Did the preceptor provide immediate and appropriate feedback?

   Never Occasionally Always

   Comment: _____

5. Did the preceptor provide resources to the student and facilitate learning?

   Never Occasionally Always

   Comment: _____

6. Did the preceptor direct the student through critical thinking and decision making?

   Never Occasionally Always

   Comment: _____

7. Did the preceptor consider the student's limitation according to level of training?

   Never Occasionally Always

   Comment: _____

8. Did the preceptor encourage questions and offer constructive comments?

   Never Occasionally Always

   Comment: _____

9. Did the preceptor use good communication skills?

   Never Occasionally Always

   Comment: _____

10. Did the preceptor exhibit a caring and respectful attitude?

    Never Occasionally Always

    Comment: _____

Please comment on how this preceptor assisted you in developing your clinical learning experience.

1. Do you recommend this preceptor for other students: Yes No
   Why or why not? _____

2. Is this clinical setting a good place for student learning and why?

_____

3. Were the course objectives realistic; could they be improved?

_____

4. The following worked well in this clinical:

_____

5. The following did not work well in this clinical:

_____

THE CLINICAL FACILITY EVALUATION

Name of clinical facility: _____

Course: _____

Completed by: ☐ Student ☐ Faculty

Please circle the most appropriate answer that best describes your opinion regarding the clinical site. Space is provided after each statement if you choose to add any additional comments.

1. Was this clinical agency pertinent to the expected clinical experience?

   Never Occasionally Always

   Comment: _____

2. Were the facilities adequate and available to achieve the clinical objectives?

   Never Occasionally Always

   Comment: _____

3. Were there sufficient and appropriate learning opportunities available to meet the objectives?

   Never Occasionally Always

   Comment: _____

4. Were there adequate numbers of clients to meet the objectives?

   Never Occasionally Always

   Comment: _____

5. Were the types of clients varied in age, types of problems, and so on?

   Never Occasionally Always

   Comment: _____

6. Was support staff helpful and accepting of students?

   Never Occasionally Always

   Comment: _____

7. Were instructional materials and community resources available to supplement learning (i.e., pamphlets, outside class opportunities, etc.)?

Never Occasionally Always

Comment: _____

Was the philosophy of the clinical site relevant to:

8. Caring?

Never Occasionally Always

9. Health promotion and disease prevention?

Never Occasionally Always

10. Sociocultural diversity?

Never Occasionally Always

11. Safe practice and competent patient care?

Never Occasionally Always

How far did you travel from home to the clinical site? Mileage: _____

How accessible was the site to public transportation? Mileage: _____

List ways this clinical site provided a good clinical experience for the student.

List areas in which this clinical site might need improvement in order to provide optimal student learning.

Do you suggest this clinical site for other students? Yes No
Why, or why not? _____

Effective Student Evaluations

ANECDOTAL NOTES FORM

Student: _____

Date:	Students must be able to discuss the patient's medical diagnosis, laboratory values, medications, tests, and treatments. Compare with the textbook content. Students must be able to list nursing diagnoses in order of priority, discuss nursing interventions and rationales, and perform nursing care safely and professionally.	
	Patient initials:	Student initials:
	Patient initials:	Student initials:
	Patient initials:	Student initials:
	Patient initials:	Student initials:
	Patient initials:	Student initials:

Learning Requirements and Syllabus Preparation

APPRENTICE NURSING SKILLS CHECKLIST

Student: _____

Instructor: _____

Skill	Date	Pass/Fail	Remediation
Verify order Patient record Gather needed supplies for procedure, such as dressings, tapes, chest tube, pleurovac, etc.			
Identify, gather, and prepare equipment and supplies			
Obtain appropriate equipment: Stethoscope, thermometer, probe cover, age-appropriate blood pressure cuff, pulse oximetry, watch, Dynamap Charting, flow sheets **Vital signs:** Pulse rate, quality, rhythm, and appropriate sites Respiratory rate and quality Blood pressure: Manual and palpation Blood pressure: Electronic Dynamap Auscultation Temperature: Axilla, oral, rectal, tympanic Pulse oximetry and factors that change pulse oximetry Observe for condition or change in condition			
Instruction			
Preoperative preparations and consents Postoperative teaching Postanesthesia care Positioning: • Supine, prone, lateral, jack-knife, lithotomy, and Fowler's • Trendelenburg/reverse Trendelenburg Time out/boarding pass Preprocedure shave/skin prep Checklist for surgery			
Safety			
Restraints/safety devices: Order, applying, releasing extremities involved, behavior, and care of patient (nutrition, circulation, elimination) Fall prevention, care of confused patient, reorientation measures, patient education and documentation, reporting			
Height and weight			
Health history interview Biographical and demographic information Current health problem			

(*continued*)

APPRENTICE NURSING SKILLS CHECKLIST (*continued*)

Skill	Date	Pass/Fail	Remediation
Symptom analysis • Onset, location, duration, characteristic, associated manifestation, radiation, and treatment • Past health history, surgical history, family health history • Health care maintenance Medication use • Domestic violence			
Psychosocial history			
Risk factors, assessment, appearance, motor activity, behavior, mental status, levels of consciousness, orientation, mood (subjective description) and affect (observable, outward demeanor) Speech, communication, thought processes and content, social history (personal habits), occupational exposure, life stressors, and lifestyle (socioeconomic factors) • Sexuality • Learning preferences: Visual, auditory, or other • Health beliefs: Assessment (cause of illness) Health promotion and health-risk appraisal • Review of systems • Cultural assessment: Language and communication process, level of ethnic identity, influence of religion, views about discrimination, network support, habits, customs and beliefs			
Physical assessment			
The student will perform examination using inspection, auscultation, palpation, and percussion in appropriate order **Skin, hair, nails** • Color of skin, scars, rashes, or lesions • Clubbing • Lice or scabs • Texture of hair **Eyes, vision** • Symmetry and alignment • Abnormalities in eyelids • Eyebrow distribution • Observation of sclera and conjunctiva • Symmetry of pupil and iris • Extra-ocular movements and cranial nerves • Constriction and accommodation of both pupils **Ears** • Drainage/symmetry **Nose and sinuses** • Color • Drainage • Loss of smell • Pain over sinuses			

Skill	Date	Pass/Fail	Remediation
Mouth and throat • Symmetry • Color of mucosa • Tongue dysfunction • Teeth • Parotid gland **Neck and neck vessels** • Jugular venous • Distention • Enlargement of cervical nodes • Thyroid assessment • Carotid auscultation **Lungs** • Breathing patterns • Use of accessory muscles • Skin and nail-bed color • Ability to speak • Adventitious sounds • Spine abnormalities • Palpation • Tactile fremitus • Percussion **Heart** • Observation • Jugular venous distension (JVD) • Point of maximal impulse (PMI) • Auscultation • Clicks, murmurs, rubs, aortic, pulmonic, tricuspid, mitral valve closure **Breast and axilla (male and female)** • Anatomy and symmetry • Any masses, drainage, pain, discoloration • Palpation • Lymph nodes **Abdomen** • Color of skin, scars, rashes, or lesions • Abdominal contour, symmetry, and position of umbilicus • Umbilical herniation and enlarged inguinal lymph nodes or masses • Bowel sounds in all quadrants • Presence of bruits, ascites • Percussion • Palpation findings • Rectum (hemorrhoids, fissures, prolapse)			

(*continued*)

APPRENTICE NURSING SKILLS CHECKLIST (*continued*)

Skill	Date	Pass/Fail	Remediation
Musculoskeletal • Inspect overall appearance • Observe gait and balance • Perform Romberg test • Observe spine from lateral and posterior curvatures • Palpate along spine • Inspect and palpate skin, joints, and muscle groups of upper and lower extremities • Joint abnormalities • Test muscle strength and range of motion of all limbs • Check pulses • Inspect hair distribution and skin discoloration on legs • Identify presence of edema **Neurologic** • Mental status testing • Cranial nerve testing • Muscle strength • Level of consciousness (LOC): Glasgow Coma Scale • Affect, mood, and memory • Are cranial nerves intact? • Gait, balance, and coordination in upper and lower extremities • Findings of sensory testing: Light touch and sharp and dull discrimination • Deep tendon reflexes and Babinski reflex **Genitourinary** • Male: Any drainage, bulges in inguinal area, any penile or scrotal abnormalities, any skin abnormalities, opening of urethra • Female: Any drainage, vaginal abnormalities, prolapse, opening of the urethra			
Infection control			
• Hand washing, antibacterial soap application • Standard/universal precautions • Clean gloving • Sterile gloving • Sharps disposal • Contaminated material disposal • Isolation technique (masking, gowning, and gloving for contact, droplet, enteric, reverse, and airborne isolation) • Surgical asepsis • Sterile technique/sterile field • Cleaning bodily fluid spills • Using Material Safety Data Sheet (MSDS) **Hygiene** • Bed bath, shower • Oral care: Conscious and unconscious patient			

Skill	Date	Pass/Fail	Remediation
• Care of dentures, retainers, bridges, and caps • Shaving • Shampooing and hair care • Nail care • Care of prosthetics (eyeglasses, contacts, eye prosthesis, hearing aid, artificial limbs) • Eye, ear, and nose care			
Mobility, immobility, and positioning			
Body mechanics of the patients and students Body alignment and indications • Dorsal recumbent • Prone • Sims' • Fowler's • Knee–chest • Dorsal lithotomy Turning patient every 2 hours Transferring patient with proper body mechanics to bed Use of devices such as egg-crate mattresses, foam mattress pads, and cushions to relieve pressure sores Active and passive range of motion Ambulation Use of wheelchair, crutches, cane, walker, and Hoyer lift Maintenance of traction equipment **Bed making** Making an occupied, unoccupied bed, postoperative bed Use of the call bell Transporting a patient **Intake & Output (I&O) calculations and recording** Net balance calculations **Cold and heat application** • Hypothermic blanket • Hyperthermia blanket (bear hugger) • Heating (K-pad) • Ice packs **Genitourinary** Use of bedpan or fracture pan Use of urinal Commode Measuring urinary hat Use of bladder scanner Condom catheter application Intermittent catheterization Insertion/removal of indwelling catheter in males and females Catheter irrigation Continuous bladder irrigation Catheter care: Indwelling, condom, suprapubic, Texas catheter,			

(*continued*)

APPRENTICE NURSING SKILLS CHECKLIST (*continued*)

Skill	Date	Pass/Fail	Remediation
urometer Perineal care Assist with Pap smear Assist with pelvic examination **Tubes and drains** Insertion of nasogastric tube Nasogastric tube maintenance such as checking placement and gastric residual Gastrostomy tube maintenance Initiating tube feedings via tube-feeding devices such as a Kangaroo pump Bolus tube feedings Maintenance of drainage collection devices: Jackson Pratt drains, Hemovac, Penrose drains **Respiratory care** Pulse oximetry Nebulizer Use of incentive spirometer (IS) Use of Ambu bag/mask Use of nasal cannula,100% nonrebreather (NRB), Ventimask Turn, cough, and deep breathe (TCDB) Closed chest tube drainage system to suction/water and care Chest tube insertion site care Tracheostomy care Postural drainage Arterial blood gas • Metabolic acidosis • Metabolic alkalosis • Respiratory acidosis • Respiratory alkalosis Tracheal, oral, and nasal suctioning and care of patient Chest physiotherapy **Bowel elimination** Enema (retention/soap suds) Selection/application of ostomy appliance Ostomy pouch care: Teaching measurement of stoma, burping, preventing infections, attaching and cleaning pouch Stoma skin prep and cleansing, application of powder Ostomy irrigation Removal of impactions Suppository			
Nutrition			
Gravity feedings: Enteral gastrostomy/jejunostomy/nasogastric Insertion/maintenance of enteral feeding tube Removal of feeding tube (not gastrostomy tube) Feeding pump Feeding a patient Aspiration precautions Gastric lavage			

Skill	Date	Pass/Fail	Remediation
Wound management			
Pressure ulcer prevention Clean dressing change Superficial dressing change (dry, gauze, topical wound products) Deep wound packing Wet-to-dry dressing change Sterile dressing change Wound irrigation Suture/staple/steri-strips removal Negative pressure wound therapy application and maintenance Maintenance of specialty bed			

CHAPTER 4

First Day of Clinical Practice: Forms, Expectations, and Math Assessment

CONTACT INFORMATION FORM

1. Name: _____
2. Best way to contact you: _____
3. Please provide a telephone number: _____
4. Please provide your e-mail address: _____
5. Field of nursing you are interested in: _____
6. What experience do you have? _____
7. What type of knowledge do you believe you have? _____
8. What do you believe are your weak areas? _____
9. What is the best way for you to learn? _____
10. What do you think is the best way in which a clinical instructor to help you learn?

_____

_____

_____

SAMPLE MATH QUIZ

1. Express the following number to the nearest hundredth.

   2.345 _____

2. Solve the following equation. Express your answer to the nearest tenth.

   55 × 0.15 = _____

3. Reduce the following fraction as far as possible.

   55/30 = _____

4. Solve the following equation. Express your answer as a decimal fraction to the nearest tenth.

   0.114 × 3.2 = _____

5. You are to give 1,250 mg of a medication and you receive 250-mg tablets from pharmacy. How many tablets would you give? _____

6. Solve the following equation. Express decimal fractions to the nearest tenth.

   310,000 × 2.1 = _____

7. What is the denominator in this fraction?

   1,500/50 _____

8. What is the numerator in this fraction?

   2.44/4 _____

9. You have to administer a combination drug that combines 25 mg of medication A and 6.25 mg of medication B. Pharmacy has given you 12.5-mg tablets of medication A and 12.5-mg of medication B. How many tablets of medication B would you give? _____

10. You have to administer a prescription that combines two separate drugs of 50 mg of medication A and 12.5 mg of medication B. Pharmacy has given you 25-mg tablets of medication A and 6.25 mg of medication B. How many tablets of medication A would you give? _____

11. An IV medication of 250 mL is started at 0750 to run at 33 gtts/min using a 10 gtts/mL set. How long will the infusion run?

12. Express 750 mg in gm _____

13. Express 0.75 mg in mcg _____

14. Express 2.5 L in mL _____

15. The nurse needs to infuse 250 mL over 45 minutes by infusion pump. At what rate per hour does the nurse set the pump?

(*continued*)

16. The doctor has ordered 1 liter D5W [IV fluid solution 5% dextrose and water] over 12 hours. At what rate per hour does the nurse set the pump?

17. Calculate the IV flow rate for 1,200 mL to be infused in 6 hours. The infusion set is calibrated for a drip factor of 20 gtts/mL. _____

18. A doctor orders 75 mg of ceftriaxone to be taken by a 15-pound infant twice a day. The pharmaceutical reference states that 50–75 mg/kg/day is the appropriate dosage range. Is this doctor's order within the desired range?

19. The most commonly used parenteral administration routes are:
    a. Sublingual, intravenous, and transdermal
    b. Intravenous, intramuscular, and subcutaneous
    c. Intravenous, inhalation, and subcutaneous

20. Convert these body weights into kilograms. Round to the nearest tenth.
    a. 44½ lbs = _____
    b. 154 lbs = _____
    c. 540 lbs = _____
    d. 123 lbs = _____

21. Body surface calculations are used:
    a. Only for antibiotics
    b. Extensively for antineoplastic agents
    c. Only for liquids

22. Calculate 0.05 g/kg for a 100-lb patient that is to be administered every 6 hours. Pharmacy has sent the nurse gentamycin that is labeled 40 mg/mL that is to be mixed in 250 mL of 0.9% normal saline solution (NSS). Calculate the first dose.
    _____

23. Prepare a 0.3 g/kg dosage from a 4 g in 2.7 mL–strength solution. The patient weighs 55 kg. Calculate to the nearest tenth. _____

24. What is the proper technique for drawing up humulin N (NPH) 24 units and regular insulin 2 units?
    a. Wipe off the vials with alcohol. Inject 2 units of air into regular and then 24 units of NPH, and then draw up 24 units of NPH and 2 units of regular insulin.
    b. Not necessary to inject air. Wipe off the vials with alcohol. Roll the NPH bottle. Inject 2 units of air into regular and then 24 units of NPH, and then draw up 24 units of NPH and 2 units of regular insulin.
    c. Wipe off the vials with alcohol. Roll the NPH bottle. Inject 24 units of air into NPH and then 2 units of air into the regular insulin vial, and then draw up 2 units of regular insulin and then draw up 24 units of NPH insulin.

25. Insulin can be administered by what other routes:
    a. Subcutaneous, inhalation, self-administered pens
    b. Intramuscular, inhalation, intradermal
    c. Subcutaneous, intradermal, sublingual

26. Your patient was ordered 28 units regular insulin, and 64 units NPH insulin. In all, how many units of insulin will you administer?

27. A solution of 25,000 units of heparin in 500 mL of D5W is to infuse at a rate of 1,000 units per hour using a 10 gtt/min set. Calculate the gtt/min flow rates to administer the heparin dosage.

28. A solution of 750 mL with 25,000 units of heparin is infusing at 50 mL/hr. At what rate should the nurse set the rate on the pump?

29. One balanced electrolyte solution is:
    a. D5NS
    b. LR
    c. 0.9% NSS
    d. 0.45% NSS

30. Identify the weakest solution:
    a. 1:1000
    b. 1:10,000
    c. 1:5

31. Of the quantities below, which has been written in the proper format?
    a. 0.8 mg
    b. .15 mg
    c. 2 U insulin
    d. 0.50 mL

32. There are two bottles of milk of magnesium on the shelf at the pharmacy. One bottle contains 9.5 oz and the other 300 mL. Which has the larger volume? _____

33. The recommended dose of Dilantin for a child is 3 mg/kg/24 hr given every 12 hours. The patient's weight is 10 lbs. The medication is supplied in 250 mg/10 mL.
    1. Calculate the weight for the child in kg _____
    2. Calculate the safe dose for the child in mg/dose _____
    3. How many millimeters will be administered for each dose? _____

34. The patient is ordered Tylenol elixir at 325 mg per 2 teaspoons (tsp.). How many mL would the nurse administer?

ANSWERS TO SAMPLE MATH QUIZ

1. 2.345 (nearest hundredth = 2.35)
2. $55 \times 0.15 = 8.25$ (nearest tenth = 8.3)
3. Find the number that can be divided into both 55 and 30. Five can be divided into both, which would reduce 55/30 to 11/6.
4. 0.3648 (nearest tenth = 0.4)
5. $\frac{\text{D (dose needed)}}{\text{H (dose that you have)}} \times$ Q (the form it comes in, i.e., tablet, etc.) So,

   $\frac{1,250\,\text{mg}}{250\,\text{mg}} \times 1\,\text{tablet} = 5\,\text{tablets}$
6. $310{,}000 \times 2.1 = 651{,}000$. This cannot be reduced any further.
7. 1,500/50. The denominator is 50.
8. 2.44/4. The numerator in this fraction is 2.44.
9. Medication A is a distractor, and the question is not asking you anything concerning this. You need only to be concerned about medication B.

   $\frac{\text{D}}{\text{H} \times \text{Q}} = \frac{6.25\ \text{mg}}{12.5\ \text{mg}} \times 1$ 13.5 pt tablet = 0.5 or ½ tablet
10. Medication B is a distractor and the question is not asking you anything concerning this; 50 mg/25 mg × 1 tablet = 2 tablets
11. $\frac{\text{Volume}}{\text{Minutes}} \times \text{gtts/mL (drop factor)} = \text{gtts/min}$

    $\frac{250\,\text{mL}}{\text{Minutes}} \times 10\,\text{gtts/mL} = 33\,\text{gtts/min}$

    2,500 gtts/min = 33 gtts/min (or, 2,500 gtts: X = 33 gtts: 1 min) = 2,500 gtts/33 gtts = 76 min, or 1 hr and 15 min, and would run from 0750 until 0905.
12. $\frac{750\ \text{mg}}{1000\ \text{mg}} \times 1\,\text{gm} = 0.75\,\text{g}$
13. $\frac{0.75\ \text{mg}}{1\ \text{mg}} \times 1000\,\text{mcg} = 750\,\text{mcg}$
14. $\frac{2.5\ \text{L}}{1\ \text{L}} \times 1{,}000\,\text{mL} = 2{,}500\,\text{mL}$

15. IV pumps run per hour so use smaller gtts (60 gtt/mL) micro-drip tubing

$$\frac{\text{Volume in mL}}{\text{Minutes}} \times \text{Drop factor}$$

$$\frac{250\text{ mL}}{45} \times 60\text{ gtts} = 333\text{ gtts}$$

16. $\frac{\text{Total volume}}{\text{mL/hr}} = \frac{1{,}000\text{ mL}}{12\text{ hr}} = 83\text{ mL/h}$

17. $\frac{1{,}200\text{ mL}}{360\text{ min}} \times \frac{20\text{ gtts}}{\text{mL}} = 66.7\text{ gtts}$

18. $\frac{1.5\text{ lbs}}{2.2\text{ lbs}} \times 1\text{ kg} = 6.8\text{ kg}$

$$\frac{50\text{ mg} \times 6.8\text{ kg} = 340\text{ mg}}{75\text{ mg} \times 8.6\text{ kg} = 510\text{ mg}}$$

So the acceptable range is 340 mg to 510 mg/q day. The doctor has ordered 70 mg twice daily = 1,020 mg/d, so this is not within the acceptable range and the doctor needs to revise this order.

19. "Parenteral" means that medicine is taken into the body in a manner other than through the digestive canal. So the correct answer is:
b. Intravenous, intramuscular, and subcutaneous

20. a. $\frac{44.5\text{ lbs}}{2.2\text{ lbs}} \times 1\text{ kg} = 20.2\text{ kg}$

b. $\frac{154\text{ lbs}}{2.2\text{ lbs}} \times 1\text{ kg} = 70\text{ kg}$

c. $\frac{540\text{ lbs}}{2.2\text{ lbs}} \times 1\text{ kg} = 245.5$

d. $\frac{123\text{ lbs}}{2.2\text{ lbs}} \times 1\text{ kg} = 55.9$

21. b. Extensively for antineoplastic agents

22. Convert 100 lbs. to kg = 45.46 kg
45.46 kg × 0.05 g/kg = 2.273 g
Convert grams to milligrams: 2.273 × 1,000 = 2,273 mg

$\frac{2{,}273\text{ mg}}{40\text{ mg/mL}} = 56.8\text{ mL}$ Note: "Every 6 hours" is a distractor.

23. $\frac{3\text{ g}/55\text{ kg}}{4\text{ g}} \times 2.7\text{ mL} = 11.1\text{ mL}$

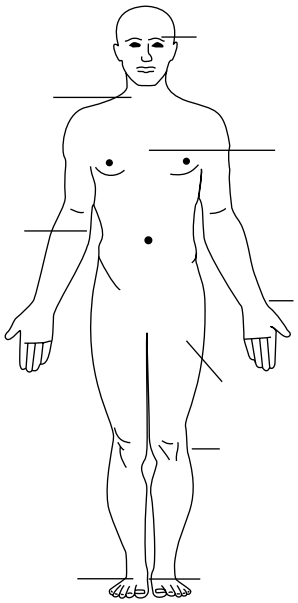
(*continued*)

24. *c.* Wipe off the vials with alcohol. Roll the NPH bottle. Inject 24 units of air into NPH and then 2 units of air into the regular insulin vial, and then draw up 2 units of regular insulin and then draw up 24 units of NPH insulin.
25. *a.* Subcutaneous, inhalation, self-administered pens
26. 28 units regular insulin and 64 units NPH insulin = 92 units total. In nursing practice, this order should be classified before administration.
27. 3 gtt/min
28. 25,000 units : 750 mL = X units : 50 mL
    $750\,\text{mL} \times X = 125,000\,\text{units/mL}$
    $X = \frac{125{,}000\,\text{units/mL}}{750\,\text{mL}} = 166.66\,\text{units}$
29. *b.* LR
30. *b.* 1:10,000
31. *a.* 0.8 mg
32. 9.5 oz. × 30 mL (one ounce) = 285 mL, so 300 mL is the larger volume
33. 3 mg/kg/24 hr given every 12 hours
    a. $\frac{10\ \text{lbs}}{2.2\ \text{lbs}} \times 1\,\text{kg} = 4.6\,\text{kg}$
    b. 3 mg × 4.6 kg = 13.8 mg/kg/d 13.8 mg/kg/d/2 = 6.9 mg/12 hr
    c. $\frac{6.9\ \text{mg}}{250\ \text{mg}} \times 10\,\text{mL} = 0.276\ \text{mL or } 0.3\ \text{mL}$
34. 325 mg per 2 teaspoons (tsp); each tsp = 5 mL × 2 = 10 mL

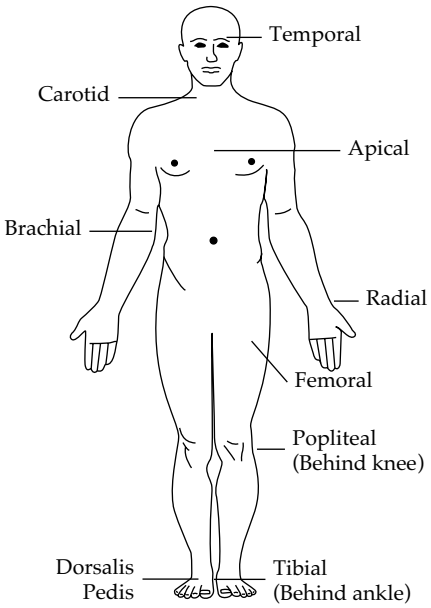
CHAPTER 5

Review and Assessment of Basic Skills

PULSE LOCATIONS WORKSHEET



ANSWERS TO PULSE LOCATIONS WORKSHEET



DATA COLLECTION TOOL AND DAILY WORKSHEET

Time: S/S: Location: Scale used: Intensity: Action: Was intervention adequate?	What intervention(s) may be more effective for pain relief? If pain unrelieved, was RN informed?
Neurological: Mood/affect: A&O _____ Pupils _____ Reflexes WNL? _____ Is speech clear? _____ Able to swallow without difficulty? _____ Able to MAE? _____ List any deficits: _____ _____ _____ _____	Treatment/diagnostic procedure: Did patient tolerate? Laboratory results: If abnormal, what is the significance? Specific concerns:
Integumentary: Color _____ Condition _____ Turgor _____ Warm/cool _____ Lesions/wounds _____ S/S infection _____ IV site _____	**Respiratory:** Rate _____ Breath sounds _____ SOB _____ DOE _____ O_2 _____ Suctioned _____ Respiratory TX _____ Chest tube _____ Other _____
Genitourinary: Continent _____ Foley _____ Bed pan _____ Retention _____ Frequency _____ Urine color _____ Odor _____	**Cardiovascular:** Apical pulse _____ Rhythm _____ Heart sounds _____ Murmur _____ Edema _____ Capillary refill _____ Pulses _____

Sediment _____ Other _____ _____	Homan's _____ Activity intolerance _____ Other _____ _____
Gastrointestinal: Dental caries _____ Oral lesions _____ BS X 4 _____ Abdomen soft/firm/distended/ protuberant/tender Distention _____ N/V _____ Abdominal circumference (if distended) _____ NGT/OGT/PEG/Keofeed/NPO/tube feeding/regular diet Other: _____ _____	**Musculoskeletal:** Tone _____Strength _____ Range of motion _____ Gait _____ Assistance device _____ Fall precaution _____ Intervention _____ Other: _____ _____ _____

N/V, nausea and vomiting; NGT, nasogastric tube; NPO, nothing by mouth; OGT, oral gastric tube; PEG, percutaneous endoscopy gastrostomy tube

SHADOWING EVALUATION FORM

Department: _____ Student: _____
Date: _____ Clinical course: _____
Summary of experience
_____
_____
_____
_____

New skills learned
_____
_____
_____
_____
_____
_____

CHAPTER 6

Medications

MEDICATION FORM

Drug (Brand/ Generic)	Mechanism of Action	How Administered	Expected Outcomes	Side Effects	Contraindications	Antidote

CHAPTER 7

Admission Assessments

WEEK 3 MEDICATION QUIZ

List the brand or generic name, dosage, route, reason for medication, side effects, and any special considerations the nurse should be aware of.

