NurseThink® for Students

Conceptual Clinical Cases

Clinical-Based for Next Gen Learning
From Fundamentals to NCLEX®

Over 50 Patient Assignments

✓ Concept-Based
✓ Clinical Judgment
✓ Next Gen Test Items
✓ Prioritization Power
✓ Chart Exhibits Throughout
✓ Online Quizzing/Video Coaching

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Karin J. Sherrill  RN, MSN, CNE, ANEF, FAADN
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Dr. Tim Bristol is a nurse educator from Minneapolis, Minnesota. He has taught students at all levels to include LPN, ADN, BSN, MSN, and PhD. Through NCLEX® reviews and coaching, NurseTim® brings clinical judgment to life for students and faculty at all levels. He works with programs and organizations internationally on everything from student remediation and retention to exams and curricular success. He helps ensure that clinical is the focus of everything that happens in nursing education. He also enjoys working internationally and leads many service learning trips each year with his wife and four children. Over the past 12 years, he has led over 600 travelers abroad focusing on community development and nursing.

Karin J. Sherrill is a Nurse Educator with a passion for faculty development, test item writing, active teaching strategies, and the integration of the clinical judgment model in nursing education. She has taught ADN and BSN students locally and internationally for almost three decades. Karin has worked closely with publishing and technology companies, as well as testing and professional organizations to advance student success and nursing education. She loves to develop ways to escalate the level of thinking and decision making of the future bedside nurse. Karin’s favorite classroom saying is “If your brain doesn’t hurt, I haven’t done my job.”

Letter From the Authors

Every minute that you study should feel as if you are standing next to the client, whether it’s in their home, in their hospital room, in their community, or at their school. By studying this way, you are learning in the same way that you will apply new information as a professional nurse. It is about developing a habit of collecting clinical cues, analyzing the information, and prioritizing the actions. The clients in this book will help you study as if you are the nurse providing the care – it creates realism. You will learn by helping each person in this book navigate a very difficult, but realistic health related experience. We hope you will address each of these clients with the seriousness and professionalism that they deserve. They are real. From our experience, you will save time studying by developing these key habits of NurseThink® and Clinical Judgment. Making it real will allow you to become the thinking nurse you are striving to be.

- Karin & Tim
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The NurseThink® Way of Thinking uses a conceptual approach to apply Next Gen Clinical Judgment. The strategies of Prioritization Power and THIN Thinking allow the student to develop a systematic way of improving clinical judgment in the classroom, lab, simulation, and clinical.
NurseThink® Conceptual Approach

A conceptual approach to learning helps to save time studying. Using the process of compare and contrast, a student can learn at a higher level than with just memorization. For example, reviewing the concept of oxygenation can be addressed consistently in a variety of conditions (known as exemplars). Whether a client is experiencing an oxygenation problem from pneumonia, pulmonary edema, or a pulmonary embolus, the nurse’s actions to address the oxygenation deficit are similar. For this reason, it is important for the nurse to recognize problems of oxygenation and intervene safely, regardless of the underlying cause or illness. The habits formed by the NurseThink® conceptual approach will develop clinical judgment that guides the nurse towards the best action.

NurseThink® Next Gen Clinical Judgment

NurseThink® Next Gen Clinical Judgment originates from evidence and best practices in nursing education. The focus of Next Gen Learning is to apply clinical judgment, also known as the doing that happens after critical thinking and clinical decision making. Next Gen Learning includes the recognition of clinical cues that alert the nurse to formulate and prioritize a hypothesis about which actions need to be taken. Once the action is taken, the nurse needs to determine if it was effective and re-evaluate the hypothesis if necessary.

NurseThink® Prioritization Power

Prioritization Power is the strategy used when identifying a client’s highest priority needs. The Prioritization Power activities may include: priority assessments, priority labs or diagnostics findings, priority complications, priority interventions, priority medications, priority concerns, and/or priority client education or discharge concerns. When completing the Prioritization Power items consider, “What should the nurse do 1st, 2nd, and 3rd?” or “Which lab should the nurse obtain 1st, 2nd, or 3rd?” Know that the correct answer to a test item will be in the top three priorities – guaranteed!