Drug: Acetaminophen

_____

_____

Drug: Baclofen

_____

_____

Drug: Cardizem

_____

_____

Drug: Diamox

_____

_____

Drug: Effexor

_____

_____

ADMISSION ASSESSMENT EXERCISE

Name: _____ Age: _____ Date: _____ Time: _____

Past medical history: _____ Height: _____ Weight: _____

C/O: _____

_____

Admit vital signs: B/P _____ HR _____ RR _____ T _____ POX _____

Religion: _____ Current vaccinations: Flu ☐ Pneumococcal ☐

Unable to obtain history ☐ Reason: _____

(*continued*)

Neurology: Denies any problems ☐

H/A ☐ CHI ☐ CVA ☐ TIA ☐ LOC ☐ Visual problems: _____

Hearing problems: _____ Aphasia: _____

Change in mental status: _____

Cardiology: Denies any problems ☐

Angina ☐ MI ☐ CAD ☐ CHF ☐ HTN ☐ Hypotension ☐ CABG ☐ AICD ☐

Pacemaker ☐ Mitral valve problem/repair ☐ Irregular electrical activity ☐

Edema ☐ Murmur ☐ PVD ☐ Pulmonary edema ☐ Pulmonary HTN ☐

Other: _____

Respiratory: Denies any problem ☐

Allergies ☐ Type: _____ Asthma ☐ COPD ☐ PNA ☐

Emphysema ☐ Bronchitis ☐ Tracheostomy ☐ Frequent colds ☐ Influenza ☐

Pulmonary embolism ☐ Home oxygen usage ☐ Frequent respiratory infections ☐

Current smoker ☐ ppd: _____ Ex-smoker ☐ ppd: _____

Age started smoking: _____ Date quit smoking: _____

Gastrointestinal: Denies any problem ☐

Dysphagia ☐ Obesity ☐ Anorexia ☐ Bulimia ☐ Nausea ☐ Vomiting ☐ Diarrhea ☐

GERD ☐ Hernia ☐ Hepatitis B ☐ Cirrhosis ☐ Pancreatitis ☐ GIB ☐ Ostomy ☐

Abdominal surgeries _____

_____

Alcohol intake ☐ Amount: _____ Frequency: _____

Cholecystitis ☐ Bariatric surgery ☐ Last BM: _____

Incontinence ☐

Genitourinary: Denies any problem ☐

Frequency ☐ Hesitancy ☐ UTI ☐ Urinary retention ☐ STD ☐ Type: _____

Incontinence ☐ Kidney stones ☐ Prostate problems/surgeries ☐

Endocrine: Denies any problem ☐

DM ☐ Type: _____ Thyroid ☐ Huntington's chorea ☐ Myasthenia gravis ☐

Other: _____

Musculoskeletal: Denies any problem ☐

Joint replacement ☐ Type: _____ Chronic problems ☐ Type: _____

_____

Arthritis ☐ Fractures ☐ Deformities ☐ Paralysis ☐ Other: _____

Prosthesis ☐ Type: _____

Skin: Denies any problem ☐

Rash ☐ Psoriasis ☐ Keloids ☐ Pressure ulcers ☐ Skin alterations ☐

Describe: _____

_____

_____

_____

Other:

DVT ☐

Cancer ☐ Type: _____ When diagnosed? _____

Treatment: _____ Chemotherapy ☐ Radiation therapy ☐

Current medication list:

_____

_____

_____

_____

_____

_____

Other medication: OTC ☐ Name/amount:

_____

_____

_____

Herbel medication ☐ Name/amount:

_____

_____

(*continued*)

_____

Recreational drug usage ☐ Type: _____ Current usage ☐

Past usage ☐

Mental illness ☐ Type/current treatment:

_____

_____

_____

Anxiety ☐ Depression ☐

Last menstrual period _____ Last Pap smear _____

Last mammogram _____ Currently pregnant ☐ Postmenopausal ☐

Hormone replacement ☐ Type/dosage:

_____

PSA ☐ Date/last prostate examination:

_____

Allergies:

_____

_____

_____

Surgeries: Denies ☐

Pain ☐ Current ☐ Describe:

_____

_____

_____

_____

Usual treatment for pain:

_____

_____

Education:

Barriers to learning ☐ Language ☐ Visual ☐ Hearing ☐ Literacy ☐ Age-related ☐

Advance directive ☐ Copy to be brought in by family ☐ Currently on file ☐

Patient requests information ☐

Family medical history:

Member	Alive	Deceased	PMH
Mother	☐	☐	_____
Father	☐	☐	_____
_____	☐	☐	_____
_____	☐	☐	_____
_____	☐	☐	_____
_____	☐	☐	_____

SAMPLE ADMISSION ASSESSMENT EXERCISE # 1

Name: Joseph Brown Age: 82 Date: _____ Time: _____

PMD: Dr. Sickly Height: 5′ 8″ Weight: 175

C/O Abdominal pain, N/V, anorexia

_____

Admit vital signs: B/P 156/88 HR 92 RR 22 T 100 POX 93%

Religion: Christian Current vaccinations: Flu ☐ Pneumococcal ☐

Unable to obtain history ☐ Reason: _____

Neurology: Denies any problems ☐

H/A ☐ CHI ☐ CVA ☐ TIA ☐ LOC ☐ Visual problems: _____

Hearing problems: Diminished in right ear Aphasia: _____

Change in mental status: Malaise

(*continued*)

Cardiology: Denies any problems ☑

Angina ☐ MI ☐ CAD ☐ CHF ☐ HTN ☐ Hypotension ☐ CABG ☐ AICD ☐

Pacemaker ☐ Mitral valve problem/repair ☐ Irregular electrical activity ☐

Edema ☐ Murmur ☐ PVD ☐ Pulmonary edema ☐ Pulmonary HTN ☐

Other: _____

Respiratory: Denies any problem ☑

Allergies ☐ Type: _____ Asthma ☐ COPD ☐ PNA ☐

Emphysema ☐ Bronchitis ☐ Tracheostomy ☐ Frequent colds ☐ Influenza ☐

Pulmonary embolism ☐ Home oxygen usage ☐ Frequent respiratory infections ☐

Current smoker ☐ ppd: _____ Ex-smoker ☑ ppd: 2 ppd

Age started smoking: _____ Date quit smoking: _____

Gastrointestinal: Denies any problem ☐

Dysphagia ☐ Obesity ☐ Anorexia ☐ Bulimia ☐ Nausea ☐ Vomiting ☐ Diarrhea ☐

GERD ☐ Hernia ☐ Hepatitis B ☑ Cirrhosis ☐ Pancreatitis ☐ GIB ☐ Ostomy ☐

Abdominal surgeries _____

_____

Alcohol intake ☐ Amount: _____ Frequency: _____

Cholecystitis ☐ Bariatric surgery ☑ Last BM: Yesterday

Incontinence ☑ Other: Abdominal pain

Genitourinary: Denies any problem ☐

Frequency ☐ Hesitancy ☐ UTI ☐ Urinary retention ☐ STD ☐ Type: _____

Incontinence ☐ Kidney stones ☐ Prostate problems/surgeries ☑ Other: Decreased output

Endocrine: Denies any problem ☑

DM ☐ Type: _____ Thyroid ☐ Huntington's chorea ☐ Myasthenia gravis ☐

Other: _____

Musculoskeletal: Denies any problem ☐

Joint replacement ☐ Type: _____ Chronic problems ☑ Type: Arthritis

knees

Arthritis ☐ Fractures ☐ Deformities ☐ Paralysis ☑ Other: Generalized aches

Prosthesis ☐ Type:

Skin: Denies any problem ☐

Rash ☐ Psoriasis ☐ Keloids ☐ Pressure ulcers ☐ Skin alterations ☐

Describe: Recent yellow color

Other:

DVT ☐

Cancer ☐ Type: _____ When diagnosed? _____

Treatment: _____ Chemotherapy ☐ Radiation therapy ☐

Current medication list:

Procardia 10 mg twice a day

ASA 325 mg daily

Digoxin 0.25 mg orally every day

Other medication: OTC ☐ Name/amount: _____

Herbal medication ☑ Name/amount: St. John's wort, one pill twice a day

Recreational drug usage ☐ Type: _____ Current usage ☐

Past usage ☐

(*continued*)

Mental illness ☐ Type/current treatment: _____

_____

_____

Anxiety ☐ Depression ☐

Last menstrual period _____ Last Pap smear _____

Last mammogram _____ Currently pregnant ☐ Postmenopausal ☐

Hormone replacement ☐ Type/dosage: _____

PSA ☐ Date/last prostate examination _____

Allergies: Lisinopril, somatostatin

_____

_____

Surgeries: Denies ☑

Pain ☐ Current ☐ Describe: Abdominal pain

_____

_____

_____

Usual treatment for pain: _____

_____

Education:

Barriers to learning ☐ Language ☐ Visual ☐ Hearing ☐ Literacy ☐ Age-related ☐

Advance directive ☐ Copy to be brought in by family ☐ Currently on file ☐

Patient requests information ☐

Family medical history:

Member	Alive	Deceased	PMH
Mother	☐	☑	CVA
Father	☐	☑	PNA

Brother ×1	☐	☑	HTN
Sisters ×2	☑	☐	HTN
	☐	☐	
	☐	☐	

SAMPLE ADMISSION ASSESSMENT EXERCISE #2

Name: Willie White Age: 66 Date: _____ Time: _____

PMD: Dr. Feelgood Height: 5′ 11″ Weight: 250 lbs _____

C/O Shortness of breath

_____

Admit vital signs: B/P 180/92 HR 100 RR 40 T 100 POX 87%

Religion: Jehovah Witness Current vaccinations: Flu ☐ Pneumococcal ☐

Unable to obtain history ☐ Reason: _____

Neurology: Denies any problems ☑

H/A ☐ CHI ☐ CVA ☐ TIA ☐ LOC ☐ Visual problems: _____

Hearing problems: _____ Aphasia: _____

Change in mental status: _____

Cardiology: Denies any problems ☐

Angina ☐ MI ☐ CAD ☐ CHF ☐ HTN ☐ Hypotension ☐ CABG ☐ AICD ☐

Pacemaker ☐ Mitral valve problem/repair ☐ Irregular electrical activity ☐

Edema ☐ Murmur ☐ PVD ☐ Pulmonary edema ☐ Pulmonary HTN ☐

Other: AFib

Respiratory: Denies any problem ☐

Allergies ☐ Type: _____ Asthma ☐ COPD ☐ PNA ☐

Emphysema ☐ Bronchitis ☐ Tracheostomy ☐ Frequent colds ☐ Influenza ☐

(*continued*)

Pulmonary embolism ☐ Home oxygen usage ☐ Frequent respiratory infections ☐

Current smoker ☐ ppd: _____ Ex-smoker ☐ ppd: _____

Age started smoking: _____ Date quit smoking: _____

Other: Asthma as a child, occasional upper respiratory infection

Gastrointestinal: Denies any problem ☑

Dysphagia ☐ Obesity ☐ Anorexia ☐ Bulimia ☐ Nausea ☐ Vomiting ☐ Diarrhea ☐

GERD ☐ Hernia ☐ Hepatitis ☐ Cirrhosis ☐ Pancreatitis ☐ GIB ☐ Ostomy ☐

Abdominal surgeries _____

_____

Alcohol intake ☐ Amount: 1–2 glasses wine Frequency: Daily

Cholecystitis ☐ Bariatric surgery ☐ Last BM: Yesterday

Incontinence ☐ Other

Genitourinary: Denies any problem ☑

Frequency ☐ Hesitancy ☐ UTI ☐ Urinary retention ☐ STD ☐ Type: _____

Incontinence ☐ Kidney stones ☐ Prostate problems/surgeries ☐ Other:

Endocrine: Denies any problem ☐

DM ☐ Type: 2 Thyroid ☐ Huntington's chorea ☐ Myasthenia gravis ☐

Other _____

Musculoskeletal: Denies any problem ☐

Joint replacement ☐ Type: _____ Chronic problems ☐ Type: _____

_____

Arthritis ☐ Fractures ☐ Deformities ☐ Paralysis ☑ Other: Hx: Broken ankle

Prosthesis ☐ Type: _____

Skin: Denies any problem ☑

Rash ☐ Psoriasis ☐ Keloids ☐ Pressure ulcers ☐ Skin alterations ☐ Describe:

_____

_____

_____

Other:

DVT ☐

Cancer ☐ Type: _____ When diagnosed? _____

Treatment: _____ Chemotherapy ☐ Radiation therapy ☐

Current medication list:

Coumadin 3 mg po daily

Metformin 250 mg po with each meal

_____

_____

_____

Other medication: OTC ☐ Name/amount: _____

_____

_____

Herbal medication ☐ Name/amount: _____

_____

_____

Recreational drug usage ☐ Type: _____ Current usage ☐

Past usage ☐

Mental illness ☐ Type/current treatment: _____

_____

_____

Anxiety ☐ Depression ☐

Last menstrual period: _____ Last Pap smear: _____

Last mammogram: _____ Currently pregnant ☐ Postmenopausal ☐

Hormone replacement ☐ Type/dosage: _____

PSA ☐ Date/last prostate examination: _____

(*continued*)

Allergies: None _____

_____

_____

Surgeries: Denies ☐

Pain ☐ Current ☐ Describe: ORIF of right ankle

_____

_____

_____

Usual treatment for pain: _____

_____

Education:

Barriers to learning ☐ Language ☐ Visual ☐ Hearing ☐ Literacy ☐ Age-related ☐

Advance directive ☐ Copy to be brought in by family ☐ Currently on file ☐

Patient requests information ☐

Family medical history:

Member	Alive	Deceased	PMH
Mother	☑	☐	HTN, MI, ↑ Cholesterol
Father	☐	☑	MVC
_____	☐	☐	_____
_____	☐	☐	_____
_____	☐	☐	_____
_____	☐	☐	_____

SAMPLE ADMISSION ASSESSMENT EXERCISE #3

Name: Martha Gray Age: 57 Date: _____ Time: _____

PMD: Dr. Foley Height: 5′ 9″ Weight: 250 lbs

C/O Dizziness and N/V _____

_____

Admit vital signs: B/P 198/98 HR 74 RR 24 T 98.8 POX 96%

Religion: None Current vaccinations: Flu ☐ Pneumococcal ☐

Unable to obtain history ☐ Reason: _____

Neurology: Denies any problems ☑

H/A ☐ CHI ☐ CVA ☐ TIA ☐ LOC ☐ Visual problems: _____

Hearing problems: _____ Aphasia: _____

Change in mental status: _____

Cardiology: Denies any problems ☐

Angina ☐ MI ☐ CAD ☐ CHF ☐ HTN ☐ Hypotension ☐ CABG ☐ AICD ☐

Pacemaker ☐ Mitral valve problem/repair ☐ Irregular electrical activity ☐

Edema ☐ Murmur ☐ PVD ☐ Pulmonary edema ☐ Pulmonary HTN ☐

Other:_____

Respiratory: Denies any problem ☑

Allergies ☐ Type: seasonal Asthma ☐ COPD ☐ PNA ☐

_____

Emphysema ☐ Bronchitis ☐ Tracheostomy ☐ Frequent colds ☐ Influenza ☐

Pulmonary embolism ☐ Home oxygen usage ☐ Frequent respiratory infections ☐

Current smoker ☐ ppd: 1.5 ppd Ex-smoker ☐ ppd: _____

Age started smoking: 17 years Date quit smoking: _____

Gastrointestinal: Denies any problem ☐

Dysphagia ☐ Obesity ☐ Anorexia ☐ Bulimia ☐ Nausea ☐ Vomiting ☐ Diarrhea ☐

GERD ☐ Hernia ☐ Hepatitis ☐ Cirrhosis ☐ Pancreatitis ☐ GIB ☐ Ostomy ☐

Abdominal surgeries _____

_____

Alcohol intake ☐ Amount: _____ Frequency: _____

Cholecystitis ☐ Bariatric surgery ☐ Last BM: _____Today_____

Incontinence ☐

(*continued*)

Genitourinary: Denies any problem ☐

Frequency ☐ Hesitancy ☐ UTI ☐ Urinary retention ☐ STD ☐ Type: _____

Incontinence ☐ Kidney stones ☐ Prostate problems/surgeries ☐

Endocrine: Denies any problem ☐

DM ☑ Type: 2 Thyroid ☑ Huntington's chorea ☐ Myasthenia gravis ☐

Other: _____

Musculoskeletal: Denies any problem ☐ Experiencing weakness on right side

Joint replacement ☐ Type: _____

Chronic problems ☐ Type: _____
Bonespurs / surgery_____

Arthritis ☐ Fractures ☐ Deformities ☐ Paralysis ☐ Other:_____

Prosthesis ☐ Type: _____

Skin: Denies any problem ☐

Rash ☐ Psoriasis ☐ Keloids ☐ Pressure ulcers ☐ Skin alterations ☐ Describe: _____
Vaginal itching_____

_____

_____

Other:

DVT ☐

Cancer ☐ Type: _____ When diagnosed? _____

Treatment: _____ Chemotherapy ☐ Radiation therapy ☐

Current medication list:

Allegra prn, Nexium one tablet daily, Metoprolol 50 mg bid, Tylenol 500 mg – 2 tablets Q4 hours prn, Lipitor 40 mg daily, Metformin 500 mg bid, Synthroid 150 mcg daily

_____

_____

_____

_____

Other medication: OTC ☐ Name/amount: _____

_____

_____

Herbal medication ☐ Name/amount: _____

_____

_____

Recreational drug usage ☐ Type: _____ Current usage ☐

Past usage ☐

Mental illness ☐ Type/current treatment: _____

_____

_____

Anxiety ☐ Depression ☐

Last menstrual period: _____ Last Pap smear: _____

Last mammogram: _____ Currently pregnant ☐ Postmenopausal ☐

Hormone replacement ☐ Type/dosage: _____

Family medical history:	Alive	Deceased	
2 brothers	☑	☐	DM,HTN
3 sisters	☑	☐	DM
Mother	☐	☑	CVA
Father	☐	☑	MI

SAMPLE ADMISSION ASSESSMENT EXERCISE #4

Name: Sara Yellow Age: 75 Date: _____ Time: _____

PMD: Dr. Sickly Height: 5′ 7″ Weight: 165 lbs

C/O Abdominal pain

_____

Admit vital signs: B/P 201/102 HR 120 RR 30 T 102.2 POX 96%

Religion: _Christianity_____ Current vaccinations: Flu ☐ Pneumococcal ☐

Unable to obtain history ☐ Reason: _____

Neurology: Denies any problems ☐

H/A ☐ CHI ☐ CVA ☐ TIA ☐ LOC ☐ Visual problems: _____

(*continued*)

Hearing problems: _____ Aphasia: _____

Change in mental status: Closed head injury from a fall 3 years ago

Cardiology: Denies any problems ☐

Angina ☐ MI ☐ CAD ☐ CHF ☐ HTN ☐ Hypotension ☐ CABG ☐ AICD ☐

Pacemaker ☐ Mitral valve problem/repair ☐ Irregular electrical activity ☐

Edema ☐ Murmur ☐ PVD ☐ Pulmonary edema ☐ Pulmonary HTN ☐

Other: A-fib controlled

Respiratory: Denies any problem ☐

Allergies ☐ Type: _____ _____ Asthma ☐ COPD ☐ PNA ☐

Emphysema ☐ Bronchitis ☐ Tracheostomy ☐ Frequent colds ☐ Influenza ☐

Pulmonary embolism ☐ Home oxygen usage ☐ Frequent respiratory infections ☐

Current smoker ☐ ppd: _____ Ex-smoker ☑ ppd: 1/2.

Age started smoking: 25 years Date quit smoking: 20 years ago

Gastrointestinal: Denies any problem ☐

Dysphagia ☐ Obesity ☐ Anorexia ☐ Bulimia ☐ Nausea ☐ Vomiting ☐ Diarrhea ☐

GERD ☐ Hernia ☐ Hepatitis ☐ Cirrhosis ☐ Pancreatitis ☐ GIB ☐ Ostomy ☐

Abdominal surgeries _____

Alcohol intake ☑ Amount: Varies Frequency: Daily but none in past 3 days

Cholecystitis ☐ Bariatric surgery ☐ Last BM: 3 days ago

Incontinence ☐

Genitourinary: Denies any problem ☑

Frequency ☐ Hesitancy ☐ UTI ☐ Urinary retention ☐ STD ☐ Type: _____

Incontinence ☐ Kidney stones ☐ Prostate problems/surgeries ☐

Endocrine: Denies any problem ☐

DM ☐ Type: ___ Thyroid ☐ Huntington's chorea ☐ Myasthenia gravis ☐

Other: Doctor said I was prediabetic years ago

Musculoskeletal: Denies any problem ☐

Joint replacement ☐ Type: _____ Chronic problems ☐

Type: _____

_____

Arthritis ☐ Fractures ☐ Deformities ☐ Paralysis ☐ Other:_____

Prosthesis ☐ Type: _____

Skin: Denies any problem ☐

Rash ☐ Psoriasis ☐ Keloids ☐ Pressure ulcers ☐ Skin alterations ☐ Describe:
Dry skin

Other:

DVT ☐

Cancer ☐ Type: _____ When diagnosed? _____

Treatment: _____ Chemotherapy ☐ Radiation therapy ☐

Current medication list: _____

Coumadin 2.5 mg daily, Anacin prn

Other medication: OTC ☐ Name/amount: _____

Herbal medication ☐ Name/amount: _____

Recreational drug usage ☐ Type: _____ Current usage ☐

Past usage ☐

Mental illness ☐ Type/current treatment: _____

(*continued*)

Anxiety ☐ Depression ☐

Last menstrual period _____ Last Pap smear: _____

Last mammogram _____ Currently pregnant ☐ Postmenopausal ☐

Hormone replacement ☐ Type/dosage: _____

PSA ☐ Date/last prostate examination _____

Allergies: _____

_____

_____

Surgeries: Denies ☐

Pain ☑ Current ☐ Describe: Sharp right lower quadrant pain radiating shoulder

_____

_____

_____

Usual treatment for pain: _____

_____

Education:

Barriers to learning ☐ Language ☐ Visual ☐ Hearing ☐ Literacy ☐ Age-related ☐

Advance directive ☐ Copy to be brought in by family ☐ Currently on file ☐

Patient requests information ☐

Family medical history:

Member	Alive	Deceased	PMH
Mother	☐	☑	CHF
Father	☐	☑	MI
_____	☐	☐	_____
_____	☐	☐	_____
_____	☐	☐	_____
_____	☐	☐	_____

SAMPLE ADMISSION ASSESSMENT EXERCISE #5

Name: Heather Purple Age: 72 Date: _____ Time: _____

PMD: Dr. Payne Height: 5′ 3″ Weight: 237 lbs

C/O Abdominal pain

_____

Admit vital signs: B/P 170/92 HR 98 RR 30 T 99.3 POX 88%

Religion: Baptist Current vaccinations: Flu ☐ Pneumococcal ☐

Unable to obtain history ☐ Reason: _____

Neurology: Denies any problems ☐

H/A ☐ CHI ☐ CVA ☐ TIA ☐ LOC ☐ Visual problems: Glaucoma

Hearing problems: _____ Aphasia: _____

Change in mental status: _____

Cardiology: Denies any problems ☐

Angina ☐ MI ☐ CAD ☐ CHF ☐ HTN ☐ Hypotension ☐ CABG ☐ AICD ☐

Pacemaker ☐ Mitral valve problem/repair ☐ Irregular electrical activity ☐

Edema ☐ Murmur ☐ PVD ☐ Pulmonary edema ☐ Pulmonary HTN ☐

Other: Rheumatic fever as a child

Respiratory: Denies any problem ☐

Allergies ☐ Type: _____Hay fever_____ Asthma ☐ COPD ☐ PNA ☐

Emphysema ☐ Bronchitis ☐ Tracheostomy ☐ Frequent colds ☐ Influenza ☐

Pulmonary embolism ☐ Home oxygen usage ☐ Frequent respiratory infections ☐

Current smoker ☐ ppd: _____ Ex-smoker ☐ ppd: _____

Age started smoking: _____ Date quit smoking: _____

Gastrointestinal: Denies any problem ☐

Dysphagia ☐ Obesity ☐ Anorexia ☐ Bulimia ☐ Nausea ☐ Vomiting ☐ Diarrhea ☐

GERD ☐ Hernia ☐ Hepatitis ☐ Cirrhosis ☐ Pancreatitis ☐ GIB ☐ Ostomy ☐

Abdominal surgeries _____

_____

(*continued*)

Alcohol intake ☑ Amount: 1 glass of wine Frequency: Daily

Cholecystitis ☐ Bariatric surgery ☐ Last BM: _____

Incontinence ☐

Genitourinary: Denies any problem ☐

Frequency ☐ Hesitancy ☐ UTI ☐ Urinary retention ☐ STD ☐ Type: _____

Incontinence ☐ Kidney stones ☐ Prostate problems/surgeries ☐

Endocrine: Denies any problem ☐

DM ☐ Type: 2 Thyroid ☐ Huntington's chorea ☐ Myasthenia gravis ☐

Other: _____

Musculoskeletal: Denies any problem ☐

Joint replacement ☐ Type: Chronic problems ☐ Type: Chronic back pain and wears a back brace

Arthritis ☐ Fractures ☐ Deformities ☐ Paralysis ☐ Other: _____

Prosthesis ☐ Type: _____

Skin: Denies any problem ☐

Rash ☐ Psoriasis ☐ Keloids ☐ Pressure ulcers ☐ Skin alterations ☐ Describe:
Dry skin

_____

_____

Other:

DVT ☐

Cancer ☐ Type: _____ When diagnosed? _____

Treatment: _____ Chemotherapy ☐ Radiation therapy ☐

Current medication list:

Note: Frequently, patients only know the action of the medications they take and will not be able to recall the specific name of the drugs. These drugs need to be clarified. Ask the patient or family member to bring in the list of medications or the pill bottles.