NurseThink® THIN Thinking

THIN Thinking is a unique strategy by NurseThink®. THIN Thinking allows for efficient processing of information that will benefit the student when taking multiple choice and alternative exams questions. This method ensures higher-order mental processing, rather than memorization. Often, students select an answer based on recognition of material and answer by association. This strategy encourages the student to read the question and focus on the intent of what the item is asking. Next, the student will apply the THIN mnemonic to guide the decision towards the highest priority answer. This strategy is especially valuable when confused by a question or stuck between two answers.
To implement THIN Thinking, consider this process:

**T: TOP THREE**

What are the three highest needs, concepts, questions, components, or elements noted in this question? Ask yourself: What is this question addressing? What are the top three needs? This is where to apply Prioritization Power! Use these prioritization strategies to best determine the Top Three.

- **Maslow’s Hierarchy of Needs:** This is a theory that places basic physiological needs as a higher priority than psychological needs. A greater challenge occurs when comparing the priority of safety to physiological needs. For example, if a client is not breathing, that is the priority. But, if the client is not breathing from a car accident and the car is on fire, moving the client to a safe environment should occur before addressing the fact that they are not breathing (making safety a higher priority).

- **ABCs:** This is everyone’s favorite. Is there a time when circulation is a higher priority than airway or breathing? Yes. Consider a client with diabetic ketoacidosis and a respiratory rate of 28 breaths per minute. Although alarming, this is a good thing because it indicates that they are attempting to compensate for the metabolic acidosis from the ketosis state. In this case, airway and breathing are not a problem. Move on to circulation.

- **Actual versus Potential:** In most cases, an actual problem will take precedence over a potential problem unless the potential problem presents a greater risk to safety than the actual problem. For example, while an alert client may have an actual problem of vomiting, a client who is nauseated while in c-spine precautions is a higher priority because of the concerns for airway safety.

- **Acute versus Chronic:** Given a choice between acute and chronic, an acute situation will almost always be the higher priority. A good example of this would be a client with COPD. While their disease is being maintained with medications and oxygen, they are considered chronic. When there is evidence of respiratory distress or exacerbations of the symptoms (respiratory rate, ABGs, pulse ox, etc.) the client becomes acute by showing a change in their baseline condition.

- **Least Invasive First:** It is important for the nurse to consider less invasive options before increasing the client’s risk of injury with an invasive option. For example, standing a male client at the bedside every two hours to use a urinal is a better option than applying adult diapers. Applying adult diapers is a better option than applying a condom catheter. Applying a condom catheter is a better option than placing a Foley catheter.

- **Safe Practice:** This is always a priority. Safety concerns may include evaluation of the risk for falls, prevention of injury when performing a skill, reduction of risk for hospital acquired infections (HAI), and more.

**H: HELP QUICK!**

What can the nurse do quickly to relieve the problem? What strategies can the nurse perform immediately while waiting for another intervention or healthcare professional? What interventions may be implemented urgently? Will it help to elevate the head of the bed? What if oxygen is applied? Will the dizziness be improved if the client sits down? How can the nurse act now to help the client? These are the types of questions that the nurse should be asking to help the client as quickly as possible.

**I: IDENTIFY RISK TO SAFETY**

What are the top safety concerns of the client? The National Council Licensure Examination (NCLEX®) is an exam about safety—many questions are going to address client safety or discuss a threat to client safety. Because of this, it is important to consider the highest concerns for safety experienced by the client. Safety concerns may include evaluation of the risk for falls, prevention of injury, reduction of risk for hospital acquired infections (HAI), and more.
N: NURSING PROCESS

Many questions represent a step of the nursing process. Although it is possible for a test question to refer to any step of the nursing process, the NCLEX® exam is focused on nursing actions. Assessment, Implementation, and Evaluation of care are often the focus of test items. Reflect on “what action should the nurse take next?” knowing that an action can be an assessment, intervention, or evaluation. When determining a priority action, ask yourself, “have I fully assessed what I need in order to safely perform this intervention?” For example, a client with surgical pain of 8 out of 10 needs pain medicine (intervention). A higher priority would be to assess the vital signs to confirm that the medication can be safely delivered without injury to the client.

The Value of Studying with Unfolding Clinical Cases

Never has a nursing school graduate said “my nursing program had too much clinical time!” The more common comment by students is “I wish we had more time in clinical.” Most students recognize the value of clinical learning, especially when it is engaging and focused. That is the value of clinical case studies. Many professional disciplines, including nursing, medicine, teaching, and law, all use case studies as a means of teaching and learning. Clinical cases are effective in assisting nursing students to develop critical judgment and enhance problem solving skills while facilitating learning through unfolding scenarios that mimic realistic clinical situations. The process of applying knowledge and concepts in a clinical setting or working with case studies assists students in moving beyond memorization of facts and recall of information into thinking like a nurse and develops an ability to transfer knowledge in similar situations.

The clinical cases in this book will unfold requiring each case to be completed in a systematic, beginning-to-end, order. That means that each case needs to be completed using NurseThink® and Next Gen Clinical Judgment. Much like clients in the health care system, it is important to look comprehensively at the healthcare journey to put the pieces together. When a nurse addresses only a single snapshot in time, holistic care cannot be achieved.

Terms Used Throughout the Clinical Cases

These are terms and abbreviations that are used on the NCLEX® exam and will be used throughout the clinical cases.

- **UAP**: Unlicensed assistive personnel is the term for any healthcare provider who does not have a license, including nurse’s aides, assistants, or techs.
- **HCP**: Healthcare Provider include all professionals with prescriptive privileges, including physicians, nurse anesthetists, physician assistants, nurse practitioners, and nurse midwives.
- **Prescriptions**: The term used for any “orders” from the HCP, not just medication related options. For example, a provider can “prescribe” physical therapy or a low sodium diet.

Key

- **Next Gen Clinical Judgment**
- **Prioritization Power!**
- **THIN Thinking**
Next Gen Clinical Judgment

Examples of Using Prioritization Power and THIN Thinking

In order to create a habit of clinical judgment, it is important to apply the concepts of Prioritization Power and THIN Thinking to all aspects of your learning, as well as the clinical cases in this book. Here are some strategies to help you master NurseThink® and save time studying.

Prioritization Power with Study Time

Reading

1. Read a section of the textbook (no more than 1-2 pages)
2. Summarize the material in 2-4 sentences. Consider speaking it out loud, recording it, and/or writing it in a notebook.
3. Use Prioritization Power to choose the Top 3 of what was read.
   a. Pathophysiology findings
   b. Assessment findings
   c. Lab findings
   d. Interventions
   e. Medications
   f. Potential problems or complications
   g. Education/Discharge needs
Study Group Learning

1. Bring the Prioritization Power summaries and compare/contrast with your study buddies. This will help you save so much time studying.

2. Complete a Clinical Case in this book and compare/contrast with your study buddies.

3. Challenge your group by asking “what if” for each illness/condition/concept. For example – “What if the client became dizzy, what would I do 1st, 2nd, and 3rd?”

In Class (explore the NurseThink® NoteBook at NurseThink.com)

Organize your Notes into Next Gen Learning by creating a new template. Take your notes in class, then use Prioritization Power after class (within 24 hours) while the information is fresh. Study for the exam from your Prioritization Power Summaries in the right-hand column.

<table>
<thead>
<tr>
<th>CHRONIC KIDNEY DISEASE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Notes</strong></td>
</tr>
<tr>
<td>- Maintain fluid and electrolyte balance (K, Na, Ca, Phos)</td>
</tr>
<tr>
<td>- Dialysis catheter, bruit (hear) &amp; thrill (feel)</td>
</tr>
<tr>
<td>- Hold meds before dialysis – but not insulin</td>
</tr>
<tr>
<td>- Weak bones from lack of Vitamin D (Ca) – risk for fractures</td>
</tr>
<tr>
<td>- Hypertension (HTN), edema from excess fluid</td>
</tr>
<tr>
<td>- Anemia (lack of erythropoietin (EPO))</td>
</tr>
<tr>
<td><strong>Prioritization Power</strong></td>
</tr>
<tr>
<td><strong>Priority Assessments</strong></td>
</tr>
<tr>
<td>1. Fluid status (lungs, edema, blood pressure (BP))</td>
</tr>
<tr>
<td>2. Electrolytes (K, Na, Ca, Phos)</td>
</tr>
<tr>
<td>3. Dialysis Catheter (bruit &amp; thrill)</td>
</tr>
<tr>
<td><strong>Priority Labs</strong></td>
</tr>
<tr>
<td>1. Potassium (dysrhythmias)</td>
</tr>
<tr>
<td>2. Hemoglobin (anemia – lack of erythropoietin)</td>
</tr>
<tr>
<td>3. ABGs (metabolic alkalosis)</td>
</tr>
<tr>
<td><strong>Priority Interventions</strong></td>
</tr>
<tr>
<td>1. Daily weights, I/O (fluid status)</td>
</tr>
<tr>
<td>2. Lung sounds (crackles)</td>
</tr>
<tr>
<td>3. Protect fistula (no tight clothing, no BPs, no IVs)</td>
</tr>
<tr>
<td><strong>Priority Complications</strong></td>
</tr>
<tr>
<td>1. Heart failure (HF), Pulmonary Edema (crackles, short of breath (SOB) first)</td>
</tr>
<tr>
<td>2. Dysrhythmias (irregular pulse felt)</td>
</tr>
<tr>
<td>3. Tissue hypoxia (anemia)</td>
</tr>
<tr>
<td><strong>Priority Discharge Goals</strong></td>
</tr>
<tr>
<td>1. Weigh self each day</td>
</tr>
<tr>
<td>2. Report shortness of breath</td>
</tr>
<tr>
<td>3. Follow renal diet</td>
</tr>
</tbody>
</table>
THIN Thinking with Go To Clinical Cases