Eye drops 4 times daily, sugar pill daily, heart pill daily, water pill daily, b/p pill two times a day, iron table daily, vitamin D + calcium daily, stool softener daily.

Other medication: OTC ☐ Name/amount: Evening primrose

Herbal medication ☐ Name/amount: _____

Recreational drug usage ☐ Type: _____ Current usage ☐

Past usage ☐

Mental illness ☐ Type/current treatment: _____

Anxiety ☐ Depression ☐

Last menstrual period _____ Last Pap smear: _____

Last mammogram _____ Currently pregnant ☐ Postmenopausal ☐

Hormone replacement ☐ Type/dosage: _____

PSA ☐ Date/last prostate examination: _____

Allergies: _____

Surgeries: Denies ☐

Pain ☐ Current ☐ Describe: _____

(*continued*)

_____

Usual treatment for pain: _____

_____

Education:

Barriers to learning ☐ Language ☐ Visual ☐ Hearing ☐ Literacy ☐ Age-related ☐

Advance directive ☐ Copy to be brought in by family ☐ Currently on file ☐

Patient requests information ☐

Family medical history:

Member	Alive	Deceased	PMH
Mother	☐	☑	Old age
Father	☐	☑	Old age
_____	☐	☐	_____
_____	☐	☐	_____
_____	☐	☐	_____
_____	☐	☐	_____

SAMPLE ADMISSION ASSESSMENT EXERCISE #6

Name: Elisa Green Age: 88 Date: _____ Time: _____

PMD: Dr. Feelgood Height: 5′ 5″ Weight: 102 lbs

C/O Abdominal pain

_____

Admit vital signs: B/P 174/95 HR 110 RR 28 T 99 POX 91%

Religion: Catholic Current vaccinations: Flu ☐ Pneumococcal ☐

Unable to obtain history ☐ Reason: _____

Neurology: Denies any problems ☐

H/A ☐ CHI ☐ CVA ☐ TIA ☐ LOC ☐ Visual problems: Slight droop to left eye

Hearing problems: HOH/hearing aids Aphasia: _____

Change in mental status: _____

Other: Had cataract surgery of left eye

Cardiology: Denies any problems ☐

Angina ☐ MI ☐ CAD ☐ CHF ☐ HTN ☐ Hypotension ☐ CABG ☐ AICD ☐

Pacemaker ☐ Mitral valve problem/repair ☐ Irregular electrical activity ☐

Edema ☐ Murmur ☐ PVD ☐ Pulmonary edema ☐ Pulmonary HTN ☐

Other: Chronic A-fib

Respiratory: Denies any problem ☑

Allergies ☐ Type: _____Hay fever_____ Asthma ☐ COPD ☐ PNA ☐

Emphysema ☐ Bronchitis ☐ Tracheostomy ☐ Frequent colds ☐ Influenza ☐

Pulmonary embolism ☐ Home oxygen usage ☐ Frequent respiratory infections ☐

Current smoker ☐ ppd: _____ Ex-smoker ☐ ppd: _____

Age started smoking: _____ Date quit smoking: _____

Gastrointestinal: Denies any problem ☐

Dysphagia ☐ Obesity ☐ Anorexia ☐ Bulimia ☐ Nausea ☐ Vomiting ☐ Diarrhea ☐

GERD ☐ Hernia ☐ Hepatitis ☐ Cirrhosis ☐ Pancreatitis ☐ GIB ☐ Ostomy ☐

Abdominal surgeries _____

_____

Alcohol intake ☐ Amount: _____

Cholecystitis ☐ Bariatric surgery ☐ Last BM: _____

Incontinence ☐ Other: Decreased appetite

Genitourinary: Denies any problem ☐

Frequency ☐ Hesitancy ☐ UTI ☐ Urinary retention ☐ STD ☐ Type: _____

Incontinence ☐ Kidney stones ☐ Prostate problems/surgeries ☐

Endocrine: Denies any problem ☐

DM ☐ Type: _____ Thyroid ☐ Huntington's chorea ☐ Myasthenia gravis ☐

Other: _____

Musculoskeletal: Denies any problem ☐

(*continued*)

Joint replacement ☑ Type: Chronic problems ☑ Type: Generalized bone aches, uncertain if arthritis or not

Arthritis ☐ Fractures ☐ Deformities ☐ Paralysis ☐ Other:_____

Prosthesis ☐ Type: _____

Skin: Denies any problem ☐

Rash ☐ Psoriasis ☐ Keloids ☐ Pressure ulcers ☐ Skin alterations ☐ Describe:

_____

_____

_____

Other:

DVT ☐

Cancer ☐ Type: _____ When diagnosed? _____

Treatment: _____ Chemotherapy ☐ Radiation therapy ☐

Current medication list:

Nitroglycerin 0.4 tablet prn chest pain, Coumadin 2 mg daily, aspirin ES prn pain

_____

_____

_____

_____

_____

_____

Other medication: OTC ☐ Name/amount: _____

_____

_____

Herbal medication ☐ Name/amount: _____

_____

_____

Recreational drug usage ☐ Type: _____ Current usage ☐

Past usage ☐

Mental illness ☐ Type/current treatment: _____

_____

_____

Anxiety ☐ Depression ☐

Last menstrual period _____ Last Pap smear _____

Last mammogram _____ Currently pregnant ☐ Postmenopausal ☐

Hormone replacement ☐ Type/dosage: _____

PSA ☐ Date/last prostate examination _____

Allergies: _____

_____

_____

Surgeries: Denies ☐

Pain ☑ Current ☐ Describe: Cervical cancer. Had a hysterectomy.

Complains of sharp right lower guadrant pain with two episodes of bright bloody stools

_____

_____

Usual treatment for pain: _____

_____

_____

Education:

Barriers to learning ☐ Language ☐ Visual ☐ Hearing ☐ Literacy ☐ Age-related ☐

Advance directive ☐ Copy to be brought in by family ☐ Currently on file ☐

Patient requests information ☐

Family medical history:

Member	Alive	Deceased	PMH
Mother	☐	☑	Dropsy
Father	☐	☑	Cirrhosis
Brother × 1	☐	☑	Killed in the war

(*continued*)

Sister × 1	☑	☐	PNA
	☐	☐	
	☐	☐	

SAMPLE ADMISSION ASSESSMENT EXERCISE #7

Name: Henry Pink Age: 68 Date: _____ Time: _____

PMD: Dr. Payne Height: 5′ 11″ Weight: 187 lbs

C/O Severe right leg pain

_____

Admit vital signs: B/P 187/102 HR 112 RR 32 T 100.7 POX 95%

Religion: 7th Day Adventist Current vaccinations: Flu ☐ Pneumococcal ☐

Unable to obtain history ☐ Reason: _____

Neurology: Denies any problems ☐

H/A ☐ CHI ☐ CVA ☐ TIA ☐ LOC ☐ Visual problems: Wears glasses

Hearing problems: HOH/hearing aids Aphasia: _____

Change in mental status: _____

Other: _____

Cardiology: Denies any problems ☑

Angina ☐ MI ☐ CAD ☐ CHF ☐ HTN ☐ Hypotension ☐ CABG ☐ AICD ☐

Pacemaker ☐ Mitral valve problem/repair ☐ Irregular electrical activity ☐

Edema ☐ Murmur ☐ PVD ☐ Pulmonary edema ☐ Pulmonary HTN ☐

Other: _____

Respiratory: Denies any problem ☐

Allergies ☐ Type: _____ Asthma ☐ COPD ☐ PNA ☐

Emphysema ☐ Bronchitis ☐ Tracheostomy ☐ Frequent colds ☐ Influenza ☐

Pulmonary embolism ☐ Home oxygen usage ☐ Frequent respiratory infections ☐

Current smoker ☐ ppd: 1 1/2 Ex-smoker ☐ ppd: _____

Age started smoking: 18 years old Date quit smoking: _____

Gastrointestinal: Denies any problem ☑

Dysphagia ☐ Obesity ☐ Anorexia ☐ Bulimia ☐ Nausea ☐ Vomiting ☐ Diarrhea ☐

GERD ☐ Hernia ☐ Hepatitis ☐ Cirrhosis ☐ Pancreatitis ☐ GIB ☐ Ostomy ☐

Abdominal surgeries _____

_____

Alcohol intake ☐ Amount: A six pack of beer or more each weekend

Cholecystitis ☐ Bariatric surgery ☐ Last BM: _____

Incontinence ☐ Other: Constipation problem

Genitourinary: Denies any problem ☐

Frequency ☐ Hesitancy ☐ UTI ☐ Urinary retention ☐ STD ☐ Type: _____

Incontinence ☐ Kidney stones ☐ Prostate problems/surgeries ☐ Other: Nocturnal freq.

Endocrine: Denies any problem ☐

DM ☐ Type: _____ Thyroid ☐ Huntington's chorea ☐ Myasthenia gravis ☐

Other: _____

Musculoskeletal: Denies any problem ☐

Joint replacement ☐ Type: _____ Chronic problems ☐ Type: _____

_____

Arthritis ☐ Fractures ☐ Deformities ☐ Paralysis ☐ Other: _____

Prosthesis ☐ Type: _____

Skin: Denies any problem ☐

Rash ☐ Psoriasis ☐ Keloids ☐ Pressure ulcers ☐ Skin alterations ☐ Describe: _____

_____

_____

_____

Other:

DVT ☐

Cancer ☐ Type: _____ When diagnosed? _____

(*continued*)

Treatment: _____ Chemotherapy ☐ Radiation therapy ☐

Current medication list:

Co-reg 12.5 mg bid, ASA 325 mg daily, Atrovent inhaler TID and prn, Pepcid 20 mg bid, Tylenol XS prn

Other medication: OTC ☐ Name/amount: _____

Herbal medication ☐ Name/amount: _____

Recreational drug usage ☑ Type: Pot in younger years Current usage ☐

Past usage ☐

Mental illness ☐ Type/current treatment: _____

Anxiety ☐ Depression ☐

Last menstrual period _____ Last Pap smear: _____

Last mammogram _____ Currently pregnant ☐ Postmenopausal ☐

Hormone replacement ☐ Type/dosage: _____

PSA ☐ Date/last prostate examination: _____

Allergies: PCN

Surgeries: Denies ☐

Pain ☐ Current ☐ Describe: Hernia repair

Usual treatment for pain: _____

Education:

Barriers to learning ☐ Language ☐ Visual ☐ Hearing ☐ Literacy ☐ Age-related ☐

Advance directive ☐ Copy to be brought in by family ☐ Currently on file ☐

Patient requests information ☐

Family medical history:

Member	Alive	Deceased	PMH
Mother	☐	☑	CVA
Father	☐	☑	MI
Brother ×3	☐	☑	HTN, DM, MI
Sister ×1	☑	☐	None
_____	☐	☐	_____
_____	☐	☐	_____

SAMPLE ADMISSION ASSESSMENT EXERCISE #8

Name: Wayne Blue Age: 59 Date: _____ Time: _____

PMD: Dr. Goode Height: 6′ 0″ Weight: 235 lbs

C/O Fluish, achy, fatigue, nausea

_____

Admit vital signs: B/P 134/74 HR 60 RR 32 T 99.8 POX 95%

Religion: Atheist Current vaccinations: Flu ☐ Pneumococcal ☐

Unable to obtain history ☐ Reason: _____

Neurology: Denies any problems ☐

H/A ☐ CHI ☐ CVA ☐ TIA ☐ LOC ☐ Visual problems: _____

Hearing problems: HOH/hearing aids Aphasia: _____

Change in mental status: _____

Other: _____

Cardiology: Denies any problems ☑

Angina ☐ MI ☐ CAD ☐ CHF ☐ HTN ☐ Hypotension ☐ CABG ☐ AICD ☐

Pacemaker ☐ Mitral valve problem/repair ☐ Irregular electrical activity ☐

Edema ☐ Murmur ☐ PVD ☐ Pulmonary edema ☐ Pulmonary HTN ☐

Other: _____

Respiratory: Denies any problem ☑

Allergies ☐ Type: _____ Asthma ☐ COPD ☐ PNA ☐

Emphysema ☐ Bronchitis ☐ Tracheostomy ☐ Frequent colds ☐ Influenza ☐

Pulmonary embolism ☐ Home oxygen usage ☐ Frequent respiratory infections ☐

Current smoker ☐ ppd: _____ Ex-smoker ☐ ppd: _____

Age started smoking: _____ Date quit smoking: _____

Gastrointestinal: Denies any problem ☑

Dysphagia ☐ Obesity ☐ Anorexia ☐ Bulimia ☐ Nausea ☐ Vomiting ☐ Diarrhea ☐

GERD ☐ Hernia ☐ Hepatitis ☐ Cirrhosis ☐ Pancreatitis ☐ GIB ☐ Ostomy ☐

Abdominal surgeries _____

_____

Alcohol intake ☑ Amount: 1–2 glasses daily _____

Cholecystitis ☐ Bariatric surgery ☐ Last BM: _____

Incontinence ☐ other: _____

Genitourinary: Denies any problem ☐

Frequency ☐ Hesitancy ☐ UTI ☐ Urinary retention ☐ STD ☐ Type: Herpes___

Incontinence ☐ Kidney stones ☐ Prostate problems/surgeries ☐ Other:
Nocturnal freq

Endocrine: Denies any problem ☐

DM ☐ Type: Thyroid ☐ Huntington's chorea ☐ Myasthenia gravis ☐

Other: _____

Musculoskeletal: Denies any problem ☐

Joint replacement ☐ Type: _____ Chronic problems ☑ Type: _____

Hip and knee pain after walking _____

_____

Arthritis ☐ Fractures ☐ Deformities ☐ Paralysis ☐ Other:_____

Prosthesis ☐ Type: _____

Skin: Denies any problem ☐

Rash ☐ Psoriasis ☐ Keloids ☐ Pressure ulcers ☐ Skin alterations ☐
Describe: Rosacea _____

_____

_____

Other:

DVT ☐

Cancer ☐ Type: _____ When diagnosed? _____

Treatment: _____ Chemotherapy ☐ Radiation therapy ☐

Current medication list:

Co-reg 25 mg bid, Atenolol 50 mg—1/2 tablet twice a day _____

_____

_____

(*continued*)

Other medication: OTC ☑ Name/amount: Daily vitamin

Herbal medication ☐ Name/amount: _____

Recreational drug usage ☐ Type: _____ Current usage ☐

Past usage ☐

Mental illness ☐ Type/current treatment: _____

Anxiety ☐ Depression ☐

Last menstrual period _____ Last Pap smear _____

Last mammogram _____ Currently pregnant ☐ Postmenopausal ☐

Hormone replacement ☐ Type/dosage _____

PSA ☐ Date/last prostate examination _____

Allergies: _____

Surgeries: Denies ☐

Pain ☐ Current ☐ Describe: _____

Education:

Barriers to learning ☐ Language ☐ Visual ☐ Hearing ☐ Literacy ☐ Age-related ☐

Advance directive ☐ Copy to be brought in by family ☐ Currently on file ☐

Patient requests information ☐

Family medical history:

Member	Alive	Deceased	PMH
Mother	☑	☐	DM 2
Father	☑	☐	MI
_____	☐	☐	_____
_____	☐	☐	_____
_____	☐	☐	_____
_____	☐	☐	_____

ANSWERS TO SAMPLE ADMISSION ASSESSMENT EXERCISES

Exercise 1

Did student discover that the patient was on ASA and Procardia but denies cardiac disease? Blood pressure is elevated—did the client take his pills today? Did the student realize that St John's wort can influence a variety of anticoagulation and cardiac medications?

Exercise 2

Patient is hypertensive but no cardiac are ordered. Plus oximetry is low and blood pressure elevated. Were there items addressed before the rest of the assessment is completed?

Exercise 3

Did student stop to address the neurological weakness and hypertension? Is the patient having an evolving stroke? Does the student recognize the various risk factors for a stroke plus family history? Client denies cardiac problems but is on metoprolol.

Exercise 4

Did the student address the significance of the vital signs first? is the patient experiencing delirium tremors since he is hypertensive and tachycardia since his last drink was three days ago? His abdomen symptoms may be indicative of gallbladder or pancreatitis.

Exercise 5

Did student address the significance of the pulse oximetry first in correlation with the respiratory rate and the client's denial of any respiratory problem? Does the primrose play a factor in medication absorption or toxicity?

Exercise 6

Even though the patient is complaining of abdominal pain there is drooping to the left eyelid. Is this a signification factor that needs to be addressed immediately? Are the hearing aids with patent and functioning properly? Client denies any respiratory but pulse oximetry is low. The client is on botj Coumadin Aspirin and experiencing bloody stools. The clinical instructor can assist the student with this relationship of anticoagulants and bleeding.

Exercise 7

Blood pressure is elevated. Client is on Coreg denies any cardiac history. Client denies any gastrointestinal disease but on Pepcid.

Exercise 8

Client denies any cardiac history but on Coreg and Atenolol. Client has a history of thyroid problems but not on any thyroid medication.

eMAR Quiz

Answer the following questions true (T) or false (F):

1. Electronic medical records allow viewing of the patient's medical record by various members of the interdisciplinary team from different locations at the same time. ( )
2. An eMAR promotes increased medication errors due to the required multiple information requirements. ( )
3. An eMAR is a temporary record used during downtime. ( )
4. An eMAR records in 12-hour blocks to distinguish between day and night shift administration. ( )
5. The eMAR allows nurses access to their patients' laboratory results, medication records, and progress notes. ( )
6. The eMAR must be programmed by the nurse to set reminders. ( )
7. Allergies entered by the emergency department will notify anyone giving medications of all the patient's allergies. ( )
8. Correct eMAR documentation can be viewed by the unit manager and used in performance evaluations. ( )
9. A false sense of security may be elicited and computer dependency may occur when using an eMAR. ( )
10. Damaged barcodes and malfunctioning scanners are the only reasons that may prevent medication administration. ( )

Answers to eMAR Quiz

1. (T) The patient record is available to health care professionals in different locations, allowing better patient care.
2. (F) The eMAR has built-in safety features that assist in preventing medication errors.
3. (F) An eMAR is a permanent record.
4. (F) The eMAR records in military time to reflect 24-hour documentation.
5. (T) Nurses can retrieve all the information on their patients in the eMAR.
6. (F) The eMAR has a system in place with set reminders.
7. (F) The allergies of the patient should be entered into the eMAR and confirmed.
8. (T) Documentation by the nurse can be used by the unit manager and included as part of the employee's evaluation process.
9. (T) The nurse may assume that the medication, dose, route, and patient order are all correct. All medications should be reviewed to ensure accuracy. The six patient rights should be implemented each and every time a medication is to be administered to ensure patient safety.
10. (F) Unavailable medications, computer downtime, patient refusal, and so on are other reasons for the prevention of medication administration.

CHAPTER 8

Critical Thinking Applied to IV Therapy, Medications, and Laboratory Values

CRITICAL THINKING FORM

1. List two objectives or goals you plan to meet during this week's clinical practice?

_____

_____

2. How do you plan to meet the two objectives or goals?

_____

_____

3. How does your plan to meet your two objectives/goals reinforce your theoretical knowledge?

_____

_____

4. What will be your number one priority based on your objectives or goals?

_____

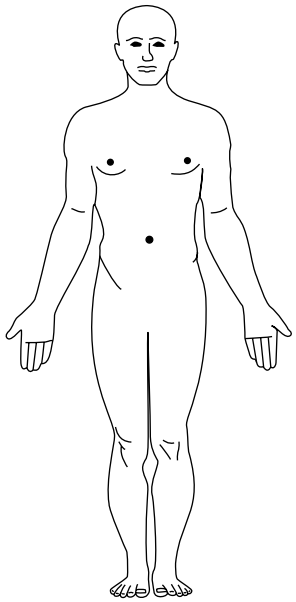
_____

5. List one patient educational objective you will include in your plan of care for this week.

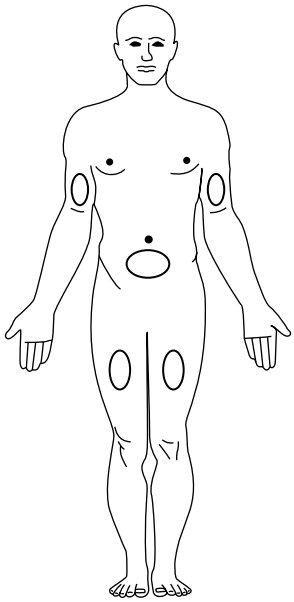
_____

_____

SC INJECTION SITE LABELLING WORKSHEET

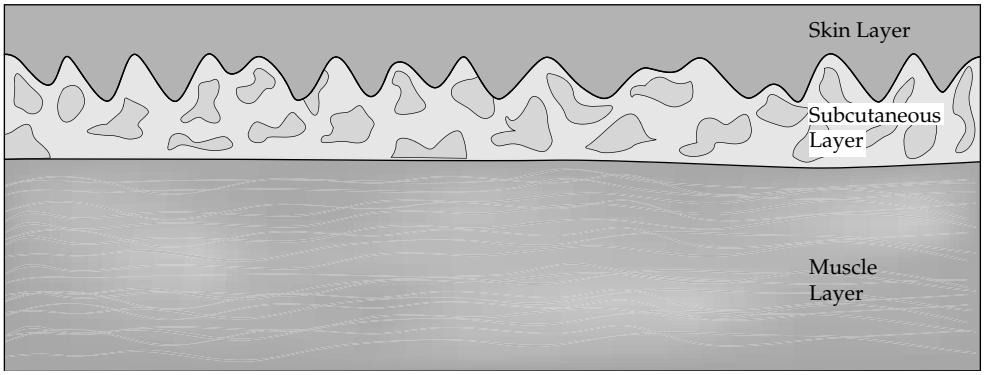


SC INJECTION SITE ANSWER SHEET



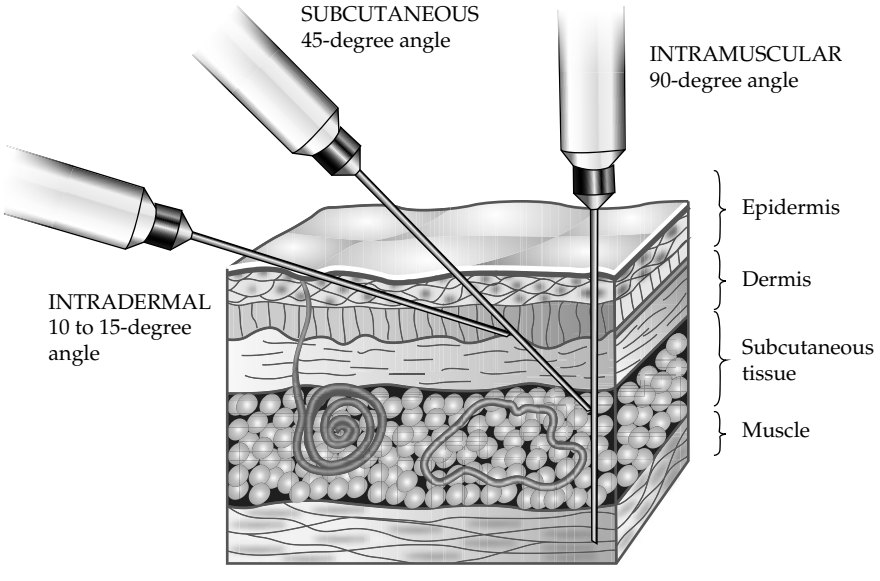
INJECTION SITE EXERCISE

Draw the correct injection angles of the three layers in the graphic and label them by name.



1. SC injection
2. IM injection
3. Intradermal injection

INJECTION SITE EXERCISE ANSWER SHEET



DRUG CALCULATIONS EXERCISE

Common drop factor rates are as follows:

10 drops/mL/mL = blood administrative set
15 drops/mL/mL = regular administrative set
60 drops/mL/mL = microadministrative set

Formula for working out the flow rate is as follows:

$$\frac{\text{mL (volume)} \times \text{drops/mL (drop factor)}}{\text{time (minutes)}} = \text{drops/minute}$$

Example problem:
1200 mL 0.9 NS (normal saline) ordered over 8 hours. Drop factor of 15 drops/mL. How many drops per minute?

$$\frac{1,200 \text{ mL} \times 15}{8 \times 60} = \frac{18,000}{480} = 37.5 \text{ mL/min} = 38 \text{ mL/min}$$

1. Calculate the drip rate for 500 mL over 30 minutes with a regular set = _____ rate.
2. Calculate 1 L 0.9 NS over 10 hours = drop factor 15 gtts/mL = _____ rate.
3. Calculate 1.5 L LR over 4 hours = drop factor 10 gtts/mL = _____ rate.
4. Calculate 2 Ls 0.45 NS over 6 hours = drop factor 10 gtts/mL = _____ rate.
5. Calculate 1 L D5W over 6 hours = drop factor 15 gtts/mL = _____ rate.
6. 250 mL 0.9 NS over 1 hour with drop factor of 15 gtts/mL = _____ rate.
7. 500 mL 0.9 NS over 2 hours with drop factor of 10 gtts/mL = _____ rate.
8. 500 mL 0.9 NS over 2.5 hours with drop factor of 15 gtts/mL = _____ rate.
9. 3 L 0.9 NS over 10 hours with drop factor of 15 gtts/mL = _____ rate.
10. 500 mL LR over 4 hours with drop factor of 15 gtts/mL = _____ rate.
11. 250 mL 0.9 NS over 2 hours with drop factor of 60 gtts/mL = _____ rate.
12. 1.5 L D5W is ordered over 3 hours with drop factor of 10 gtts/mL. The IV has been running for 2 hours and has 500 mL remaining. How many drops/min is required to complete the infusion as ordered? _____

(*continued*)

13. 1,500 mL is ordered over 10 hours with a drop factor of 10 gtts/mL. The IV has been running for 8 hours and 150 mL remains. How many drops/min is required to infuse the fluid as ordered?_____

14. 4 L NS is ordered over 12 hours with a drop factor of 15 gtts/mL. The IV has been infusing for 8 hours and 45 minutes. How many drops/min are required to complete the infusion as ordered?_____

15. 150 mL of 0.9 NS is ordered over 3 hours with a drop factor of 15 gtts/mL. Calculate the rate._____
_____

(DO, doctor ordered; AD, available dose)

1. DO: 50 mg metoprolol po

   AD: 25 mg metoprolol tablets
   Give: _____

2. DO: 37.5 mg dothiepin po

   AD: 75 mg dothiepin tablets
   Give: _____

3. DO: 300 mg Dilantin po

   AD: 100 mg Dilantin tablets
   Give: _____

4. DO: digoxin 0.25 mg po

   AD: 1 mg digoxin tablet
   Give: _____

5. DO: 1 mg diazepam po

   AD: 2 mg diazepam
   Give: _____

6. DO: 200 mg sodium valproate po

   AD: 100 mg sodium valproate
   Give: _____

7. DO: 30 mg codeine po

   AD: 60 mg codeine tablets
   Give: _____

8. DO: 2.5 g Augmentin po

   AD: 500 mg Augmentin tablets
   Give: _____

9. DO: 62.5 mcg benztropine mesylate

   AD: 25 mg benztropine mesylate tablets
   Give: _____

10. DO: 2 mg Haldol IV

    AD: 5 mg/mL Haldol IV
    Give: _____

DRUG CALCULATIONS ANSWER SHEET

Common drop factor rates are as follows:
10 drops/mL/mL = blood administrative set
15 drops/mL/mL = regular administrative set
60 drops/mL/mL = micro administrative set

Formula for working out the flow rate is as follows:

$$\frac{\text{mL (volume)} \times \text{drops/mL (drop factor)}}{\text{time (minutes)}} = \text{drops/minute}$$

Example problem:
1,200 mL 0.9 NS ordered over 8 hours. Drop factor of 15 drops/mL. How many drops per minute?

$$\frac{1,200 \text{ mL} \times 15}{8 \times 60} = \frac{18,000}{480} = 37.5 \text{ mL/min} = 38 \text{ mL/min}$$

1. Calculate the drip rate for 500 mL over 30 minutes with a regular set = 25 rate.
2. Calculate 1 L 0.9 NS over 10 hours = drop factor 15 gtts/mL = 25 rate.
3. Calculate 1.5 L LR over 4 hours = drop factor 10 gtts/mL = 63 rate.
4. Calculate 2 L 0.45 NS over 6 hours = drop factor 10 gtts/mL = 56 rate.

(*continued*)

5. Calculate 1 L D5W over 6 hours = drop factor 15 gtts/mL = _____42_____ rate.

6. 250 mL 0.9 NS over 1 hour with drop factor of 15 gtts/mL = _____63_____rate.

7. 500 mL 0.9 NS over 2 hours with drop factor of 10 gtts/mL = _____42_____rate.

8. 500 mL 0.9 NS over 2.5 hours with drop factor of 15 gtts/mL = _____50_____ rate.

9. 3 L 0.9 NS over 10 hours with drop factor of 15 gtts/mL = _____75_____ rate.

10. 500 mL LR over 4 hours with drop factor of 15 gtts/mL = _____31_____ rate.

11. 250 mL 0.9 NS over 2 hours with drop factor of 60 gtts/mL = _____125_____ rate.

12. 1.5 L D5W is ordered over 3 hours with drop factor 10 gtts/mL. The IV has been running for 2 hours and has 500 mL remaining. How many drops/min is required to complete the infusion as ordered? _____83_____

13. 1,500 mL is ordered over 10 hours with a drop factor of 10 gtts/mL. The IV has been running for 8 hours and 150 mL remains. How many drops/min is required to infuse the fluid as ordered?_____13_____

14. 4 L NS is ordered over 12 hours with a drop factor of 15 gtts/mL. The IV has been infusing for 8 hours and 45 minutes. How many drops/min are required to complete the infusion as ordered? _____83_____

15. 150 mL of 0.9 NS is ordered over 3 hours with a drop factor of 15 gtts/mL. Calculate the rate. _____13_____ mL/min._____.

(Note: DO = doctor ordered; AD = available dose)

1. DO: 50 mg metoprolol po

   AD: 25 mg metoprolol tablets
   Give: _____2_____

2. DO: 37.5 mg dothiepin po

   AD: 75 mg dothiepin tablets
   Give: _____0.5_____

3. DO: 300 mg Dilantin po

   AD: 100 mg Dilantin tablets
   Give: _____3_____

4. DO: digoxin 0.25 mg po

   AD: 1 mg digoxin tablet
   Give: 0.25

5. DO: 1 mg diazepam po

   AD: 2 mg diazepam
   Give: 0.5

6. DO: 200 mg sodium valproate po

   AD: 100 mg sodium valproate
   Give: 2

7. DO: 30 mg codeine po

   AD: 60 mg codeine tablets
   Give: 0.5

8. DO: 2.5 g Augmentin po

   AD: 500 mg Augmentin tablets
   Give: 5

9. DO: 62.5 mcg benztropine mesylate

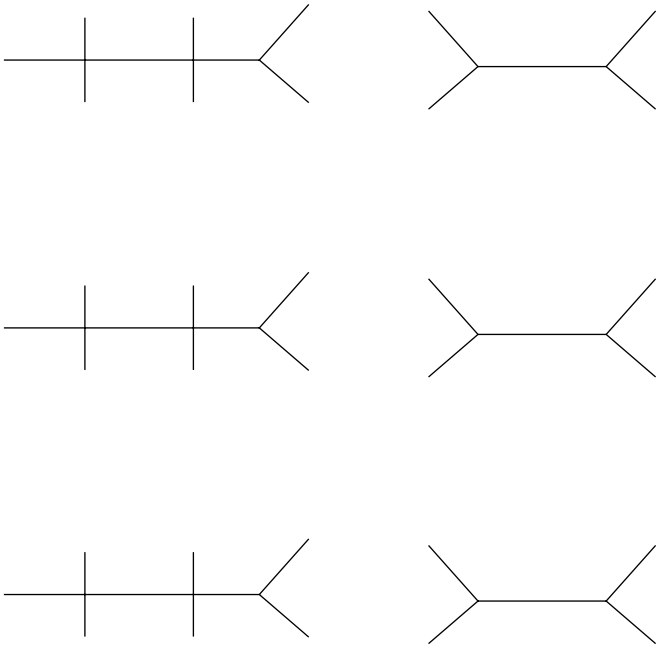
   AD: 25 mg benztropine mesylate tablets
   Give: 2.5

10. DO: 2 mg Haldol IV

    AD: 5 mg/mL Haldol IV
    Give: 0.4

LATTICE FORMAT WORKSHEET

Fill in the lattice formats with your patient's previous laboratory results and current laboratory results.



LABORATORY VALUES WORKSHEET

Lab Test	Lab Result	Normal Value	Lab Test	Lab Result	Normal Value
WBC			Myoglobin		
RBC			CPK		
HGB			LDH		
HCT			Cholesterol		
PLT			Triglycerides		
Sodium			HDL		
Potassium			LDL		
Chloride			BNP		
Glucose			Digoxin		
Bicarb			Lithium		
BUN			Dilantin		
Creatinine			PT		
Calcium			INR		
Phosphate			PTT		
Magnesium			TSH		
Alk phos			B_{12}		
ALT (SGPT)			Iron		
AST (SGOT)			TIBC		
Bilirubin			CRP		
Total protein			Ammonia		
Albumin					
Troponin					

ANSWERS TO LABORATORY VALUES WORKSHEET

Lab Test	Lab Result	Normal Value	Lab Test	Lab Result	Normal Value
WBC		4,000–10,000	Myoglobin		M: 17–106 F: 1–66
RBC		4.2–5.9	CPK		M: 24–320 F: 24–200
HGB		M: 14–18 F: 12–16	LDH		50–150
HCT		M: 42–52 F: 36–48	Cholesterol		< 150
PLT		140,000–400,000	Triglycerides		54–150
Sodium		135–145	HDL		M: 35–80 F: 40–86
Potassium		3.5–5.3	LDL		< 100
Chloride		100–108	BNP		< 100
Glucose		70–120	Digoxin		0.5–2.0
Bicarb BUN		17–24 7–21	Lithium Dilantin		< 2.0 10–20
Creatinine		0.6–1.3	PT		10–15
Calcium		8.2–10.2	INR		2–3
Phosphate		2.5–4.5	PTT		60–70
Magnesium		1.5–2.0	TSH		0.3–3.0
Alk phos		M: 42–98 F: 53–128	B_{12}		130–700
ALT (SGPT)		7–56	Iron		60–70
AST (SGOT)		5–40	TIBC		240–450
Bilirubin		0–0.3	CRP		5–240
Total protein		60–80	Ammonia		10–35
Albumin		3.5–5.3			
Troponin		<0.2			

SAMPLE PHYSICIAN ORDERS FORM

Patient name: Jane Doe
Age: 73
Account number: 9000001
Medical record number: 12345
PMD: Dr. Payne

Allergies: Acetaminophen, Codeine, Tetanus

DX: Syncope 2° AFIB

HX: Left hip ORIF in 2009, HTN, glaucoma, DM 2

IVF: D5NS @ 120cc/hr.

Atenolol 50 mg daily

Tylenol #3, one tablet q4h, prn pain

Diet: regular

Activity: Bed rest

Consult cardiology

EKG in am

O_2 per NC. Keep POX > 95%

BLANK PHYSICIAN ORDERS FORM FOR STUDENT'S CLARIFICATION OF ORDERS

Answer Sheet for Physician Order Form

CLARIFICATION OF ORDERS

Patient name: Jane Doe
Age: 73
Account number: 9000001
Medical record number: 12345
PMD: Dr. Payne

PHYSICIAN ORDERS FORM WITH CLARIFICATION OF ORDERS ANSWER SHEET

CLARIFICATION OF ORDERS

Patient name: Jane Doe
Age: 73
Account number: 9000001
Medical record number: 12345
PMD: Dr. Payne

Allergies: Acetaminophen, Codeine, Tetanus

DX: Syncope 2° AFIB

HX: Left hip ORIF in 2009, HTN, glaucoma, DM II

IVF: D5NS @ 120cc/hr.: Neurological patients should not receive D5W IVFs. Clarify this order with a physician.

Atenolol 50 mg daily: Because of new left sided weakness, Atenolol should be withheld until a swallowing evaluation is done. An NPO order should be obtained from the physician. An alternative drug/route needs to be ordered.

Tylenol #3, one tablet q4th, prn pain: Tylenol cannot be given since the patient is allergic to both Tylenol and codeine. Order needs to be discontinued and another pain medication given.

Diet: regular: Uncertain if patient had a stroke. Keep patient NPO.

Activity: Bed rest

Consult cardiology

EKG in am. No labs have been ordered.

O_2 per NC. Keep POX > 95%: The nurse should also evaluate what orders are "lacking." For example, blood glucose levels should be checked because the patient is a diabetic.

Because of left sided weakness, a CT scan should be ordered to rule out stroke.

Patient should have a swallow evaluation to prevent aspiration in case of stroke.

Since the patient has glaucoma, there are no eye gtts ordered.

(*continued*)

CRITICAL THINKING S/P CLINICAL FORM

Complete and submit during postconference.

1. Describe what may have occurred during your clinical today that may not have been expected: _____

2. How did you respond to this unplanned event? _____

3. How did your nursing interventions contribute to assist you in resolving or reevaluating your plan to meet your objectives? _____

4. List how you effectively met your educational objectives: _____

_____

_____

_____

5. List pertinent information that contributed to monitoring the patient's disease process or current health issues: _____

_____

_____

_____

CHAPTER 9

Preoperative, Intraoperative, and Postoperative Nursing Responsibilities

WEEK 5 MEDICATION QUIZ

List the brand or generic name, dosage, route, reason for medication, side effects, and any special considerations the nurse should be aware of.

Drug: Ambien

_____

_____

Drug: Dextran

_____

_____

Drug: Insulin

_____

_____

Drug: Keppra

_____

_____

Drug: Percocet

_____

_____

Drug: Valium

_____

_____

PREOPERATIVE CHECKLIST

Patient name: Jane Doe
Medical record number: 123456789

Vital signs: BP _____ HR _____ RR _____ Temperature _____ POX O_2 _____	NPO @ _____			
Allergies listed on chart?	YES ☐	NO ☐	Date	Comment
Medication record is on the chart?	☐	☐		
Transfer medication record is on the chart?	☐	☐		
EKG completed?	☐	☐		
Patient has name band on?	☐	☐		
Urinalysis completed?	☐	☐		
Patient is on isolation?	☐	☐		
H & P completed?	☐	☐		
Consent signed?	☐	☐		
Consent is witnessed?	☐	☐		
Patient has a gown on?	☐	☐		
Patient has a blood band on?	☐	☐		
Results of T & S are on the chart?	☐	☐		
Patient has voided?	☐	☐		
Chest x-ray?	☐	☐		
CBC completed with results on the chart?	☐	☐		
Pre-op antibiotics are sent with patient?	☐	☐		
Patient has jewelry removed?	☐	☐		
Patient has nail polish removed?	☐	☐		
Patient has no wigs, hair pins, or hair extensions?	☐	☐		

POSTSURGICAL CRITICAL THINKING QUESTIONS

Students should answer the following critical thinking questions regarding postsurgical patients.

1. While monitoring the postsurgical patient, you notice an hour after the last inspection that the drainage has slightly extended. What actions should you take?
2. Your patient's preoperative vital signs were 152/87, 102, 22, 99.3°F. The patient's most recent set of vital signs are as follows: 102/62, 76, 12, 96°F. What, if anything, should you do?
3. Your patient is complaining of severe burning at the incision site. You know that your patient has a patient controlled analgesic pump (PCA pump) attached. What actions should you take?
4. Your patient complains of abdominal distention and nausea. What actions should you take?
5. Your patient accidently removes the initial surgical dressing. What actions should you take?
6. Your patient is restless and can't seem to relax. What actions should you take?
7. Your patient finally falls asleep. When he awakens, he tells you that he feels like he is in a wet bed. You investigate and find that his dressing leaked and a moderate amount of blood has collected on the sheets below the patient. What action should you take?
8. Your patient has been pushing his PCA control button excessively while awake. However, when he is sleeping, you notice that he goes hours without pushing the PCA control button. What action should you take?
9. Your postoperative patient has returned. The vital signs are stable but you notice the urine output is barely 20 cc/hr. What action should you take?
10. You have been unable to get to your patient's chart until now (3 hours later) and notice there is an order for STAT labs. What action should you take?

ANSWERS TO POSTSURGICAL CRITICAL THINKING QUESTIONS

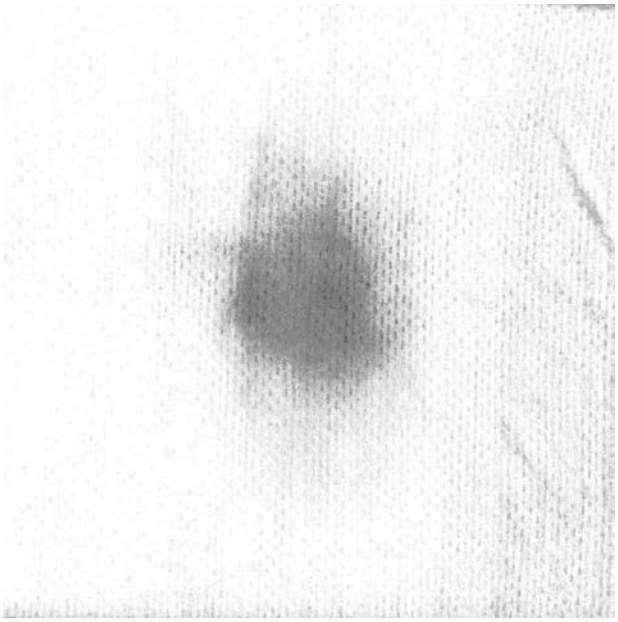
1. Monitor the patient's vital signs, map out the old drainage, and reinforce the dressing.
2. Assess when the patient last had pain medication administered. Assess the surgical site for excessive bleeding. If all appears normal, monitor vital signs more frequently. Notify the physician if the patient's blood pressure remains low.
3. Ensure that the patient understands how to use the PCA control button. Assess the PCA tubing and setup. Make certain that the PCA pump is on and that the tubing is not clamped. You may need to give a clinical bolus for breakthrough pain.
4. If the patient has an NGT (nasogastric tube), ensure it is patent. If the patient does not have an NGT, administer an antiemetic such as Zofran or Phenergan (as ordered by the MD). Assess bowel sounds. An ileus post–abdominal surgery is common. Encourage the patient to turn, cough, and breathe deeply. Instruct on AROM (active range of motion) exercises. Often movement helps to increase motility in the gut.
5. Ensure no damage has been done to the surgical site. Check that all staples, sutures, and drains are still intact. Re-dress the surgical site and document the situation. If the patient

continues to remove the dressing, interventions may need to be implemented. Mitts may be placed on the patient's hands, if the patient appears to be confused, to remind the patient to refrain from irritating the surgical site.

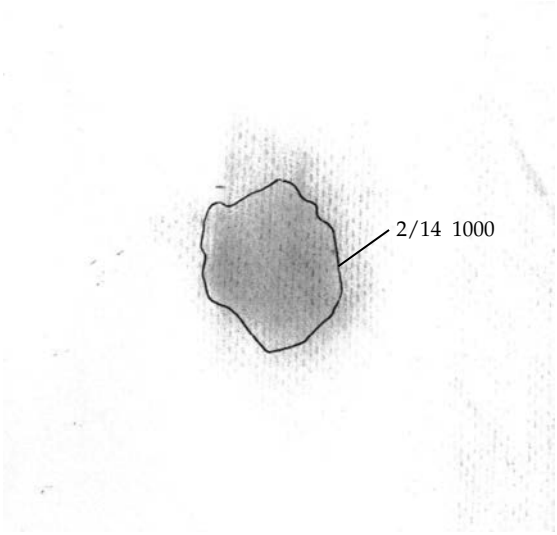
6. Assess the patient's vital signs, including the pulse oximetry. If the pulse oximetry is low, oxygen may need to be applied to maintain a pulse oximetry of 94% or greater. Inspect the surgical site for excessive bleeding. If the site is unchanged or normal drainage is observed, the patient may need pain medication. Assess neurological functions, and do a cardiac and respiratory assessment. Frequently large volumes of fluid are given during surgery. Rule out any type of fluid overload.
7. Assess the patient's vital signs. You may need to check a CBC to make sure that the patient has not lost a lot of blood. Check the operative report for the amount of EBL (estimated blood loss). Reinforce the dressing. Change the bedding and make sure that the patient's skin is clean. Monitor the dressing for additional drainage every 15 minutes. Notify the physician of the situation and await further orders.
8. The patient may not understand how the PCA works. Inform the patient that the medication is dispensed at a set rate with a lockout time. No additional medication will be given above the set amount even if the patient repetitively pushes the control button. The PCA pump will only register the number of times the control button is pushed. No additional medication doses will be given above the ordered and set amount.
9. First assess the patency of the Foley. If the Foley is patent, the patient may be dehydrated. Notify the MD. Prepare to give an additional IV fluid bolus.
10. Order the labs. When the results return, notify the MD of the results and explain the reason for the delay.

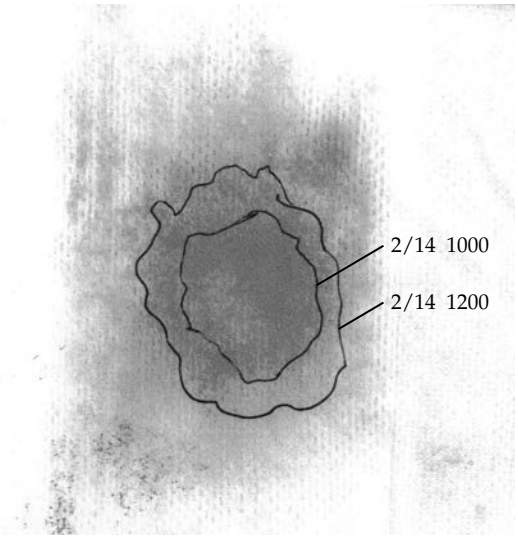
POSTSURGICAL MAPPING EXERCISE

Instruct the students to "map out" the drainage on the first image of the dressing. The second image is a view of the same dressing 1 hour later. Instruct the students to "map out" the drainage on the second image. Always add date and time.



ANSWERS TO POSTSURGICAL MAPPING EXERCISE





ADDITIONAL POSTOPERATIVE SCENARIOS

Postoperative patients may present with various complications. Students should practice critical thinking skills based on signs or symptoms that may present with a postoperative patient.

a. Your postoperative cholecystectomy patient returned to your unit over 4 hours ago. Your patient has had no urine output in 4 hours. What, if anything, should you do?

_____

_____.

b. Your patient had a total abdominal hysterectomy (TAH) and has been zut on a PCA with Dilaudid for pain. Her preoperative blood pressure was 150/83. Before using her PCA you take her vital signs and her vital signs are: 92/48, 120, 24, T. 99°F. What, if anything, should you do?

_____

_____.

c. Your patient had a small bowel obstruction (SBO) and returned with a large dressing on the abdomen and an NGT. You notice the patient's abdomen is more distended than on arrival. What, if anything, should you do?

_____

_____.

d. Your patient had a hiatal hernia repair. Your patient is complaining he feels "bloated. " What, if anything, can you do?

_____

_____.

e. Your patient returned from surgery 2 hours ago. Your patient's temperature is 95°F. What, if anything, should you do?

_____

_____.

f. Your patient has had to return to the OR for a leaking anastomosis. Your patient has an NGT but is feeling nauseated. What, if anything, should you do?

_____

_____.

g. Your patient is an obese 73-year-old man who had a tumor resected from his kidney. He had been putting out approximately 80 cc/hr of bloody urine until 2 hours ago. Since then he has not put out any urine. What, if anything, should you do?

_____

_____.

h. Your 1-hour postoperative patient's laboratory results come back. The patient's Hgb (hemoglobin) is 6.5, HCT (hematocrit) is 18. Your patient has recently received pain medication and therefore cannot sign a consent for a transfusion. What, if anything, should you do?

_____

_____.

i. Your patient has returned from postop status post–abdominal surgery for a volvulus. After 1 hour, you find that your patient has attempted to get out of bed independently. Your patient admits he felt something "pop" when he stood up. What, if anything, should you do?

_____

_____.

ANSWERS TO ADDITIONAL POSTOPERATIVE SCENARIOS

a. Assess the Foley to determine whether it is kinked. The Foley may need to be irrigated with sterile water to ensure it is draining appropriately. Some health care facilities offer a bladder scanner to determine whether the bladder has been emptying. If no bladder scanner is available, palpate the bladder (gently) to make sure that it is not distended. If all prove negative, call the MD. The patient may need a fluid bolus.

b. Assess your patient for excessive bleeding. If the patient shows no signs of excessive bleeding, the patient may need fluids. Call the MD and notify the MD of the baseline and current vital signs. The patient is on a PCA pump. The machine should be checked for proper administration and the medication, rate, or amount may need to be adjusted.

c. It is not uncommon for a patient with abdominal surgery to have a distended abdomen. It is wise to ensure the NGT is patent. The nurse can also monitor abdominal girth, ensuring to mark where the girth is being measured to maintain accuracy. Assess bowel sounds for peristalsis, any signs of perforation, or bleeding.

d. It is not uncommon for patients to feel "bloated" after surgery due to the effects of some anesthesia. The best action is to ask the patient to turn and perform AROM. Movement helps to pass "gas." Inform the patient that, when allowed, ambulation also will help.

e. Apply warm blankets or a "bear hugger" (a device that blows warmed air into an inflatable blanket). Continue to monitor the patient's temperature. Once the patient begins to warm, the temperature may increase to hyperthermic levels. The temperature must be monitored carefully and can only be raised or lowered one degree per hour. Seizures and arrhythmias can occur if these safety factors are not observed.

f. Ensure the NGT is patent. The patient may be nauseated from the anesthesia. An antiemetic medication should be given.

g. Assess the Foley. Blood in the urine may create clots that obstruct the drainage portal in the catheter. It may be necessary to manually irrigate the catheter or to remove it and reinsert a new catheter. The nurse should notify the MD if the catheter cannot be irrigated or the irrigated fluid does not return. The patient may be placed at a high risk for bladder rupture. DO NOT remove the catheter without a doctor's order.

h. Often the surgical consent allows transfusions within 24 hours S/P surgery. Look at the previous hematocrit, how much blood loss in surgery, and if the patient is symptomatic. A repeat lab draw may be required before transfusion. Make certain you know the policy of your facility. If you must obtain a consent, it is customary to contact the nearest family member. If no family is listed or available, the doctor must be notified and will need to fill out a form stating that the patient's condition is emergent and a transfusion is necessary, thus requiring no patient or family signature.

i. Help the patient back to bed. Assess the surgical dressing for additional bleeding or drainage. The patient may have a dehiscence or may have dislodged a suture or staple. If there is visible bowel contents, the bowel must be immediately covered with sterile moist dressings. Assess vital signs promptly. Notify the MD or surgical resident of the situation. Await the doctor. Continue to monitor the patient closely.

CHAPTER 10

Delegation and Management Styles and Concepts

DELEGATION SURVEY EXERCISE

Job title: _____

Job responsibilities: _____

_____

_____

1. What type of responsibilities do you delegate?

_____

_____

_____

2. How do you know the delegated task will be completed in a timely and satisfactory manner?

_____

_____

_____

3. What would be the consequences if the task was not completed?

_____

_____

_____

4. What ethical considerations can be involved in the delegation process?

_____

_____

_____

5. Does cultural background, gender, or age play a role in how you delegate? If so, how?

_____

_____

_____

6. How do procedure and policy play a role in delegating a task?

_____

_____

_____

7. What is your course of action if you do not believe that a person has the ability to perform a delegated task? Does it affect his or her job evaluation? Will he or she be trained, reassigned, and so on?

_____

_____

_____

8. How do you determine who will cover your responsibilities when you are at a meeting or taking a meal break?

_____

_____

9. Is there a difference between a leader and a manager? If so, can you explain the difference?

_____

_____

_____

DELEGATION MATCHING EXERCISE

Place the letter of the item in the right-hand column next to the function or question it matches in the left-hand column. The same letter can be used more than once.

Initial assessment	A. NA
Reinforce teaching	B. RN
Basic nursing care	C. LPN
Supervise NA	D. Yes

Measurement and documentation of vital signs	E. RN, LPN
Teaching and assessment associated with discharge	F. Unlicensed assistive personnel
Able to perform routine tracheostomy care	G. No
Provide stoma care for the a patient with a well-functioning ostomy	
Test stool for occult blood and urine for glucose, and report results	
Can a nursing assistant delegate a blood sugar test to another NA?	

ANSWERS TO THE DELEGATION MATCHING EXERCISE

Initial assessment	B. RN
Reinforce teaching	C. LPN
Basic nursing care	A. NA
Supervise NA	E. RN, LPN
Measurement and documentation of vital signs	A. NA
Teaching and assessment associated with discharge	B. RN
Able to perform routine tracheostomy care	A. NA (if certified)
Provide stoma care for a patient with a well-functioning ostomy	C. LPN
Test stool for occult blood and urine for glucose, and report results	C. LPN
Can an NA delegate a blood sugar test to another NA?	G. No. Only the RN and LPN can delegate to an NA and they are legally accountable for the nursing care provided. One NA cannot delegate a task to another NA.

DELEGATION QUESTIONS

1. An unlicensed NA who usually works in obstetrics is assigned to work on a surgical unit. Which question would be most appropriate for the charge nurse to ask prior to delegating a patient care assignment?
   a. How long have you been an NA?
   b. What type of care did you give in obstetrics?
   c. Do you have your competency checklist so that we can review it?
   d. How often have you cared for adult patients?
2. An RN from the intensive care unit is temporarily reassigned to a medical–surgical unit. Which of these patient assignments would be most appropriate for this nurse?
   a. A type 2 diabetes mellitus patient whose blood sugar is stable
   b. A patient from a motor vehicle accident 6 days ago with an external fixation device on his leg

c. A newly admitted patient with an evolving stroke
d. A cholecystectomy patient 3 days postop

3. Which of these patients would be appropriate to assign to an LPN?
   a. A trauma victim with multiple lacerations who requires vasopressors
   b. An elderly patient with a vancomycin-resistant enterococcus colon infection
   c. A confused patient who requires four-point restraints
   d. A patient admitted for possible hemorrhage due to overdose of Coumadin

ANSWERS TO DELEGATION QUESTIONS

1. *c.* The RN should review the nursing assistant (NA) competencies, because surgical and obstetric units will have completely different patient requirements. The nurse must review what the NA normal responsibilities are so there is clear communication.
2. *b.* Since the nurse has been reassigned, she should receive the most stable patients.
3. *b.* The trauma victim and the possible hemorrhage are unstable patients and need careful monitoring. Four-point restraints need careful assessment from the RN concerning circulation and skin integrity.

PRIORITIZATION QUESTIONS

1. A practical nurse from the obstetric unit is assigned to work in a critical care unit. Which patient should be assigned to the nurse?
   a. A patient admitted with a stroke and with a history of a newly implanted pacemaker
   b. A new admission with left-sided weakness from an intracranial hemorrhage
   c. A 60-year-old patient diagnosed with cardiac arrest from a myocardial infarction
   d. A 35-year-old patient in skeletal traction admitted 6 days ago after a motor vehicle crash (MVC)
2. A patient is admitted to the emergency department with complaints of severe jaw pain, and a myocardial infarction is suspected. Admission orders include oxygen at 4 L/min, cardiac enzymes, a chest x-ray, a 12-lead EKG, and the administration of 2 mg of morphine sulfate. Which should the nurse do first?
   a. Obtain the 12-lead EKG.
   b. Order troponin and creatine phosphokinase (CPK) MB every 8 hours.
   c. Order a chest x-ray.
   d. Administer morphine sulfate.
3. A nurse is carrying out physician orders for a patient who has had a history of atrial fibrillation and has just experienced a pulmonary embolism with a pulse oximetry of 88%. The nurse carries out which order first?
   a. Start an intravenous line.
   b. Apply oxygen.
   c. Administer morphine sulfate.
   d. Obtain a ventilation profusion (VQ) lung scan.

4. An emergency department nurse is performing an assessment of a patient who sustained second-degree burns of both legs with peripheral edema. The nurse should assess which of the following first?
   a. Peripheral pulses
   b. Respirations
   c. Heart rate
   d. Blood pressure

ANSWERS TO PRIORITIZATION QUESTIONS

1. *d.* This is the most stable patient with a predictable outcome.
2. *d.* Pain medication is the most important priority that will prevent additional ischemia.
3. *b.* The patient needs immediate oxygen because of the hypoxemia.
4. *a.* There is risk for impaired peripheral circulation.

CHAPTER 11

The Neurological System and Assessments

WEEK 7 MEDICATION QUIZ

List the brand or generic name, dosage, route, reason for medication, side effects, and any special considerations the nurse should be aware of.

Drug: Aricept

_____

_____

_____

Drug: Cogentin

_____

_____

_____

Drug: Depakote

_____

_____

_____

Drug: Fentanyl

_____

_____

_____

Drug: Mannitol

_____

_____

_____

SAMPLE PHYSICIAN ORDERS FORM

Patient: John Walker
Age: 73 XXXX 83
Account number: 900002
Medical record number: 12346
PMD: Dr. Payne

Allergies: ASA

DX: Change in mental status

HX: Dementia, Alzheimer's disease, GIB, TIA

IVF: 0.45% saline @ 80 ml/hr

May take home medications

x-ray in a.m.

CBC, BMP, Pt, PTT, ammonia level in a.m.

Diet: NPO

Activity level: Up ad lib

Consult: Gastroenterology

PHYSICIAN ORDERS FORM WITH CLARIFICATION OF ORDERS ANSWER SHEET

CLARIFICATION OF ORDERS

Patient: John Walker
Age: 73 XXXX 83
Account number: 900002
Medical record number: 12346
PMD: Dr. Payne

Allergies: AS

DX: Change in mental status

HX: Dementia, Alzheimer's disease, GIB, TIA

IVF: 0.45% saline @ 80 mL/hr

May take home medications. This order needs clarification for type, strength, and direction's of each drug. Home medications should be listed with ordered dose and frequency.

x-ray in am. Clarification needed. What type of x-ray should be ordered and for what reason?

CBC, BMP, Pt, PTT, ammonia level in a.m.

Activity level: Up ad lib because of neurological statue change, bed rest should be ordered to maintain patient safety.

Consult: Gastroenterology (Even though the patient is experiencing a gastrointestinal bleed, the patient also needs to be evaluated for a possible TIA.) Neurology consult should be ordered. Clarify why the MD ordered a GI consult.

This order has not been signed. Numerous times, orders, treatment, and procedures have to be addressed with the physician. Perhaps he was interrupted while he was writing these orders. The nurse must assess if appropriate orders were written for the client to avoid an act of omission. An act of omission occurs when there is failure of the physicians and nurses to provide appropriate care and treatment. CT scan of head should be ordered to ensure patient does not have a CVA.

CRITICAL THINKING EXERCISE # 1

You are receiving report on Mr. P, an 82-year-old Black male who was admitted 2 hours ago from the doctor's office with a history of controlled atrial fibrillation and a blood pressure of 180/100. He has been feeling weak for 1 week. He has a past medical history of hypertension, atrial fibrillation, TIA 1 year ago, is a one-pack-a-day smoker since age 16, and he has hyperlipidemia.

On initial assessment of systems:

CNS: Coma scale of 15; moves all extremities equally; anisocoria is present in the right eye; cranial nerves VII, IX, X, and XI are intact
Cardiovascular: S1, S2 present, +peripheral pulses 2+, slight pretibial edema, a #20 gauge in his left hand with D5 ½ NS infusing at 100 mL/hr
Pulmonary: Pulse oximetry 93%, respirations unlabored but symmetrical, hyperresonance breath sounds, AP diameter increased
Renal/hepatic: Negative for hepatic problem or renal failures
Endocrine: Negative for diabetes mellitus
Hematological/coagulopathy: Negative for anemia, bruising
Integumentary: Poor turgor and tenting, paper-thin skin, dry membranes
Current medications: Coumadin 5 mg po daily, atenolol 25 mg po daily, prednisone 5 mg po daily, Alupent inhaler as needed
Laboratory, radiology, and other relevant studies: CXR shows hyperinflated lungs with flattened diaphragms; head CT negative; PT 15, INR 1.5;
sodium 150, potassium 4, chloride 110, CO_2 40, FBS 180, calcium 8.6

You have settled in the patient and orientated him to his surroundings when you suddenly notice left facial drooping and weakness of the left arm. The patient is drooling, is unable to handle oral secretions, and is obtunded. BP now is 210/100, HR 120, POX 88%, and respiratory rate 24; anisocoria is still present in the right eye. You have initiated the rapid response team to evaluate the patient for a TIA versus CVA. A 2-liter nasal cannula is applied and patient is positioned in high Fowler's position. The patient is being transferred to the intensive care unit.

To properly evaluate this situation, answer the following questions:

1. What is a neurological assessment tool?
2. What is anisocoria?
3. What is the first sign of a change in neurological status?
4. What do cranial nerves VII, IX, and X test?
5. The blood pressure is increasing and showing signs of widening PP. What does that mean?
6. What are the health risks for this patient to have a stroke?
7. Why is his international normalized ratio (INR) significant?
8. Why is his sodium elevated?
9. Why is the CO_2 elevated and what does an elevated CO_2 level mean?
10. What is "hyperresonance"?
11. What is an acceptable POX for this patient with a diagnosis of age and chronic obstructive pulmonary disease (COPD)?
12. Why is his blood sugar elevated?

ANSWERS TO CRITICAL THINKING EXERCISE #1

1. A neurological assessment tool is a scale based on eye response, motor response, and verbal response.
2. Anisocoria—unequal pupils. There are several causes, which may be normal or may be the result of a medical disease, or the side effect of a drug.
3. The first sign of a deteriorating condition is a change in the LOC and mentation. Pupil changes are a late sign.
4. Cranial nerves VII, IX, and X test:
   Cranial nerve VII (facial nerve)—The chief motor nerve of the face, serves muscles of facial expression
   Cranial nerve IX (glossopharyngeal nerve)—Is the motor nerve for swallowing
   Cranial nerve X (vagus)—The parasympathetic nerve to the viscera
5. Widening PP is an increase in the difference between the systolic and diastolic blood pressure and may be indicative of increased ICP.
6. Health risks for this patient include atrial fibrillation, TIA 1 year ago, one-pack-a-day smoker since age 16, and hyperlipidemia.
7. His INR is subtherapeutic; an INR less than 2.0 may not provide adequate protection from clotting.
8. Sodium is elevated because of signs of dehydration as evidenced by tenting, poor turgor, and dry membranes.
9. CO_2 is elevated because COPD increases carbon dioxide levels due to reduced oxygen efficiency.
10. Hyperresonance is heard over areas of air trapping and exaggerated chest sounds because of his COPD.
11. Acceptable POX for this patient with a diagnosis of COPD is usually acceptable at lower target range of 88% to 92%.
12. Blood sugars are elevated due to stress and the use of corticosteroids for his COPD.

Neurological Assessment Tool

	1	2	3	4	5	6
Eye response	Does not open eyes	Opens eyes in response to painful stimuli	Opens eyes in response to voice	Opens eyes spontane-ously		
Verbal response	No verbal response	Incomprehen-sible sounds	Utters inappro-priate words	Confused, disoriented	Oriented, converses normally	
Motor response	No motor movements	Extension to painful stimuli (decerebrate response)	Abnormal flexion to painful stimuli (decorticate response)	Withdrawal to painful stimuli	Localizes painful stimuli	Obeys commands

CRITICAL THINKING EXERCISE #2

A 24-year-old female presented to a private physician with a complaint of earache. A diagnosis of otitis media was made in the office on July 15, and the patient was started on Zithromax. On July 17, she presented to another physician with complaints of severe headache, symptoms of confusion, neck pain, sudden high fever, and vomiting. Patient was positive for the Kernig and Brudzinski signs. The CT scan was normal. A lumbar puncture was performed after the patient was placed in the lateral decubitus position. The fluid was cloudy with more than 6,000 white cells, the glucose was 45 mg/dL, and the protein 100 mg/dL; opening pressure 500 mmH_2O. The Gram stain is showing *Streptococcus pneumonia*. The patient is diagnosed with bacterial meningitis. Patient is placed on 3 L nasal cannula, IV fluids of D5W at 100 mL/hr, Decadron 4 mg IV every 6 hours, penicillin 2.4 gm IV every 4 hours, vancomycin 250 mg daily, and phenytoin 20 mg/kg. Two days later, the patient becomes confused and starts voiding 20 mL/hr of concentrated urine; sodium is 128, urine osmolality over 100 mOsm/kg, and ionized calcium level 3 mg/dL. The patient is diagnosed with syndrome of inappropriate antidiuretic hormone. Patient is placed on droplet precautions for 48 hours and seizure precautions. Patient is being observed for signs of increased ICP.

On initial assessment of systems:

CNS: Easily arousable to voice but confused to time and place, does not open eyes, localizes painful stimuli, positive Kernig and Brudzinski signs, sodium 128
Cardiovascular: S1, S2 present, +peripheral pulses 2+, a #18 gauge in her right hand with D5W infusing at 100 mL/hr, positive Trousseau's sign, febrile
Pulmonary: Pulse oximetry 93%, respirations unlabored but symmetrical
Renal/hepatic: Urine concentrated, poor urinary output
Endocrine: Positive SIADH
Hematological/coagulopathy: Negative for anemia, bruising
Integumentary: Skin intact

To properly evaluate this situation, answer the following questions:

1. How are the Kernig and Brudzinski signs performed, and what are they indicative of?
2. What is a lateral decubitus position?
3. What is a spinal headache?
4. What positions will cause increased ICP?
5. Why should one not administer D5W to a patient with this condition?
6. What precautions should be used when the nurse administers Dilantin?
7. What is SIADH?
8. What does droplet isolation consist of?
9. What do seizure precautions consist of?
10. What classification of drug is Decadron? How should it be tapered during the admission?
11. Why does hyponatremia cause confusion?
12. What is the patient's score with the neurological assessment tool?

ANSWERS TO CRITICAL THINKING EXERCISE #2

1. These signs are indicative of meningitis. To elicit the Kernig sign, the patient is placed in the supine position where the hip and knee are flexed to a right angle. If there is resistance and/or pain during extension of the patient's knees, it constitutes a positive Kernig sign. The Brudzinski sign is performed with the patient in the supine position. The examiner keeps one hand behind the patient's head and the other on the patient's chest in order to prevent the patient from rising. Reflex flexion of the patient's hips and knees after passive flexion of the neck constitutes a positive Brudzinski sign.
2. Patient is on her side in a curled up position to expose the spinal column for the lumbar puncture.
3. Spinal headache occurs with patients who have had a lumbar puncture. It will occur 12 to 24 hours after a spinal tap or spinal anesthesia. Patients are recommended to lie in a supine position after the procedure and avoid sudden changes in position.
4. The nurse should avoid flexing or extending the patient's neck. Extreme hip flexion can increase intra-abdominal pressure and restrict the movement of the diaphragm and respiratory effort, causing increased ICP.
5. D5W is hypotonic fluid that moves from the intravascular space into the cells. It should not be administered to a patient with this condition because sudden fluid shifts out of blood vessels and into cells will cause increased ICP from a fluid shift into brain cells.
6. Adverse cardiovascular reactions such as severe hypotension and cardiac arrhythmias are associated with rapid administration of Dilantin. Administration should not exceed 50 mg/min.
7. SIADH is the principal cause of hyponatremia, in which excessive levels of antidiuretic hormone help the kidneys to retain water and electrolytes. Can be caused by meningitis.
8. Meningitis is spread by respiratory droplets from the noses and throats of infected people, and it requires droplet isolation for at least 48 to 72 hours after antibiotic administration. Because droplets do not usually travel more than 3 feet, droplet isolation consists of using masks as well as standard precautions.
9. The goal of seizure precautions is to prevent traumatic injury, choking, and respiratory difficulties. Seizure precautions consist of padded rails and having ready and available equipment such as a nasal cannula and tubing, oxygen flow meter, suction gauge, suction canister, and suction tubing to connect to canister. Try to assign the patient to a room in close proximity to the nurses' station. Ensure that the call bell is always within the patient's reach. Avoid use of restraints.
10. Decadron is a corticosteroid that is used for cerebral edema. Corticosteroids are gradually tapered to avoid both recurrent activity of the underlying disease and possible adrenal cortisol deficiency.
11. Hyponatremia will cause confusion because the cells in the brain swell due to low sodium.
12. The patient's neurological score is 10.

CHAPTER 12

The Cardiac System and Assessments

WEEK 8 MEDICATION QUIZ

List the drug's brand or generic name, dosage, route, reason for medication, side effects, and any special considerations the nurse should be aware of.

Drug: Calcium

Drug: Coreg

Drug: Fosamax

Drug: Hydralazine

Drug: Lopressor

Drug: Toradol

CARDIAC KNOWLEDGE WORKSHEET

List below what you, as a nurse, would assess for in a cardiology patient.

_____

_____

_____

_____

_____

What interventions would you or could you perform in the cardiology patient?

_____

_____

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List tests that the doctor may order for the cardiology patient.

_____

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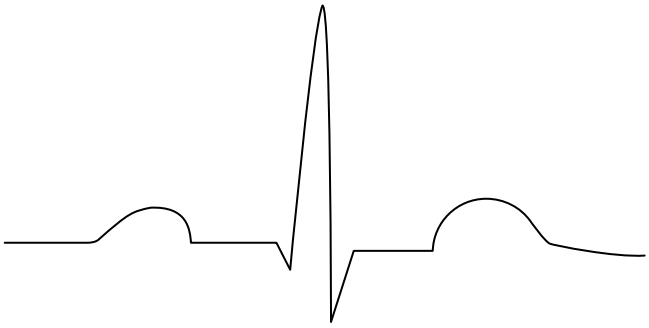
CARDIAC WAVE FORM EXERCISE



Label the atrial depolarization

Label the ventricular depolarization

Label the ventricular repolarization

Label the P-wave

Label the QRS complex

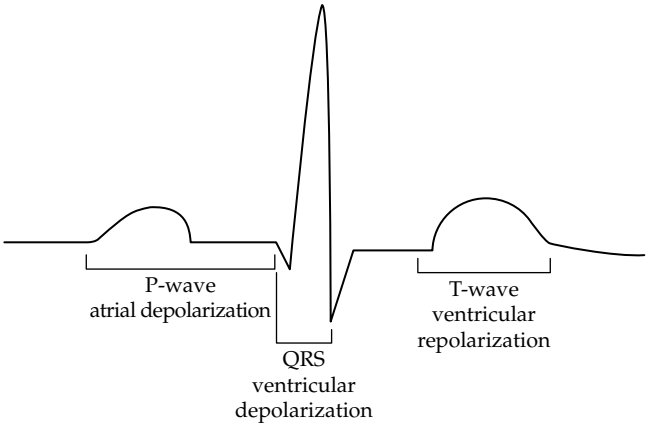
Label the T-wave

Where does the P-wave initiate in the drawing? Demonstrate your knowledge by labeling the cardiac EKG segment.

Where does the QRS complex initiate in the drawing? Demonstrate your knowledge by labeling the cardiac EKG segment.

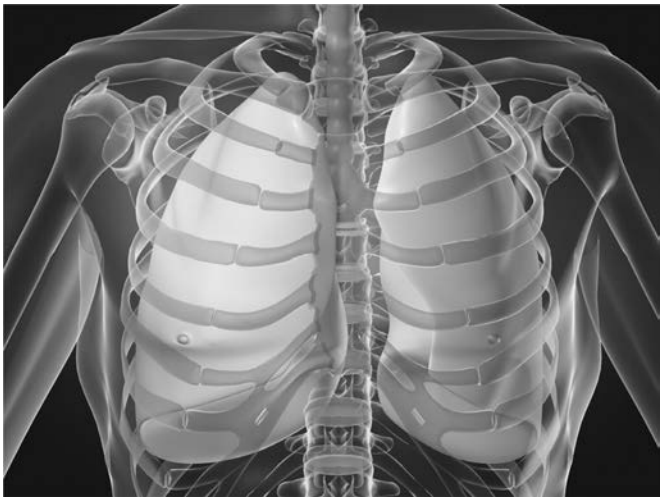
Where does the T-wave initiate in the drawing? Demonstrate your knowledge by labeling the cardiac EKG segment.

CARDIAC WAVE FORM ANSWER SHEET



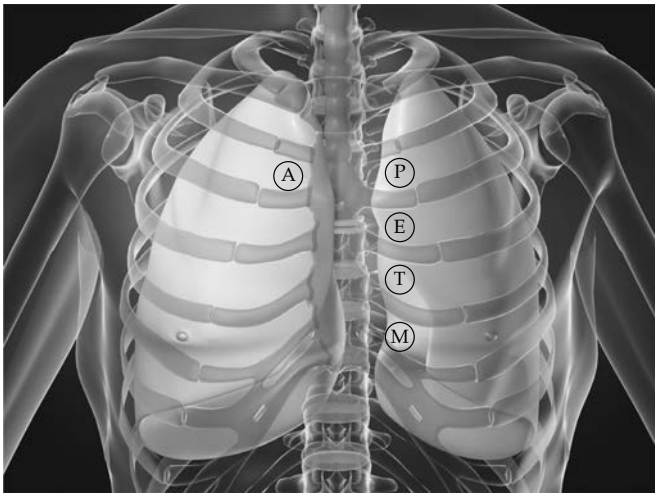
HEART SOUNDS EXERCISE

Label the site used to auscultate the heart sounds. Place the corresponding letter in the appropriate place.



A = Aortic valve
P = Pulmonic valve
E = Erb's point
T = Tricuspid valve
M = Mitral valve

HEART SOUNDS ANSWER SHEET



A = Aortic valve
P = Pulmonic valve
E = Erb's point
T = Tricuspid valve
M = Mitral valve

PHYSICIAN ORDERS FORM

Patient name: Jane Doe
Age: 73
Account number: 900001
Medical record number: 12345
PMD: Dr. Payne

Allergies: Codeine

DX: CVA

HX: AFib, HTN, DVT

CT scan of brain in a.m.

MRI with and without contrast

AM labs: CBC, BMP, Pt, PTT, INR

EKG X3

Turn q2h

Foley

Vital signs Q2hr; Notify MD if SBP >

Diet: Regular

Ambulate ad lib

PHYSICIAN ORDERS FORM ANSWER SHEET

Patient name: Jane Doe
Age: 73
Account number: 900001
Medical record number: 12345
PMD: Dr. Payne

Allergies: Codeine

DX: CVA

HX: AFib, HTN, DVT

CT scan of brain in a.m.

MRI with and without contrast

AM labs: CBC, BMP, Pt, PTT, INR

EKG X3

Turn q2h

Foley

Vital signs Q2hr; Notify MD if SBP > Missing parameters

Diet: Regular. Patient should be NPO. Aspiration precautions

Ambulate ad lib. Patient should be on bed rest to prevent falls.

Neurological assessments Q hr

Should the HOB be flat or at 30 degrees?

VOCABULARY RECALL EXERCISE WORD LIST

Korotkoff	Palpation	Pedal pulse
Tympanic	Popliteal pulse	Pulse pressure
Orthopnea	Sphygmomanometer	
Stethoscope	Eupnea	Dyspnea
Axilla	Bradypnea	Bradycardia
Tachycardia	Cheyne-stokes respirations	Fever
Cyanosis	Edema	Apex
Hypertension	Hypotension	Fever
Apical pulse	Apnea	Temperature
Rectal	Thermometer	Intervention
Heploc	Specimen	Occult blood
Nursing process	Nanda	Assessment
Accucheck	Vital signs	Chest tube
6 rights	Wound care	Nasogastric tube
Peg	Tube feeding	Pain scale
Foley	Intracatheter	Broca's center
Mental status	Health history	Transfusion
Medication	Language barrier	Homeostasis
Isolation	Cognitive	Integumentary
Enema	Education	MI
Pacemaker	Critical thinking	
Chronic	Acute	
Infection	CVA	

CRITICAL THINKING EXERCISE #1

A 56-year-old man presented to the emergency room (ER) with dull tightness in his chest and shortness of breath while shoveling snow for 15 minutes. He is now experiencing nausea and vomiting. His past medical history is significant for HTN, type 2 diabetes mellitus, and hypercholesterolemia. He states that he is noncompliant with his medications. He has no known allergies. He smoked ½ pack of cigarettes a day for the past 40 years. The patient denies any history of recreational drug use. The patient does not exercise regularly. His EKG is indicative of an inferior MI. He has been given a nonenteric aspirin 325 mg, an IV drip of nitroglycerin to be titrated to 10 to 100 mcg/min to control chest pain, and a heparin drip started at 800 units/hr. The patient is ordered 80 mg of Lasix IV. The doctor has ordered a cardiac catheterization for tomorrow. He has recently had right inguinal hernia repair.

FBS 120 Sodium 135 Potassium 3.8 Chloride 110 CO_2 26 CPK MB 5 Troponin T 0.4 HbA1C 8	BP 110/68 HR 68 RR 24 Temp 37°C	CXR: negative 2D Echo: pending

On initial assessment of systems:

CNS: Coma scale of 15, moves all extremities equally, all cranial nerves intact.
Cardiovascular: S1, S2 present, +peripheral pulses 2+, a #20 gauge in his left hand with NS infusing at
100 mL/hr in addition to nitroglycerin and heparin.
Pulmonary: pulse oximetry 93%, respirations labored but symmetrical
Renal/hepatic: negative for hepatic problem or renal failure
Endocrine: positive for noninsulin dependent diabetes mellitus
Hematological/coagulopathy: negative for anemia, bruising
Integumentary: skin intact but clubbing of nail beds
Current medications: metoprolol 25 mg orally twice a day, metformin 500 mg daily, and simvastatin 40 mg orally daily

To properly evaluate this situation, answer the following questions:

1. What does "clubbing" mean?
2. What does an elevated HbA1C mean?
3. What is the normal CPK-MB and why is it specific to the heart?
4. What is the danger with a diabetic patient taking a beta blocker?
5. What are the dangers to the kidneys when a diabetic patient is taking metformin and is scheduled for a cardiac catheterization?
6. What are the precautions before streptokinase can be given?
7. Why would a patient with an MI be having a fever?
8. What does the short half-life of heparin mean?
9. What precautions should be considered before Lasix is given?
10. Why is a nonenteric aspirin being given?
11. What precautions should be considered before aspirin is given?
12. What should the nurse be alert for when giving metoprolol to this patient?

ANSWERS TO CRITICAL THINKING EXERCISE #1

1. Clubbing in the nail beds occurs with heart and lung diseases that reduce the amount of oxygen in the blood.
2. An elevated HbA1C means that the patient was not controlling his blood sugar levels; the level should be less than 6%.
3. CPK is an enzyme that is present in the heart, brain, and skeletal muscles. CPK-MB is specific to the heart and can be detected in an MI 3 to 6 hours after the onset of chest pain. A CPK-MB level is normally 0 to 3 ng/mL. The troponin test measures certain proteins called troponin T and troponin I, which are released when the heart muscle has been damaged. The normal levels of troponin are:

Troponin I: less than 10 µg/L
Troponin T: 0 to 0.1 µg/L

4. Beta blockers may block the signs and symptoms of low blood sugar, such as rapid heartbeat and diaphoresis.
5. Metformin can cause lactic acidosis and should temporarily be stopped 2 days before and 2 days after if a patient is undergoing a procedure that uses a contrast medium. Contrast medium can increase the level of metformin in the blood and cause damage to the kidneys. The patient's blood sugar can be controlled with regular insulin SQ in the interim.
6. Precautions when streptokinase should not be given are: recent major surgery, organ biopsy, recent serious gastrointestinal bleeding, trauma, pregnancy or delivery, uncontrolled HTN, age older than 75 years, and cerebrovascular disease.
7. Post-MI myocardium will cause an inflammatory process and can produce a fever for a few days. This is not caused by an infection.
8. The short half-life of heparin is the time it takes for half of a given dose to be eliminated from the body or bloodstream. For heparin, the average half-life is 1.5 hours. So the heparin can be stopped 4 to 6 hours prior to surgery, and the risk of bleeding is minimized.
9. A blood pressure of at least 100 mmHg/systolic, the potassium level (3.5–5), and the magnesium level (1.7–2.2 mg/dL) should be considered before Lasix is given.
10. Nonenteric aspirin is given and absorbed in the stomach in acutely decreasing platelet aggregation. Enteric coated aspirin is broken down in the small intestine.
11. Platelet count and any sign of bleeding should be considered before aspirin is given.
12. With this patient, metoprolol should be given cautiously because beta1 selectivity may cause bronchospasms to become worse.

CRITICAL THINKING EXERCISE #2

A 74-year-old Hispanic man presented to the emergency room (ER) with increasing dyspnea with any activity. He has been using three pillows at night to sleep. He is experiencing dull tightness in his chest and shortness of breath with activity. He is experiencing nocturia, persistent cough, fatigue, and abdominal distention. His past medical history is significant for insulin dependent diabetes mellitus, HTN, and hypercholesterolemia. He is allergic to sulfa. The patient denies any history of recreational drug use or smoking. His EKG is indicative of left ventricular hypertrophy. His current medications consist of Lantus 20 units daily at bedtime and captopril 12.5 mg daily.

The doctor has decided to digitalize the patient and to draw thyroid function tests. Oxygen is applied at 3 liters.

FBS 180 Sodium 136 Potassium 3.4 Chloride 110 CO_2 22 CPK-MB 2 Troponin T 0.4 HbA1C 4 BNP 500 BUN 12 Creatinine 0.6	BP 98/68 HR 52 RR 28 Temp 36°C	CXR: Pleural effusions, cardiomegaly 2D Echo: depressed contractile function with an EF of 40%

On initial assessment of systems:

CNS: Coma scale of 15, moves all extremities equally, all cranial nerves intact
Cardiovascular: S1, S2, S3 present, +peripheral pulses 2+, a #22 gauge in his right hand with NS infusing
at 50 mL/hr, jugular venous distention present
Pulmonary: Pulse oximetry 93%, respirations labored but symmetrical, fine crackles bilaterally in bases
Renal/hepatic: on palpation, liver enlargement detected; history of nocturia but no dysuria
Endocrine: positive for insulin dependent diabetes mellitus
Hematological/coagulopathy: negative for anemia, bruising
Integumentary: skin intact

To properly evaluate this situation, answer the following questions:

1. Why are CPK-2 levels not elevated in this patient?
2. What is paroxysmal nocturnal dyspnea and what is its significance?
3. Why are thyroid studies being done?
4. What is jugular venous distention and how would the nurse determine its presence?
5. What is S3 indicative of and what is the optimal positioning for the patient to hear the S3?
6. What is BNP?
7. What is "digitalization" and why would the nurse question this order for the patient?

ANSWERS TO CRITICAL THINKING EXERCISE #2

1. CPK-2 levels do not usually rise with chest pain caused by angina, pulmonary embolism, or congestive heart failure.
2. Paroxysmal nocturnal dyspnea may be caused by a failing left ventricle resulting in pulmonary congestion and respiratory distress that awakens patients from sleep; related to posture.
3. Hypothyroidism is common in congestive heart failure and must be ruled out. The thyroid hormone acts on the cardiovascular system, which will cause changes in cardiac output, contractility, and blood pressure, and will cause rhythm disturbances.
4. Properly assessing for jugular venous pressure requires the patient to be lying down with the upper body at an angle of less than 30 degrees, with the neck muscles relaxed. The jugular vein is viewed from the side with a beam of light shining on the patient's neck. An elevated jugular venous pressure is the classic sign of right-sided heart failure.
5. The patient should be turned to a 30° left lateral position. The examiner is palpating the apical impulse while listening with the bell of the stethoscope applied near the apex. The third heart sound is a clue to heart failure or volume overload.
6. BNP is a B-type natriuretic peptide that is secreted by the left ventricles in response to excessive stretching. BNP is used for screening of congestive heart failure. Levels should be less than 100 pg/mL.
7. Digitalization is an intravenous administration of digoxin that is used when there is an urgent need or when the drug cannot be taken orally. The digoxin dose is adjusted according to patient age, body weight, and renal function. The loading dose is administered in several doses, with half the dose given in the first dose. The patient has bradycardia and is hypokalemic. When digoxin enters the body, it binds to the sodium–potassium pump and competes with potassium. So, digoxin will deplete potassium further, thereby causing the potential for cardiac arrhythmias. Digoxin increases the force of contraction of the muscle of the heart while decreasing the heart rate. Digoxin should be given when a heart rate is 60 or above.

CHAPTER 13

The Respiratory System and Assessments

WEEK 9 MEDICATION QUIZ

List the brand or generic name, dosage, route, reason for medication, side effects, and any special considerations the nurse should be aware of.

Drug: Furosemide

Drug: Morphine

Drug: Prednisone

Drug: Tegretol

Drug: Ultram

Drug: Valproic acid

_____

_____

_____

_____.

Drug: Xanax

_____

_____

_____

_____.

ARTERIAL BLOOD GAS PRACTICE SHEET

Label pH, pCO_2, and HCO_3 levels as normal, alkalosis, or acidosis. Determine whether metabolic or respiratory.

1. pH: 7.31 pH _____ pCO_2 _____ HCO_3 _____
   pCO_2: 39
   HCO_3: 17 _____
2. pH: 7.50 pH _____ pCO_2 _____ HCO_3 _____
   pCO_2: 30
   HCO_3: 24 _____
3. pH: 7.38 pH _____ pCO_2 _____ HCO_3 _____
   pCO_2: 56
   HCO_3: 35 _____
4. pH: 7.60 pH _____ pCO_2 _____ HCO_3 _____
   pCO_2: 25
   HCO_3: 24 _____
5. pH: 7.40 pH _____ pCO_2 _____ HCO_3 _____
   pCO_2: 30
   HCO_3: 22 _____
6. pH: 7.44 pH _____ pCO_2 _____ HCO_3 _____
   pCO_2: 24
   HCO_3: 16 _____

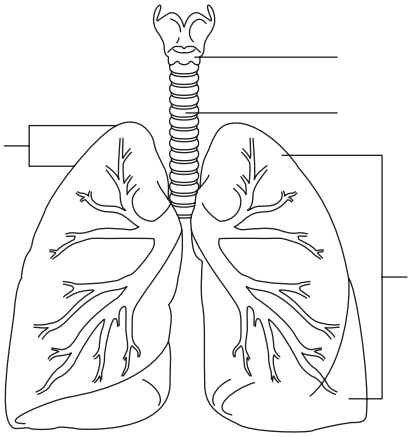
7. pH: 7.38 pH _____ pCO_2_____ HCO_3_____
   pCO_2: 76
   HCO_3: 42 _____
8. pH: 7.24 pH _____ pCO_2_____ HCO_3_____
   pCO_2: 36
   HCO_3: 14 _____

ANSWERS TO ARTERIAL BLOOD GAS PRACTICE SHEET

Label pH, pCO_2, and HCO_3 levels as normal, alkalosis, or acidosis. Determine whether metabolic or respiratory.

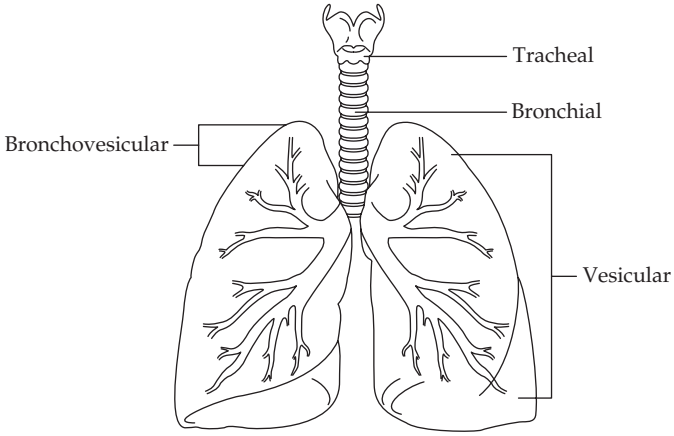
1. pH: 7.31 pH: Acidosis pCO_2: Normal HCO_3: Acid
   pCO_2: 39
   HCO_3: 17 Answer: Metabolic acidosis
2. pH: 7.50 pH: Alkalosis pCO_2: Alkalosis HCO_3: Normal
   pCO_2: 30
   HCO_3: 24 Answer: Respiratory alkalosis
3. pH: 7.38 pH: Normal pCO_2: Acidosis HCO_3: Alkalosis
   pCO_2: 56
   HCO_3 35 Answer: Compensated acidosis
4. pH: 7.60 pH: Alkalosis pCO_2: Alkalosis HCO_3: Normal
   pCO_2: 25
   HCO_3: 24 Answer: Respiratory alkalosis
5. pH: 7.40 pH: Normal pCO_2: Alkalosis HCO_3: Normal
   pCO_2: 30
   HCO_3: 22 Answer: Compensated respiratory alkalosis
6. pH: 7.44 pH: Normal pCO_2: Alkalosis HCO_3: Acid
   pCO_2: 24
   HCO_3: 16 Answer: Compensated metabolic acidosis
7. pH: 7.38 pH: Normal pCO_2: Acidosis HCO_3: Alkalosis
   pCO_2: 76
   HCO_3: 42 Answer: Compensated respiratory acidosis
8. pH: 7.24 pH: Acidosis pCO_2: Normal HCO_3: Acidosis
   pCO_2: 36
   HCO_3: 14 Answer: Metabolic acidosis

USING THE BREATH SOUNDS WORKSHEET

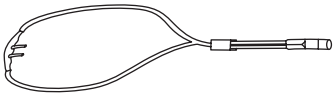


Label the breath sounds.
- Tracheal
- Vescicular
- Bronchial
- Bronchovesicular

BREATH SOUNDS EXERCISE ANSWERS



SUPPLEMENTAL OXYGEN DEVICE WORKSHEET



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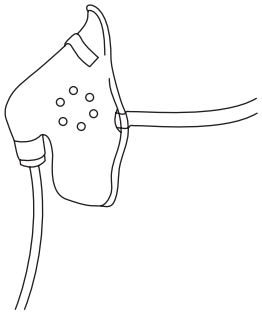

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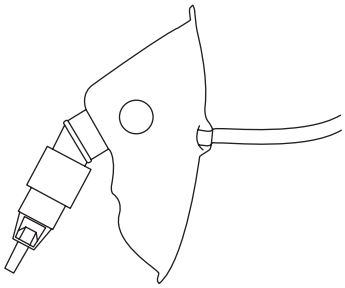

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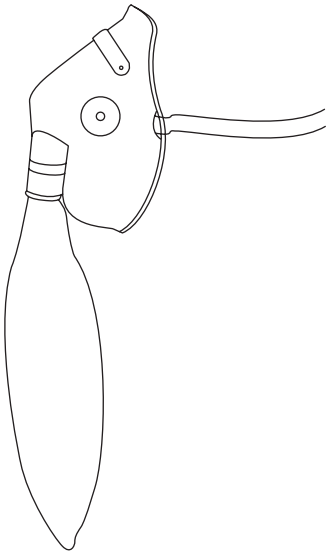

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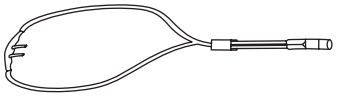
Label the supplemental oxygen devices.

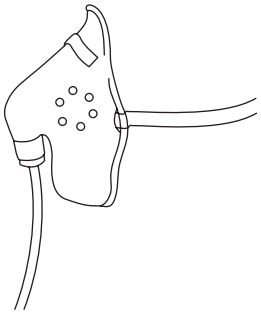
Label the percentage of oxygen the supplemental oxygen devices are able to administer.

ANSWERS TO SUPPLEMENTAL OXYGEN DEVICE WORKSHEET



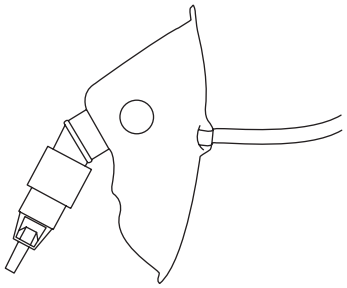
Nasal cannula

1–6 liters 25–45%



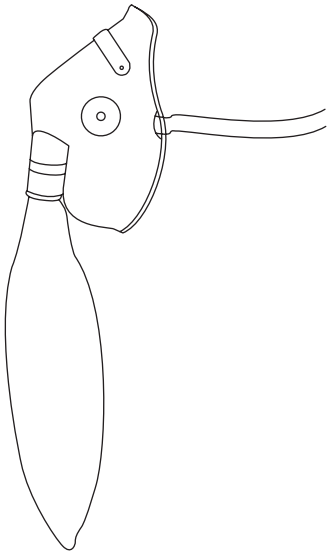
Simple face mask

8–10 liters 40–60%



Venturi mask

4–8 liters 24–50%



Non-rebreather

10–15 liters 60%–100%

Label the supplemental oxygen devices.

Label the percentage of oxygen the supplemental oxygen devices are able to administer.

CRITICAL THINKING EXERCISE #1

A 20-year-old robbery victim was evaluated in the emergency room (ER) due to a stab wound in the right upper chest. During transport, the ambulance team placed a dressing on the wound but it was only taped on three sides. The patient is showing signs of distended neck veins, subcutaneous emphysema, tracheal deviation toward the left side, cyanosis, and decreased breath sounds on the right side. The patient is admitted status post stab wound to the right chest causing a 30% open hemopneumothorax. Initial vital signs were BP 98/68, HR 120, and POX 90%. CTs were placed to 20-cm suction. Oxygen was applied at 4 L humidified. In the first hour the chest tube has drained 300 mL. After CTs inserted, there were bilateral breath sounds, BP 120/72, HR 90, and POX 95%.

To properly evaluate this situation, answer the following questions:

1. What is the difference between a closed and open pneumothorax?
2. Why did the initial intervention only tape the dressing on three sides?
3. Why is the chest tube drainage connected to 20-cm suction?
4. When does the nurse need to notify the physician about chest tube drainage?
5. What is "subcutaneous emphysema"?
6. What is "milking" or "stripping" the chest tube drainage and when would the nurse do it?
7. What does the nurse need to know and monitor about the chest tube drainage? What is "fluctuation" or "tidaling"?
8. Do the chest tubes help to restore positive or negative pressure?

ANSWERS TO CRITICAL THINKING EXERCISE #1

1. Open: Air entered the pleural space directly through a hole in the chest. Closed: Chest wall remains intact, bleb, or bullae rupture leading to a collapsed lung. May be idiopathic. May result from other illnesses (COPD, cancer, and TB).
2. Dressing the wound and taping it on three sides allows air to escape. This prevents tension pneumothorax, which develops when air is trapped in the pleural space during inspiration and cannot escape during expiration.
3. Chest tubes restore negative pressure in the pleural space at 20 cm of suction.
4. The nurse needs to notify the physician about chest tube drainage when bleeding persists (drainage > 150 mL/hr).
5. Subcutaneous emphysema is a painless swelling of the tissues because of air in the tissues. It is seen over the chest wall around drain sites and in the head and neck, and feels like tissue paper beneath the fingers. This may impede respirations.
6. Routine stripping or "milking" of the chest drainage tube is to be avoided due to excessive negative pressures and may cause rupture of the alveoli. Milking or stripping chest tubes should be done only when there is a physician's order. "Milking" and "stripping" are terms used to describe procedures to remove fluid or bodily material that keeps the chest tube

from functioning properly. It is performed by gently grasping the chest tube at the site of the blockage, squeezing the tube, and then releasing.
7. The nurse needs to monitor the chest tube drainage for amount, color, and fluctuation. The chest tube connection should be taped at the connections, make sure there are no kinks or occlusions. Tidaling or fluctuation occurs when the fluid level in the water seal rises on inspiration and falls on expiration.
8. Chest tubes are used to restore negative pressure in the pleural space.

CRITICAL THINKING EXERCISE # 2

A 41-year-old woman is being evaluated after a cholecystectomy 4 days ago. She has been resistant to deep breathing and coughing and to ambulate postsurgery. No TED anti-embolic stockings or sequential compression devices were ordered postoperatively. She has been short of breath since surgery and is only able to maintain her oxygen saturation at 91% when off 2 L nasal cannula. She is now complaining of tachycardia, dyspnea, anxiety, cool and clammy extremities, BP 70/40, and chest pain. She noticed last night that she was having edema, tenderness in her right calf, and a positive Homan's sign. Bolus administration of 1,000 mL crystalloids and 100 mL of colloids has been ordered. The doctor has ordered a ventilation perfusion scan, troponin, and D-dimer test. A VQ scan is positive for a saddle block embolus. She is being prepped for a surgical thrombectomy. A sonogram of the right calf is positive for a deep vein thrombosis (DVT).

1. What were her risk factors for developing a clot?
2. What is a saddle block embolism?
3. What is a thrombectomy and what are the risks involved?
4. What are D-dimer and troponin?
5. What are crystalloids and how do they differ from colloids?
6. What is a DVT and what is Homan's sign?
7. Who might be liable for legal action in this case?

ANSWERS TO CRITICAL THINKING EXERCISE #2

1. Her risk factors are her reluctance to deep breathe and cough and resistance to ambulate postsurgery. No TED anti-embolic stockings or sequential compression devices were ordered postoperatively.
2. A saddle block embolism is a clot that blocks both sides of an arterial branch, effectively blocking both branches of the pulmonary artery.
3. Removal of a blood clot in the pulmonary artery in this scenario is called a thrombectomy. The risks for this procedure are perforation of cardiovascular structures, pericardial tamponade, and pulmonary hemorrhage.

4. D-dimer is a fibrin degradation product (FDP) that is increased in the presence of acute pulmonary embolism (PE), usually over 500 mcg/L. Troponin elevated in a pulmonary embolism reflects right ventricular strain and can determine which patients require a higher level of care and monitoring until therapeutic anticoagulation can be started.
5. Both crystalloids and colloids increase blood flow and systemic arterial pressure, but colloids have a longer duration of effect. Colloids are given in smaller volumes (for example, 50 mL) which contain large molecules that do not pass through semipermeable membranes. They remain in the vascular system to expand the intravascular volume, achieve the same desired effect, and may prevent fluid overload.
   Crystalloid solutions:
   0.9% NaCl isotonic: Contains only Na, Chl, and water
   Balanced electrolyte solution (lactated Ringers) isotonic: Contains K, may contain CA, Mg
   Colloids: Albumin provides oncotic pressure (tends to stay in the vascular space). Examples are hetastarch and dextran.
6. Deep vein thrombosis of the leg is a blood clot that forms in a vein deep in the body and can occur in other veins (such as arms due to a peripherally inserted central catheter [PICC] line). Symptoms may be present or the DVT may be asymptomatic, unilateral or bilateral, or mild or severe. Edema is the most specific symptom of DVT.
7. Patients frequently die or experience detrimental effects from DVTs and PEs when they could easily have been prevented. Standard protocols are now being initiated by most health care organizations. The physician and the nurse may be liable in this case if the standards were not being followed. Were the standards of the hospital followed? Major guidelines have been established by institutions to prevent the occurrence of DVTs and PEs. Diagnosis-related allegations involve the failure to diagnose or delay in ordering the appropriate tests to establish a diagnosis. When the patient was reluctant to move and deep breathe and cough, prophylactic therapy such as heparin or Lovenox should have been initiated. The patient had desaturation and also required the use of oxygen for activities. Was that information relayed to the physician by the nurse? Was there a delay in timely appropriate treatment?

CHAPTER 14

The Gastrointestinal System and Assessments

WEEK 10 MEDICATION QUIZ

List the brand or generic name, dosage, route, reason for medication, side effects, and any special considerations the nurse should be aware of for the following drugs.

Drug: Boniva

_____
_____
_____.

Drug: Heparin

_____
_____
_____.

Drug: Janumet

_____
_____
_____.

Drug: Kayexalate

_____
_____
_____.

Drug: Oxycodone

_____
_____
_____.

HOW TO MEASURE FOR AN NGT QUIZ

1. An NGT needs to be measured from the _____, then to the _____, and then to the _____.
2. What is the most accurate way to confirm placement of an NGT?
3. What is an air vent on the NGT and what is its purpose?
4. What two things does the nurse need to do when first assessing an NGT with tube feedings?
5. NGT drainage should be assessed for what characters?

ANSWERS TO NGT QUIZ

1. An NGT needs to be measured from the tip of the nose to the earlobe, then from the earlobe to the xiphoid process.
2. x-ray
3. An air vent is a blue pigtail that allows atmospheric pressure to enter the patient's stomach so that the NGT does not adhere to the stomach mucosa.
4. Check for patency and residual
5. Document the type, drainage (if any), amount, color, and consistency.

NGT/OGT QUIZ

You have a patient with an NGT. You notice the following:

A. Golden-yellow drainage. Is this normal □ or abnormal □? If abnormal, explain.

_____.

B. Coffee grounds–colored drainage. Is this normal □ or abnormal □? If abnormal, explain.

_____.

C. Frank-red drainage. Is this normal □ or abnormal □? If abnormal, explain.

_____.

D. Tar-colored drainage. Is this normal □ or abnormal □? If abnormal, explain.

_____.

E. No drainage. Is this normal □ or abnormal □? If abnormal, explain.

_____.

ANSWERS TO NGT/OGT QUIZ

A. This is normal. Bile can be light or dark green, golden yellow, or yellow brown
B. This is abnormal. Coffee ground indicates the presence of blood in the gastric secretions
C. This is abnormal. Frank-red drainage indicates a current bleed
D. This is abnormal. Tarry colored drainage indicates digested blood.
E. It can be normal if there are no secretions in the stomach. It can also be abnormal. The nasogastric tube or oral gastric tube maybe resting against the mucosa and is not allowing drainage. NGT needs to be irrigated to determine a cause.

ABDOMINAL GIRTH MEASUREMENT QUIZ

To measure abdominal girth, the nurse should first collect _____ and place at the bedside.
Next the nurse should explain _____ to _____ _____ and provide patient teaching regarding the need to _____.
The nurse should provide _____ while performing the procedure.
The measuring tape should be placed from _____ to _____ _____.
The patient should be in the same _____ when the abdominal girth is measured.
The measurement results should be compared to _____.
The results of the abdominal girth measurements should be _____.
Using a permanent marker, the patient's abdomen should be marked to ensure consistency when other nurses perform _____ _____.
To ensure all efforts are made to monitor the collection of fluid, the patient should also have daily _____ taken and recorded.

ANSWERS TO ABDOMINAL GIRTH MEASUREMENT QUIZ

To measure abdominal girth, the nurse should first collect the necessary equipment and place at the bedside.
Next: the nurse should then explain the procedure to the patient and provide patient teaching regarding the need to measure abdominal girth.
The nurse should provide privacy while performing the procedure.
The measuring tape should be placed from the umbilicus to the umbilicus.
The patient should be in the same position when the abdominal girth is measured.
The measurement results should be compared to previously recorded abdominal girth measurements.
The results of the abdominal girth measurements should be documented.
Using a permanent marker, the patient's abdomen should be marked to ensure consistency when other nurses perform future abdominal girth measurements.
To ensure all efforts are made to monitor the collection of fluid, the patient should also have daily weights taken and recorded.

GASTROINTESTINAL KNOWLEDGE QUIZ

List below what you, as a nurse, would assess for in a GI patient.

_____

_____

_____

_____

_____

_____

What interventions would you or could you perform on the GI patient? List tests that the doctor may order for the GI patient.

_____

_____

_____

_____

_____

_____

ANSWERS TO GASTROINTESTINAL KNOWLEDGE QUIZ

List below what you, as a nurse, would assess for in a GI patient.

Food allergies, weight loss or gain, previous gastric conditions, medications, herbs, supplements, laxatives, enemas

Physical Exam: lips: symmetry, color, and lesions; teeth and gums: lesions, ulcerations from dentures; tongue-coating/thrush; oral cavity: lesions: breath odor

Abdomen: inspect, auscultation, palpation, and percussion

Listen for bowel sounds, bruits; bowel sounds are considered absent when the person has listened to each quadrant for 5 minutes and no sounds are heard

Percussion: tympany-high pitched (air) and dullness–short high-pitched (fluid or masses)

Palpate all four quadrants and monitor for tenderness, enlargement, contour, symmetry

(*continued*)

What interventions would you or could you perform on the GI patient? List tests that the doctor may order for the GI patient.

Upper GI tract: fluoroscopy and X-ray exam, esophagus, stomach, and small intestine; NPO 8 to 12 hours before procedure; conscious sedation used, NPO until gag reflex returned; after procedure encourage fluid intake to prevent impaction of stool and may be white for up to 72 hours Lower GI Barium evening before procedure, cleansing enemas until clear, laxatives, clear liquid dinner, NPO for 8 hours

Post procedure: conscious sedation used, NPO until gag reflex returned, cramping (air), observe for bleeding and perforation of colon

CT scans: allergy to shellfish, iodine need to be assessed first MRI; NPO 6 hours before procedure, no metal implants

Esophagogastroduodenoscopy (EGD): esophagus, stomach, and duodenum are directly examined with a flexible fiberoptic scope: consent, NPO 8 hours, postprocedure NPO until gag reflex

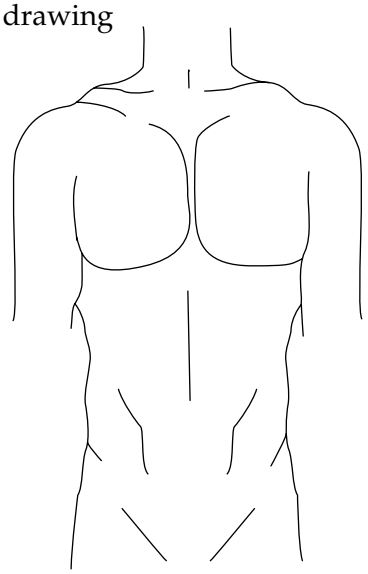
Colonoscopy: visualize colon up to ileocecal valve, clear liquids and laxatives 1 to 3 days prior to test, enemas the night before, NPO before test

Laparoscopy: visualize peritoneal cavity, general anesthesia, consent, pre-op meds, ensure bowel and bladder emptied: postop, pain meds, observe for bleeding and bowel perforation

Labs: blood chemistry, amylase, lipase, liver function tests

ABDOMINAL ORGAN POSITION EXERCISE

Insert the organs in the appropriate locations on this drawing

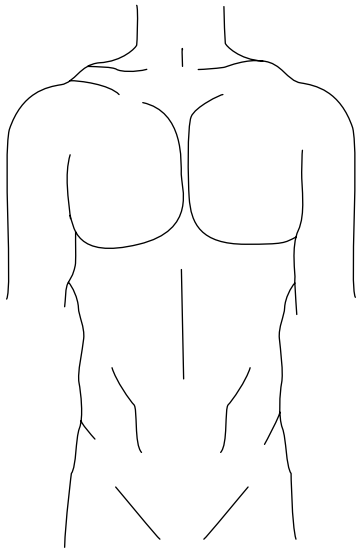


ANSWERS TO ABDOMINAL ORGAN POSITION EXERCISE

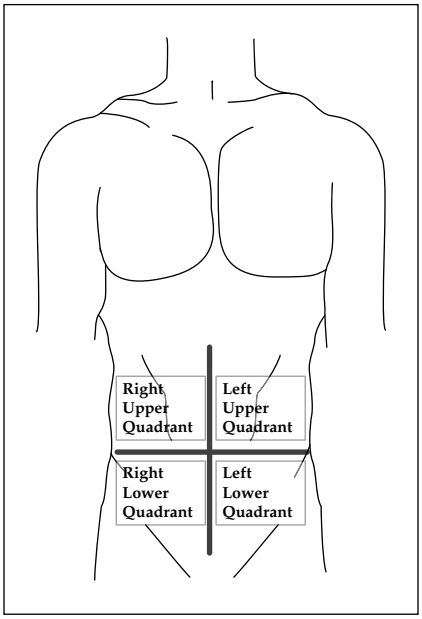
Right Upper Quadrant	**Left Upper Quadrant**
Liver and gallbladder	Left lobe of the liver
Pylorus	Spleen
Duodenum	Stomach
Head of the pancreas	Body of the pancreas
Right adrenal gland	Left adrenal gland
Portion of right kidney	Portion of left kidney
Right Lower Quadrant	**Left Lower Quadrant**
Appendix, cecum, right ovary (in females), right ureter, and ascending colon	Colon, small intestines, left ovary (in females), and left ureter

ABDOMINAL QUADRANTS LABELING EXERCISE

Label the abdominal quadrants on this picture.

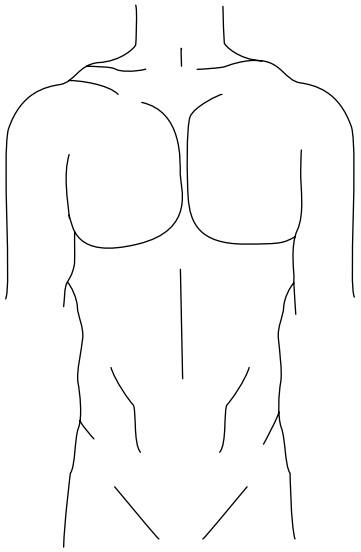


ANSWERS TO QUADRANTS LABELING EXERCISE

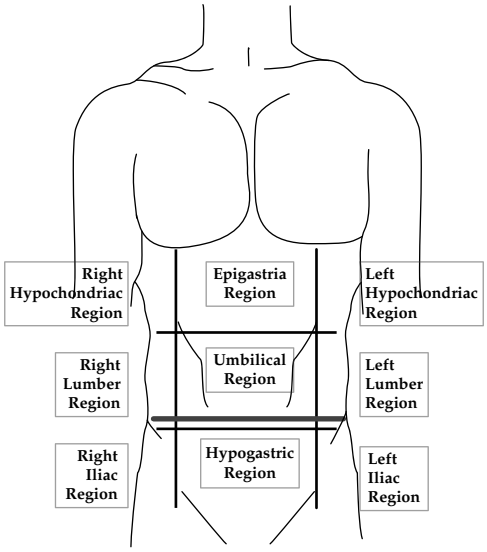


ABDOMINAL REGIONS LABELING EXERCISE

Label the abdominal regins on this picture.



ANSWERS TO ABDOMINAL REGIONS LABELING EXERCISE



CRITICAL THINKING EXERCISE #1

A 56-year-old White female is admitted to the medical–surgical unit from the emergency department with complaints of upper abdominal pain that radiates to the back, fever, and leukocytosis, elevated amylase and lipase, and hypocalcemia. Symptoms started 24 hours prior to admission. Patient admits to drinking a pint of vodka daily for several years. Last drink was consumed yesterday. An ERCP of the pancreas is done and shows chronic pancreatitis with no evidence of tumors, strictures, or stones in the gallbladder. The patient is anxious and demanding. A peripherally inserted central catheter (PICC) line will be started for TPN infusion. Patient is NPO.

On initial assessment of systems:

Central nervous system (CNS): coma scale of 15, moves all extremities equally, pupils equally accommodating, reactive to light (PEARL), fine tremors noted in hands, irritable, and anxious
Cardiovascular: S1, S2, S3 present, +peripheral pulses 2+, a #22 gauge in her right hand with normal saline (NS) infusing at 50 mL/hr, jugular venous distention present, positive for Trousseau's sign
Pulmonary: pulse oximetry 93%, respirations labored but symmetrical
Renal/hepatic: on palpation liver enlargement detected; urine concentrated and dark
Endocrine: negative
Hematological/coagulopathy: bruising noted on extremities
Integumentary: positive for Cullen's sign and Gray Turner's sign

Fasting blood sugar (FBS) 140	BP 150/90	CXR negative
Sodium 136	HR 120	ETOH 236
Potassium 3.8	RR 28	Amylase 1,800 units/L
Chloride 110	Temp 101°F	Lipase 2,000 units/L
CO_2 22		Alkaline phos 350 units/L
Blood–urea–nitrogen (BUN) 26		Alanine transaminase or ALT, also called SGPT serum
Creatinine 0.6		glutamic-pyruvic transaminase (SGPT) 90 units/L
WBC 15,000		PT 17 / INR 3
Hgb 12		Aptt 60 sec
Hct 36		Ionized calcium 3 mg/dL

To properly evaluate this situation, answer the following questions:

1. What are the causes of pancreatitis?
2. Why the patient is made NPO?
3. What are the Cullen's, Trousseau's, and Gray Turner's signs?
4. What are the lab tests that indicate signs of liver damage?
5. What are the complications of an ERCP?
6. What are the appropriate treatments for elevated PT/INR?
7. Why does pancreatitis cause hypocalcemia?
8. How would hypocalcemia be treated?

9. What are the signs of withdrawal from alcohol?
10. Why does the ionized calcium test need to be done?
11. Why is the BUN/creatinine (CR) elevated?

ANSWERS TO CRITICAL THINKING EXERCISE #1

1. The causes of pancreatitis are: gallstones, alcoholism, cystic fibrosis, ERCP (when used to treat gallstones), hypercalcemia, hyperparathyroidism, hypertriglyceridemia, infection, and cancer.
2. The patient is made NPO because the pancreatic enzymes will cause inflammation and destruction of the pancreas and surrounding tissues.
3. Cullen's sign is superficial edema and bruising in the subcutaneous fatty tissue around the umbilicus and can be indicative of pancreatic necrosis.
   Trousseau's sign is observed with hypocalcemia. To elicit the sign, a blood pressure cuff is placed around the arm and inflated to a pressure greater than the systolic blood pressure and held in place for 3 minutes. This will cause neuromuscular irritability that will induce spasm of the muscles of the hand and forearm.

   Gray Turner's sign is a gray-blue discoloration of the flanks, seen in acute hemorrhagic pancreatitis.
4. Liver function tests that help diagnose and monitor liver disease include tests such as elevated alanine transaminase (ALT), aspartate aminotransferase (AST), alkaline phosphatase (ALP), bilirubin, prothrombin time (PT)/ international normalized ratio (INR), and partial thromboplastin time (PTT), and low albumin levels.
5. ERCP is an invasive x-ray used to view the patient's bile and pancreatic ducts. Complications can include pancreatitis, perforation, infection, and aspiration of stomach contents during the procedure.
6. Appropriate treatments for elevated PT/INR are vitamin K (Aquamephyton) or, for reversal, administration of fresh frozen plasma.
7. Pancreatitis causes hypocalcemia because the fat necrosis causes the release of free fatty acids that bind with calcium, thereby decreasing calcium precipitation.
8. Hypocalcemia is treated with either oral calcium or calcium chloride IV.
9. Signs of alcohol withdrawal include irritability, diaphoresis, tachypnea, HTN, and hyperthermia. At 48 hours since last drink, signs include hallucinations, seizures, and delirium tremors. (Baseline criteria for identifying delirium tremens: a heart rate of 150 or greater; diastolic blood pressure higher than 100; and a temperature of 101°F or higher in patients with both agitation and active hallucinations.)
10. Calcium binds with albumin, so the ionized calcium test needs to be done to determine the most important physiologic component of calcium.
11. BUN is elevated due to dehydration. If the BUN is elevated from dehydration, the creatinine will be normal or low.

CRITICAL THINKING EXERCISE #2

A 32-year-old male is evaluated in the emergency room for complaint of dull right lower quadrant pain, temp of 101°F, and nausea and vomiting. On palpation of the abdomen the patient is experiencing rebound tenderness and a positive psoas sign. On examination of lab work, the WBC are 20/mm, and the abdominal CAT scan is showing a ruptured appendix with a 2-cm fluid-filled intra-abdominal abscess. Chest x-ray shows a right pleural effusion. The patient's pulse ox is 92%, RR 28, and 2 liters nasal cannula (NC) applied. Patient is being evaluated for surgery.

1. What is appendicitis?
2. What is a psoas sign?
3. What are the complications of appendicitis?
4. What is the treatment for appendicitis?
5. Why would the patient have a pleural effusion?
6. What is an abscess?

ANSWERS TO CRITICAL THINKING EXERCISE #2

1. Appendicitis is inflammation of the appendix.
2. A psoas sign is right lower quadrant pain produced with passive extension of the right hip while supine, caused by the inflammation of the peritoneum overlying the iliopsoas muscles.
3. If not surgically removed or treated medically, the appendix with an undrained abscess may rupture into the peritoneum, causing peritonitis and possibly causing sepsis.
4. Treatment for appendicitis includes removal of the appendix, drainage of the abscess, antibiotics, and IV hydration.
5. An intra-abdominal abscess or other peritoneal inflammations can cause pleural effusions because of the proximity of organs.
6. An abscess is an extension of inflammation or infection caused by some diseases such as appendicitis, chrons, or pelvic inflammatory disease.

CHAPTER 15

The Urinary System and Assessments

WEEK 11 MEDICATION QUIZ

List the brand or generic name, dosage, route, reason for medication, side effects, and any special considerations the nurse should be aware of.

Drug: Aspirin

Drug: Allopurinol

Drug: Dilaudid

Drug: Glucophage

Drug: Lactulose

_____

_____

_____

_____

_____

Drug: Tylenol

_____

_____

_____

_____

_____

INTAKE AND OUTPUT CALCULATION QUIZ

Convert the following fluids to mL:

1. 4 oz apple juice _____
2. 8 oz soda _____
3. ¾ of a 12 oz can of tomato juice _____
4. ½ of a 10 oz cup of tea _____
5. ¾ pint of milk _____
6. 4 tablespoons of pudding _____
7. ½ of a lemon ice (4 oz) _____
8. 90 gtt of coffee _____
9. 6 teaspoons of tea _____
10. 1½ quarts of water _____

ANSWERS TO INTAKE AND OUTPUT CALCULATION QUIZ

1. 4 oz apple juice 120 mL
2. 8 oz soda 240 mL
3. ¾ of a 12 oz can of tomato juice 90 mL
4. ½ of a 10 oz cup of tea 150 mL
5. ¾ pint of milk 360 mL
6. 4 tablespoons of pudding 60 mL
7. ½ of a lemon ice (4 oz) 60 mL
8. 90 gtt of coffee 7.5 mL
9. 6 teaspoons of tea 30 mL
10. 1½ quarts of water 1,500 mL

INTAKE AND OUTPUT WORKSHEET

George:	0715	Voided 425 mL urine
	0800	Ate 2 pieces of toast, ½ of 4 oz. apple juice, 3 pieces of bacon, ¾ of a pint carton of milk, and one egg
	1015	Drank ¾ of a 12-ounce can of tomato juice
	1120	Voided 3½ cups of urine
	1200	Ate ¾ of a peanut butter sandwich, 8 Tbsp. of pudding, 1 bag of chips, ½ pint of water, and 12 tsp. of lemon ice
	1315	JP drain output of 100 mL serosanguinous drainage
	1445	One greenish brown liquid stool, approximately ½ quart

Calculate the following quantities of fluid into milliliters. Enter your I&O amounts on the I&O worksheet.

Oral Intake	Tube Feed	IV	IVPB	Other (IV)	Urine	Emesis	NGT/ OGT	Drain	Other

Fluid measurements:

1 ounce = 30 mL
8 ounces = 240 mL
1 cup = 8 ounces = 240 mL
4 cups = 32 ounces = 1 quart or liter (L) = 1,000 mL
oz = ounce
8 oz = 1 cup
2 cups = 1 pint = 16 ounces
2 pints = 1 quart
4 quarts = 1 gallon
8 drams = 1 oz. = 30 mL or 30 cc
tsp. = teaspoon = 5 mL
3 tsp = 1 tablespoon

Tbsp = tablespoon = 15 mL
6 tsp = 1 oz. = 2 Tbsp
gtt = drop
1 gtt = 1 minim
60 gtt = 1 dram = 1 tsp
60 minims = 1 dram
1 mL = 1 cc
Gm = gram
1 gm = 1,000 mg = 1,000,000 mcg
mg = milligram
mcg = microgram
1 inch = 2.5 cm
1 pound = 2.2 kg

ANSWERS TO INTAKE AND OUTPUT WORKSHEET

George:	0715	Voided 425 mL urine
	0800	Ate 2 pieces of toast, ½ of 4 oz. apple juice, 3 pieces of bacon, ¾ of a pint carton of milk, and one egg
	1015	Drank ¾ of a 12-ounce can of tomato juice
	1120	Voided 3½ cups of urine
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	1315	JP drain output of 100 mL serosanguinous drainage
	1445	One greenish brown liquid stool, approximately ½ quart

Oral Intake	Tube Feed	IV	IVPB	Other (IV)	Urine	Emesis	NGT/OGT	Drain	Other
60 mL					425 mL			100 mL	500 mL
360 mL					840 mL				
90 mL									
120 mL									
240 mL									
60 mL									
	Total intake				Total output				
	930 mL				1,865 mL				

URINARY OUTPUT QUIZ

Your patient has a Foley catheter. You notice the following:

1. Clear, yellow urine @ 30 mL/hr. Is this normal ☐ or abnormal ☐? Explain: _____.
2. Cloudy, yellow urine @ 20 mL/hr. Is this normal ☐ or abnormal ☐? Explain: _____.
3. Amber urine with sediment @ 40 mL/hr. Is this normal ☐ or abnormal ☐? Explain: _____.
4. Salmon-colored (pink-tinged) urine @ 50 mL/hr. Is this normal ☐ or abnormal ☐? Explain: _____.
5. Dark, amber urine with 150 mL in 8 hours. Is this normal ☐ or abnormal ☐? Explain: _____.
6. Amber urine with flecks of tissue @ 30 mL/hr. Is this normal ☐ or abnormal ☐? Explain: _____.
7. Dark, sanguineous urine with clots @ 20 mL/hr. Is this normal ☐ or abnormal ☐? Explain: _____.
8. No urinary output. Is this normal ☐ or abnormal ☐? Explain: _____.

ANSWERS TO URINARY OUTPUT QUIZ

1. Normal. Normal urine output is 30 mL/hr.
2. Abnormal. Urine should be clear. 20 mL/hr may be normal if the patient is small and patient weight is less than 100 pounds.
3. Urine should not have sediment. 40mL/hr is a normal amount for urine output unless the patient is receiving IV fluids at a high rate or a diuretic was administered.
4. Urine should not be pink tinged. Often the patient may have tugged on the Foley, causing some irritation that results in pink-tinged urine. 50 mL/hr is an appropriate amount for urine output. Pink-tinged urine can also be due to blueberries or beets. There may be other conditions such as renal disease or infection.
5. Normal urine output is approximately 30 mL/hr. However, if the patient is in renal insufficiency or liver failure, these may be normal signs associated with the disease process.
6. 30 mL/hr is a normal urine output. Flecks of tissue are not a normal occurrence. The patient may have urinary retention that causes bladder cells to slough. The patient may have other urinary tract injuries or disease process that causes this abnormality. Further investigation is warranted. It may be necessary to send a urine specimen to the lab for analysis.
7. This would be abnormal unless the patient had a TURP procedure. A TURP procedure would require a three-way catheter that includes continuous bladder irrigations. Occasionally a patient may have some bloody urine after the insertion of a Foley catheter, but it usually will clear after several hours. The patient may have bloody urine if the patient pulled on the Foley or if a confused patient attempted to pull the Foley out. If your patient is demonstrating dark,

sanguineous output with clots, be certain to monitor for bladder distention because a clot could occlude the flow of urinary output.

8. This would be normal in the patient with complete or end-stage renal failure. If your patient does not have renal failure, there may be an occlusion or the patient may be very dehydrated. Attempt to irrigate the Foley. If you instill 30 mL of sterile saline and the saline returns immediately, there is no occlusion. The physician should be notified of the lack of urinary output.

PATIENT EDUCATION SCENARIOS

Hand each student one of the eight patient scenarios that appear below. These are questions that will develop the students' critical thinking when interacting with patients. Each patient encountered may have a different diagnosis; some with other medical problems to be considered in their overall health maintenance. However, students should ask themselves, how they would teach, how would the student know the patient has learned and not simply responded that, yes, they understand?, and so forth.

1. What is the diagnosis?
2. What would you teach this patient about his or her disease process?
3. How would you determine whether the patient understands?
4. What additional methods could be incorporated to ensure patient safety and learning?
5. What teaching would you give regarding medication(s)?
6. What additional patient teaching can be given to the patient?
7. What additional subject content can help the patient in the patient's quest for better health?
8. Are there websites to which you can refer the patient? Can you name them?

PATIENT EDUCATION SCENARIO #1

Your patient is a 74-year-old active senior citizen. Your patient has been walking 30 minutes daily for years. Recently your patient has become short of breath (SOB) when climbing one flight of stairs. He noticed a nagging cough each night when he tries to sleep.

You notice your patient has an elevated blood pressure. Your patient mentioned that on his last visit to his doctor his BNP—"whatever that is!"—was 495. His doctor prescribed hydrochlorothiazide, but it makes him constipated so he rarely takes it.

PATIENT EDUCATION SCENARIO #2

Your patient is a 43-year-old factory worker. He works 16-hour shifts, 6 days a week. He is married with four children. His wife's family lives with he and his family. The extended family includes his mother-in-law (MIL), two brothers-in-law, and one sister-in-law. Except for his MIL, the extended family members are in college. His MIL is wheelchair bound due to arthritis. His wife must stay home to care for her mother and children.

Because money is tight, the menu is mainly pasta-type meals. Your patient smokes heavily and is overweight. He came in today due to tightness in his chest. He thinks he may have strained himself lifting and placing large boxes on shelves.

PATIENT EDUCATION SCENARIO #3

Your patient is a 33-year-old female who has come in for evaluation due to not feeling well for a week. She has been experiencing increased thirst and urination. She has already lost 10 pounds and she cannot seem to get up to go to work anymore.

PATIENT EDUCATION SCENARIO #4

Your patient is a 32-year-old relatively healthy male. He is allergic to IV dyes and peanuts. He has an occasional glass of wine. He does not smoke. He is very much a health-conscious patient. He drinks mineral water and takes a daily supplent. Lately, he decided to stop eating meats. He has been adding various vegetables and fish to his diet. However, since he began his diet change, he noticed his throat feels itchy and is having difficulty swallowing. He has also noticed a small raised rash on his arms after he consumes cod.

PATIENT EDUCATION SCENARIO #5

Your 66-year-old newly retired patient came in today due to sudden onset of numbness and tingling on her left side. The episode lasted approximately an hour, and then it went away. She stated she thought she had slept wrong, but then became extremely dizzy. She called her daughter and told her what had happened. The patient's daughter called 9-1-1.

PATIENT EDUCATION SCENARIO #6

Your patient is an 87-year-old man. He recently visited his grandchildren in Florida. After flying home several days ago, he felt very fatigued. He feels a little SOB and you notice that his nares are flaring. He continuously leans forward to breathe. He admits he does not have much sputum but feels as though he can't get enough air.

PATIENT EDUCATION SCENARIO #7

Your patient is a 58-year-old obese man. He has a medical history of gastroesophageal reflux disease and high cholesterol. He drinks four to five beers nightly after work. He came in today

because he began having left abdominal quadrant pain and some difficulty in breathing. He states that he feels worse after eating. He now complains of having severe abdominal pain that radiates to his back.

PATIENT EDUCATION SCENARIO #8

Your 61-year-old patient came in after having a near-syncopal episode. She admits she had been feeling weak for a couple days. She was going to see her doctor in 8 days to get her Coumadin prescription renewed. She has a history of atrial fibrillation, but otherwise is healthy. Embarrassing as it is to admit, she does confess that her stools have been black.

ANSWERS TO PATIENT EDUCATION SCENARIO DIAGNOSES

1. CHF
2. MI
3. DM
4. Allergic reaction
5. CVA
6. Pulmonary embolism
7. Pancreatitis
8. GIB

CRITICAL THINKING EXERCISE #1

A 56-year-old female had not been seen for 2 days. When her family investigated, she was found on her left side. She had suffered a stroke to her left temporal area causing a hemorrhagic subdural without midline shift on her CT scan. She has a past medical history of congestive heart disease, chronic obstructive pulmonary disease, deep vein thrombosis, and atrial fibrillation. On admission, she has right-sided weakness and edema to right-side extremities. Urine is decreased and dark red. In addition to her stroke, the patient has been diagnosed with rhabdomyolysis.

1. What is rhabdomyolysis?
2. What is the significance of this leakage of proteins and enzymes?
3. What causes rhabdomyolysis?
4. What are the signs and symptoms of rhabdomyolysis?
5. How is rhabdomyolysis diagnosed?
6. What treatment should be done?

ANSWERS TO CRITICAL THINKING EXERCISE #1

1. Rhabdomyolysis is the rapid destruction of the myoglobin protein in the urine. Creatine kinase (CPK), which facilitates chemical reactions in the cells, is also released. Because tissue is damaged, this may result in potassium being released from cells (hyperkalemia).
2. These enzymes will clog the filtering tubules in the kidneys, causing renal failure.
3. The more common causes of rhabdomyolysis are muscle trauma; burns; infection; immobility; drug intoxication, especially cocaine; myopathies; myxedema coma; statins; psychiatric drugs; hypothermia; and hyperthermia.
4. Stiffness and weakness, dark urine, nausea, and confusion.
5. Rhabdomyolysis is diagnosed with these lab studies: complete blood count, complete metabolic panel, liver function tests, urinalysis, and CPK.
6. Stop the offending drug, hydration, and treatment with sodium bicarbonate and mannitol.

CRITICAL THINKING EXERCISE #2

A 22-year-old female is admitted to the emergency room (ER) with complaints of severe left flank pain, nausea, and vomiting. She is bent over and complaining of pain 10/10 that has been constant for 4 hours. Her past medical history is negative but she states that prior to this she started a new diet consuming large amounts of meat and fish. Familial history of kidney stones is present. Uric acid is elevated at 8 mg/dL. A urinalysis is positive for nitrates, RBC, and leukocytes. A kidneys, ureters, and bladder (KUB) x-ray is done and a left ureter 2-mm nephrolithiasis is present. Shock wave lithotripsy is ordered after the patient is hydrated. Patient is instructed to strain her urine when she has to void.

To properly evaluate this situation answer the following questions

1. What are the different types of kidney stones?
2. What are the common symptoms of a kidney stone?
3. What is a KUB?
4. What is the urinalysis indicative of?
5. Why must the patient strain her urine?
6. What role does diet play in the development of kidney stones?
7. What does an elevated uric acid level indicate?
8. How are kidney stones treated?
9. What is lithotripsy used for?

ANSWERS TO CRITICAL THINKING EXERCISE #2

1. The different types of kidney stones are: calcium, struvite, uric acid, and cystine.
2. The common symptoms of a kidney stone are: the sudden onset of excruciating, cramping pain in the low back, groin, or abdomen; nausea; vomiting; fever; difficulty urinating; and urinary urgency.
3. The KUB is used to investigate gastrointestinal conditions such as bowel obstruction, gallstones, and kidney stones.
4. Urinalysis indicates evidence of infection with the leukocyte esterase (a product of WBCs). Nitrites are also produced as a result of an infection. If blood is present in the urine, it may be a sign of kidney damage, infection, kidney stones, or bladder stones.
5. The client must drain her urine to catch any stones that may be passed.
6. Changing the diet can avoid or lessen the occurrence of new development of kidney stones.
   Calcium oxalate stones: Reduce sodium, animal protein, such as meat, eggs, and fish, and avoid foods high in oxalate, such as spinach, rhubarb, nuts, and wheat bran
   Calcium phosphate stones: Reduce sodium, animal protein
   Uric acid stones: Reduce protein; treat with allopurinol, which decreases uric acid in the blood and urine
7. Treatment for kidney stones depends on the size, substance, and obstruction. Pain control is essential. IV fluids and PO hydration are given. Urine is strained to catch any stones being passed. If hematuria is present, the hemoglobin and the hematocrit must be monitored.
8. Uric acid is a chemical created when the body breaks down substances called purines. Uric acid stones form when the urine is persistently acidic. Purines are found in meats and drinks, such as liver, anchovies, dried beans, peas, and beer. Normal values range between 3.5 and 7.2 mg/dL. An elevated uric acid level can be indicative of gout, hypothyroidism, diuretics, or renal insufficiency.
9. Shock wave lithotripsy is used to crush the kidney stone. The procedure generates shock waves that pass through the person's body to break the kidney stone into smaller pieces to pass more readily through the urinary tract.

CHAPTER 16

The Musculoskeletal and Integumentary Systems

WEEK 12 MEDICATION QUIZ

List the brand or generic name, dosage, route, reason for medication, side effects, and any special considerations the nurse should be aware of.

Drug: ACTH

Drug: Acyclovir

Drug: Demerol

Drug: Flexeril

Drug: Norvasc

Drug: Paxil

Drug: Sandostatin

_____

_____

_____

PRESSURE ULCER QUIZ

1. How can repositioning a patient prevent pressure ulcers?
2. Name three diseases that can create a potential for poor tissue perfusion that could result in ulcerations:
3. List two events that may cause immobility:
4. What basic nursing intervention(s) can help protect the patient's skin?
5. How can sensory deficits cause problems for the patient that result in immobility?
6. List the sites that more often are prone to develop pressure ulcers in the immobile patient:
7. List several methods used to assess the patient's skin:
8. Your patient's skin is pale. How does pallor relate to compromised skin?

ANSWERS TO PRESSURE ULCER QUIZ

1. Repositioning allows the perfusion to the compressed tissue to return.
2. Diabetes mellitus, peripheral vascular disease, and coronary artery disease.
3. CVA and hip fracture.
4. Bathing the patient, repositioning the patient, and applying lotion or skin barrier cream.
5. Poor eyesight can cause a fall that results in a hip fracture. Decreased sensation in the feet from diabetes mellitus can result in neuropathy and an unsteady gait, creating a potential risk for injury. A stroke patient who may be hemiplegic may not recognize the need to move.
6. Ears; bridge of nose; and bony prominences of the spine, hip bones, heels, elbows, and scapulae.
7. Observation and palpation.
8. Pallor usually means poor perfusion or lack of oxygen. Lack of perfusion results in decreased oxygenation and nutrition for the tissue and cells. The cells cannot sustain or repair any damage without oxygen and nutrients.

STAGING PRESSURE ULCERS QUIZ

Label the following pictures with the appropriate staging. Also list what may be the causative factors for each.

1. Skin may become reddened when the patient lies for more than an hour in one position; however, the skin is blanchable. Name the stage: _____.

   Causative factors: _____.
2. Pressure ulcers can be recognized when the patient's skin reflects full tissue loss but the base of the pressure ulcer is covered with eschar or slough tissue.

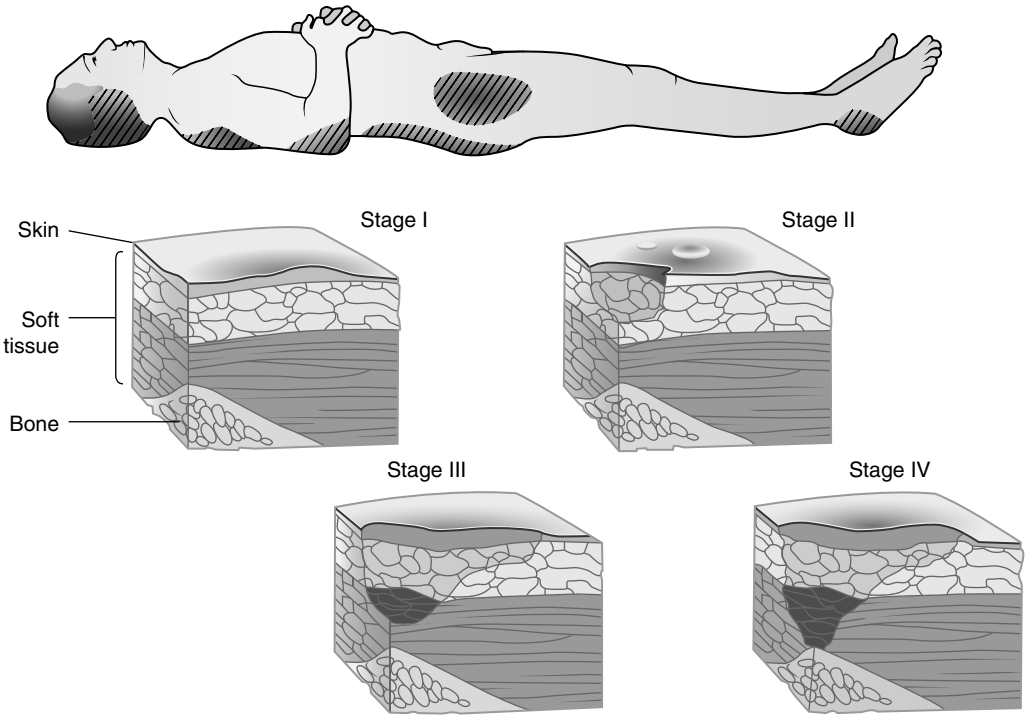
   Causative factors: _____.
3. Can be recognized when the patient's skin reflects full tissue loss with loss of bone and muscles. It may also present with tunneling and areas of eschar.

   Causative factors: _____.
4. Can be recognized when the patient's skin reflects a partial loss of dermis. There is loss of skin layer and there may be a shallow ulcer.

   Causative factors: _____.
5. Can be recognized when the patient's skin is compressed by slight pressure and the skin does not blanch. The patient may complain of pain at the site. It may be more difficult to detect in persons with darker skin pigmentation.

   Causative factors: _____.
6. Can be recognized when the patient's skin reflects full tissue loss without bone or muscle involvement. It may also present with tunneling.

   Causative factors: _____.



ANSWERS TO STAGING PRESSURE ULCERS QUIZ

1. Intact skin
2. Unstageable
3. Stage I, red, tender or painful to touch; it does NOT blanch
4. Stage II, the skin is broken; it can look like an abrasion, an ulcer, or a blister
5. Stage III, the pressure ulcer is deeper; it extends into the fatty layer of tissue
6. Stage IV, extends even deeper into muscle and/or bone

CRITICAL THINKING EXERCISE #1

MG, a 68-year-old White female with a history of osteoporosis, fell down the last three steps yesterday. She was transported by ambulance to the nearest hospital emergency department. She has been experiencing severe pain in her left hip with bruising at that site. She has been unable to bear weight on her left leg. During the initial assessment at the ED, abnormal findings are that MG's left leg is shorter than her right leg and is externally rotated. Distal pulses are present and bilaterally strong and both legs are warm. MG complains of severe pain at the site but no numbness or tingling is present. She is able to wiggle the toes on her left leg and has full movement of her right leg. An x-ray showed an intertrochanteric fracture of left hip. Anticoagulants are started 8 hours postsurgery.

1. What will the nurse observe when a person has fractured a hip?
2. What factors increase the risk for fractures for this patient?
3. What is the treatment of an intertrochanteric hip fracture?
4. What are the complications of post-hip-fracture surgery?
5. What type of drugs can be used to prevent clot formation?
6. What preoperative factors might have decreased teaching effectiveness?
7. What is osteoporosis?

ANSWERS TO CRITICAL THINKING EXERCISE #1

1. When a client has experienced a broken hip, the nurse will observe shortening and external rotation of the affected limb. The client will be experiencing pain and will be unable to ambulate.
2. Age, gender, and osteoporosis.
3. Intertrochanteric fractures are usually repaired with a metal plate and screws. The patient is given a general or spinal anesthesia in the operating room. The patient is then positioned in a manner to realign the fractured bone. Together, the plate and screw implant holds the broken bone in place.
4. Complications post hip-fracture surgery include: blood clots; pneumonia; infection; and increasing the risk of other medical illness such as heart attack, stroke, disorientation, UTI, pressure ulcers, and so on.
5. The drugs that can be used to prevent clot formation are aspirin, heparin or a heparin derivative (Argatroban), fondaparinux, and warfarin (Coumadin) or a warfarin derivative (rivaroxaban and apixaban). It depends on the agent and its half-life. Fondaparinux can be started 6 to 8 hours after surgery.
6. Factors that influence decreased teaching effectiveness are pain, medications, an unfamiliar environment, the communications and language used in medical procedures, reduced overall functioning, and impaired critical decision making.
7. Osteoporosis is a disease of the bones that makes the bones porous. The bones lose density and they become weaker and are more likely to break.

CRITICAL THINKING EXERCISE #2

A 52-year-old obese female who has been hospitalized for an umbilical hernia repair is 1 day post-op. The nurse evaluates wound healing by primary intention. The wound is in the inflammatory stage of healing. The nurse changes the dressing and notes that it is a clean wound but it is not approximated between staples 3 and 5. There is no tunneling or undermining. Before the nurse can notify the physician, the patient coughs vigorously and the wound completely opens up and the intestines are lying on the patient's abdomen. The nurse follows proper protocol in covering the patient's wound and instructs the patient to lie still and not cough. Vital signs are taken and physician is immediately notified. The patient is taken back to surgery and retention sutures are placed.

1. What is the difference between evisceration and dehiscence?
2. What is the difference between a closed and an open wound?
3. What is tunneling or undermining?
4. How does a wound heal?
5. What is the immediate protocol when there is a dehiscence?
6. What are retention sutures?
7. What should the nurse observe with any wound?
8. What type of patient experiences the most dehiscence of wounds?
9. What are the types of tissue found in the wound?
10. What should the nurse document?

ANSWERS TO CRITICAL THINKING EXERCISE #2

1. Dehiscence is the wound opening up; evisceration is a wound that exposes the bowel. Dehiscence usually occurs 4 to14 days after surgery.
2. A closed wound has intact skin but underlying tissues may be damaged, such as a contusion or a hematoma. A contaminated wound is an open wound containing infected material such as pus, debris, and so on.
3. Tunneling means that a wound has tunnels (tracts or sinuses) extending from the initial injury into the skin to another opening in the skin or to a deeper cavity. Frequently this occurs with abscesses. *Undermining* is tissue destruction under intact skin along wound margins such that the wound diameter is wider at its base than at the wound's skin edge.
4. The various stages of healing are:
   a. The inflammatory stage prepares the site of injury for repair. It lasts for up to 7 days. This can be delayed by many factors. The wound depends solely on the closure material to hold it in approximation.
   b. The proliferative stage forms a collagen in the wound known as granulation tissue. Collagen is the chief component of connective tissue. This granulation becomes tissue that is bright, beefy, and red.
   c. The remodeling or maturation phase means that the healing process has remodeled the dermal tissues to produce greater tensile strength.

5. Visibly eviscerated organs constitute a surgical emergency that can lead to sepsis from bacterial contamination. The nurse should place sterile saline–soaked towels over extruding tissue, cover with a sterile drape, keep the patient NPO, observe for signs and symptoms of shock, and call the surgeon immediately. Have the patient flex his or her knees to reduce tension in the wound area. Establish a patent IV line; administer fluids and antibiotics as ordered. A nasogastric tube (NGT) may need to be inserted and attached to suction to prevent further stress inside the abdomen. Monitor vital signs every 15 minutes and assess for signs of shock or sepsis. Calmly reassure the patient. Don't try to push protruding viscera back into the abdomen.
6. Retention sutures are sutures that are often used in surgical dehiscence. They are made of strong material such as wire that includes large amounts of tissue in each stitch, and they are used to relieve pressure on the primary suture line.
7. Assessment factors and documentation should include the approximation of wound margins, amount and type of drainage, evidence of infection, condition, color, temperature, and the presence of granulation along the incisional site.
8. Obese patients have problems with wound closure and healing due to excess fat and tissue. The wound will have more difficulty healing and sutures need to be stronger to support the additional weight of the fatty tissue. A surgical error may also increase dehiscence if sutures or staples are not placed properly or are placed too close to the incision edges. Abdominal surgeries are associated with a higher incidence of wound complications.
9. Normal granulation tissue has a red, shiny, and textured appearance that bleeds easily when disturbed. Necrotic tissue or slough is usually gray and soft. Black, hard, leathery tissue is referred to as eschar, which is dead tissue.
10. The nurse should document the times the dehiscence occurred and was reported to the physician, the activity the patient was engaged in immediately prior to when the incident occurred, and the patient's condition. Document the appearance of the open wound and the eviscerated organs and the amount, color, consistency, and odor of the drainage. Record your nursing actions and assessment of the patient's vital signs.

CHAPTER 17

Final Quiz and Final Clinical Evaluations

FINAL CLINICAL QUIZ

Name: _____ Date: _____

Define the following terms:

Sediment: _____

Donning: _____

Ashen: _____

Dusky: _____

Pallor: _____

Ruberous: _____

Cyanotic: _____

Delegation: _____

Edema: _____

Pulse pressure: _____

Pulse deficit: _____

Dehiscence: _____

Hyperthermia: _____

Hypoglycemia: _____

Define the following abbreviations:

PVD: _____

CHF: _____

MI: _____

CVA: _____

MVC: _____

JVD: _____

SC: _____

IM: _____

QHS: _____

AMA: _____

PPE: _____

List the main purpose or desired effect of the following medications:

Lasix: _____

Potassium: _____

Lopressor: _____

Insulin: _____

ASA: _____

Prioritize the following scenarios. (What would you do first?)

A. You enter your patient's room and note that the patient is having a seizure
1. Look at your watch to time the duration
2. Look at your patient's chart to see whether a seizure history is listed
3. Turn the patient to his or her side
4. Call the doctor

B. Your patient complains her left foot feels numb
1. Reassure the patient the doctor will be notified
2. Assess the foot for pulse and temperature
3. Inquire when the sensation first began
4. Reposition the leg

C. You must administer digoxin to your patient.
1. Auscultate the apical pulse for 1 minute
2. Ask the nursing assistant to obtain a set of vital signs
3. Check the five rights
4. Check the potassium level

D. You admit your patient for new onset of controlled atrial fibrillation.
1. Introduce yourself.
2. Apply the telemetry unit.
3. Obtain baseline vital signs, apical heart rate, and pulse deficit.
4. Begin patient education on atrial fibrillation.

E. You have an order to insert an NGT.
1. Check the patient's nasal passage.
2. Gather all needed equipment.
3. Explain the procedure to the patient.
4. Prepare the tape to hold the NGT.

(*continued*)

Calculate the following problems:

1. The doctor orders Solu-Cortef 60 mg IV. You have Solu-Cortef 100 mg/2 mL IV available. What amount would you give?

_____

2. The doctor orders digoxin 0.125 mg IV. You have digoxin 2 mg/mL IV available. What amount would you give? (round off to the nearest tenth)

_____.

3. The doctor orders Lasix 80 mg IV. You have Lasix 100 mg/10 mL IV available. What amount would you give?

_____.

4. The doctor orders Tylenol 650 mg po. You have 325 mg tablets available. How many tablets would you give? _____.
5. The doctor orders Flagyl 250 mg po. You have Flagyl 500 mg tablets. How many tablets would you give? _____.
6. What is the number-one priority in nursing?

_____.

7. List the chain of command for a staff nurse:

_____

_____

_____.

8. What is the difference between a leader and a manager?

_____

_____

_____.

ANSWERS TO FINAL CLINICAL QUIZ

Name: _____ Date: _____

Define the following terms:

Sediment: Material suspended in a liquid

Donning: Intent to apply, put on, or dress in something such as gloves

Ashen: Gray color, pale, or without color

Dusky: Dark in color

Pallor: Pale or paleness

Ruberous: Reddish color (maybe spelled "ruborous")

Cyanotic: Blue color

Delegation: To assign a task within the scope of practice

Edema: Fluid collection within the body

Pulse pressure: Difference between systolic and diastolic blood pressure (SBP – DBP = PP)

Pulse deficit: Difference between apical and peripheral pulse

Dehiscence: Rupture or splitting open of a wound

Hyperthermia: Elevated body temperature

Hypoglycemia: Low blood sugar

Define the following abbreviations:

PVD: Peripheral vascular disease

CHF: Congestive heart failure

MI: Myocardial infarction

CVA: Cerebral vascular accident

MVC: Motor vehicle crash

JVD: Jugular vein distention

SC: Subcutaneous

IM: Intramuscular

QHS: Every hour of sleep

AMA: Against medical advice

PPE: Personnel protective equipment

List the main purpose or desired effect of the following medications:

Lasix: To rid the body of extra fluid

Potassium: To maintain normal electrolyte balance

Lopressor: To regulate heart rate or blood pressure within normal baseline limits

Insulin: To regulate blood glucose levels to within set parameters or within normal limits

ASA: To provide mild blood thinning

Prioritize the following scenarios. (What would you do first?)

A. You enter your patient's room and note that the patient is having a seizure.
   1. Turn the patient to his or her side. Patient safety (airway) issue.

B. Your patient complains that her left foot feels numb.
   1. Assess the foot for pulse and temperature. (Assess and gather data.)

C. You must administer digoxin to your patient
   1. Auscultate the apical pulse for one minute (to ensure heart rate is above 60 bpm).

D. You admit your patient for new onset of controlled atrial fibrillation.
   1. Introduce yourself.

E. You have an order to insert an NGT.
   1. Gather all needed equipment (to ensure all equipment is readily available).

Calculate the following problems:

1. The doctor orders Solu-Cortef 60 mg IV. You have Sowlu-Cortef 100 mg/2 mL IV available. What amount would you give?
1.2 mL

2. The doctor orders digoxin 0.125 mg IV. You have digoxin 2 mg/mL IV available. What amount would you give? (round off to the nearest tenth)
0.0625 mL or 0.1mL

3. The doctor orders Lasix 80 mg IV. You have Lasix 100 mg/10 mL IV available. What amount would you give?
8 mL

4. The doctor orders Tylenol 650 mg po. You have 325 mg tablets available. How many tablets would you give?
2 tablets

5. The doctor orders Flagyl 250 mg po. You have Flagyl 500 mg tablets. How many tablets would you give?
½ tablet

6. What is the number-one priority in nursing?
Patient safety

7. List the chain of command for a staff nurse:
Charge nurse → manager → nursing director → vice-president of nursing → president

8. What is the difference between a leader and a manager?
A manager "manages" a department. In other words, provides enough staff, equipment, and supplies.

A leader will assist staff to perform at their most optimal level by offering guidance and direction.

CHAPTER 19

Makeup Assignments, Ethical Questions, and Critical Thinking Exercises

MEDICAL ETHICS DISCUSSION QUESTIONS

The following questions may be used for individual makeup assignments or may be used to help the group discuss ethics in nursing.

Read each entry and then respond with your answer and rationale.

1. You are going to lunch and notice that Ms. Doe, the nurse who has been working on your unit, is also taking her lunch break. When Ms. Doe reaches in her pocket for her money, she pulls out a vial of morphine. She states that she had given a patient his pain medication right before lunch and "forgot" to waste the remaining amount. How would you handle this encounter?

2. You get a report from the previous shift RN. This RN tells you that "the Jewish patient is a little demanding." How would you respond?

3. An elderly male patient keeps forgetting where he is at and attempts to touch you inappropriately. How would you handle this situation?

4. You are in an elevator and you overhear two coworkers discussing confidential information on a patient. How would handle this situation?

5. An older RN who has been in nursing for decades keeps telling you how "young nurses do not have the same work ethic that seasoned nurses have." How would you handle this situation?

6. You notice that you are constantly doing blood sugar checks and taking vital signs for all your patients. The nursing assistant will take vital signs and do glucose checks for the other staff nurses, but seems to miss your patients each day. How would you handle this situation?

7. You are at the bedside of Mr. Golden. Another nurse comes in to tell you that Mrs. Green in Room 301 was incontinent and that the laboratory called and said Mrs. Green was positive for a urinary tract infection. How would you handle this situation?

8. A doctor arrives on the unit and demonstrates an improper gesture to a nurse. How would you respond to this situation?

9. You are the charge nurse. A patient's daughter comes up to you and says she wants Nurse Blue assigned to her mother and not Nurse Red. How would you respond to this situation?

10. You call the doctor to notify him of the patient's elevated temperature (102.5°F). The doctor orders Tylenol 650 mg orally every 4 hours as needed. When the doctor comes in, he

announces he did not order Tylenol for this patient with end-stage liver disease. How would you respond to this situation?

11. You have noticed that each time you follow a certain staff nurse, the patients are left in disarray. The patient rooms are cluttered with medication wrappers and used syringes, and often the intravenous (IV) lines are infiltrated. How would you handle this situation?

12. When the nurse approaches one of her patient's rooms, she notices someone from the x-ray department leaving that patient's room. She is not aware of any x-rays ordered for this client. How would you handle this situation?

13. You answer the call bell of a patient who is not your own. The patient tells you she is concerned. Her nurse keeps calling her by the wrong name. How would you handle this situation?

14. You have observed that each time a patient emergency occurs, one of the staff nurses lags behind and only observes the situation from the doorway. How would you handle this situation?

15. The daughter of one of your patients states, "I'm not leaving my mother's bedside. I know how incompetent you nurses are." How would you handle this situation?

16. You notice that another staff RN shuts off the tube feedings on all her patients at the beginning of her shift. She has confided in you that she doesn't want to have to clean up any diarrhea. How would you handle this situation?

17. You call the pharmacy department for a missing medication. An hour later, you call again and they state that they will send it soon. Another hour goes by and the dose is still missing. How would you handle this situation?

18. The laboratory calls a critical value for your patient, a potassium level of 2.8. However, your patient did not have any laboratory tests ordered. How would you handle this situation?

19. You notice that the previous RN has not given any of her patients their medications after 2 p.m. This seems to be a regular occurrence for her. How would you handle this situation?

20. You work extra shifts and you do extra projects for the unit manager. However, you are utterly surprised to find that the RN who always complains of the manager's inability to

lead the unit effectively has just been given a promotion as an assistant nurse manager. How would you handle this situation?

21. You walk into the nurses' lounge and see a list of names of nurses (including your own) who have made medication errors. How would you respond to this situation?

22. Your patient's family member calls you aside and tells you he is a lawyer. This lawyer states that he wants to ensure that his father does not have any "issues" while in the hospital. How would you respond to this situation?

CRITICAL THINKING SCENARIOS

For each of the following critical thinking scenarios, discuss your analysis and what steps you would take to deal with the situation.

1. A patient is admitted with a history of HIV and is experiencing severe blood loss. The nurse assigned to the room is now refusing to take this admission.

2. You hear a loud "smack" and a moan. On entering the room, you see another nurse who tells you that the Alzheimer's patient struck her. However, the patient is cowering away from both of you. You suspect the nurse of elder abuse.

3. You were told by the previous RN that the patient was asleep the entire shift and was comfortable after the fentanyl she had administered. On entering the room, the patient states he did not sleep a wink and was still waiting for the nurse to bring in his pain medication.

4. Ms G is dying from ovarian cancer. When she was admitted, her wish was not to be resuscitated. When the family arrives, the patient was obtunded. The family now wants to reverse the patient's "no code" status.

5. Ms G is a trauma victim who has suffered irreversible brain trauma. The family has decided to make the patient a "no code" status. There is an order to withdraw care now, but the family wants to wait until Aunt M arrives, which will not be for another 2 days.

6. You have been extremely busy with your assignment and finally you are able to sit down to document. Another nurse informs you to do the entire documentation of your shift now so you don't have to keep coming back and filling in more information.

7. A patient's family member informs you that he is a lawyer and will be documenting everything he sees. He wants your name. He is taking pictures of the patient and you.

8. The manager tells you that the unit staff has been observed not complying with the handwashing protocol.

9. The doctor comes in to evaluate your patient. He tells the patient's family that it's the nurses' fault he has a pressure ulcer.

10. The hospital has instituted a new policy that the emergency room physician can bypass the admission and treatment process in the emergency room and directly admit the patient to the assigned floor. There is not enough staff or resources to handle this type of admission. There is no triaging as to who will be admitted this way.

11. You manager acknowledges your requests for a day off. It's your parents' 50th wedding anniversary. However, when the schedule is posted, you are scheduled to work that day. The manager tells you that you failed to request the day off in writing and besides, she

"can't remember every time someone wants a day off." Because staffing is short that day, she cannot give you the day off.

GENERATIONAL CHALLENGES QUESTIONS

Examine cultural attitudes and your own thoughts concerning the challenges faced by both the senior and middle-aged adult populations.

1. At what age is a person considered to be young or old? At what age is a person considered elderly? Explain your rationale.

2. List as many words as you can that society uses to label the young adult, the older adult, and the elderly.

3. What are the physiological and psychological impacts of growing old?

4. What do you believe is the worst thing a person who has grown old must face? Why? What is the worst thing that a young person must face in life?

5. Do you know any young or elderly people? Do they mention any health changes? Independence issues?

6. What do you believe would be the best things and the worse things about growing up or growing old?

7. Explain why growing old is now a diverse topic in the health care field.

8. What financial challenges do young adults and the elderly have? Include the costs of medications and school loans in your answer.

PATIENT EDUCATION QUESTIONS

The following scenarios may be used for individual or group makeup assignments. The patient education scenarios can also be used for group discussions to further aid in the development of critical thinking skills. Students should be allowed to "brain storm" any strategies that will help them resolve the situation.

What would you do in the following situations? Include strategies you would use and resources you would call on.

1. You are the RN caring for a very hard-of-hearing/legally deaf patient.

2. You are the RN instructing your patient that, after he is discharged, he must reduce the dosage of his prednisone. The patient doesn't seem to understand the need to taper. How would you help him to understand the importance of tapering?

3. Your patient speaks a language that you do not understand. How would you ascertain his knowledge base about his disease?

4. You are the RN. Your patient has had a cerebrovascular accident (CVA) and is aphasic. This patient has no receptive deficits. What would you do?

5. You are the nurse attempting to educate your patient. You discover that your patient is illiterate. How would you relay pertinent medical information to this patient?

6. You are the RN. Can you delegate a patient care technician (PCT) to teach your patient?

RELAXATION TECHNIQUES WORKSHEET

Relaxation Technique	**Comment Summary:** **Answer the following for each scenario: Did you notice a difference in your stress level? Yes or no? Briefly explain your answer.**
Take a warm bath or shower. Dress in soft, comfortable clothes. Sit in a quiet room and clear your mind. Picture yourself in a fantasy land that was specifically designed for you. Perform this exercise for 15 to 20 min.	
While sitting in a comfortable chair, close your eyes. Concentrate on feeling your breath enter and exit your body. Feel your body relax with each breath. Do this exercise for 15 to 20 minutes.	
Make yourself a warm cup of tea. Take time to sip the tea. Notice the flavor. Feel its warmth. Imagine that the warmth is causing your muscles to relax. Continue this exercise until your tea is finished.	
Cuddle with your husband, wife, boyfriend, girlfriend, dog or cat, or talk to a friend. Talk about memories that have brought happiness into your life. Remember those moments that have been funny. Can you feel yourself releasing the stress?	

Give yourself a massage. Place your hands on your shoulders and knead, squeeze, or rub. Take turns massaging your arms, then return to your shoulders. Repeat this exercise three to five times.	
Listen to music (something slow). Concentrate on the beat. Attempt to get your heart to match the slow tempo. Continue this exercise for 20 minutes.	
Ask a friend or family member to help you with this exercise. Explain that you must perform a relaxation exercise. You must make funny faces and observe someone else relaxing by doing the same. Make funny faces at each other. Do this for 15 min.	
This space is for you to add your usual relaxation exercise. Explain the exercise, the duration, and how it makes you feel.	