As discussed in Chapter 1, THIN Thinking uses an acronym to help strategize the priorities in client care. Here is a quick review.

**T:** **TOP THREE** – This is where to apply Prioritization Power! Consider these prioritization options:

- Maslow’s Hierarchy of Needs
- ABCs
- Actual versus Potential
- Acute versus Chronic
- Least Invasive First
- Safe Practice

**H:** **HELP QUICK!** – What can the nurse do quickly to relieve the problem?

**I:** **IDENTIFY RISK TO SAFETY** – What are the top safety concerns of the client?

**N:** **NURSING PROCESS** – Many questions represent a step of the nursing process.

---

**Prioritization Power and THIN Thinking with Testing**

Try this approach to apply thinking to test items and improve your performance.

1. Read the question more than once. Read JUST the question, NOT the answer choices.
2. Use **Prioritization Power** – Generate all alternatives, then choose the Top 3 Priorities.
3. NOW read the answer choices
4. Taking Actions – (Apply **THIN Thinking**)
5. Evaluating Options – Re-read the question – does the answer make the most sense?
Q: The nurse is caring for a client with liver failure who is having a percutaneous liver biopsy. The assessment findings include a heart rate of 115 beats per minute, a respiration of 24 breaths, and a blood pressure of 82/50 (60) mmHg. The client is lethargic and difficult to arouse. Which action should the nurse perform first?

Apply Prioritization Power!

1. Read JUST the Question – Not the Answers

2. Prioritization Power!
   You have enough assessment information – need to act (The Top 3 Priorities are in italic).
   - Assess biopsy site for hemorrhage.
   - Hold pressure at biopsy site if there is bleeding.
   - Oxygen for change of level of consciousness (LOC) from decreased perfusion.
   - Positioning with head of bed down to improve perfusion.
   - IV fluids to improve perfusion.

3. NOW Read Answer Options
   1. Type and cross for 2 units of PRBCs.
   2. Apply oxygen at /nasal cannula.
   3. Apply pressure to the biopsy site.
   4. Place the head of bed flat.

4. Apply THIN Thinking - H
   Help Quick – Need to act, there is enough information given that further assessment is not the top priority.
   1. Lower head of bed (NurseThink® Strategy: Least Invasive First)
   2. Apply O₂ (NurseThink® Strategy: ABCs)
   3. Assess site (NurseThink® Strategy: Nursing Process)

5. Evaluate Options
   Reevaluate vital signs (VS) in 2-3 minutes to determine if interventions were adequate. If not, continue prioritizing care.

Scan QR code to see the correct answers.
Q: The nurse is caring for a client experiencing an acute asthma event. The client is dyspneic with a respiratory rate of 34. The breath sounds are diminished throughout all lung fields. What should be the nurse's next action?

Apply Prioritization Power!

1. Read JUST the Question – Not the Answers

2. Prioritization Power!
   You have enough assessment information – need to act. Top 3 priorities in italic.
   - Raise head of the bed
   - Encourage relaxation, decrease anxiety
   - Assess pulse oximeter reading – apply O₂ if needed
   - Deliver bronchodilator
   - Determine what precipitated this event

3. NOW Read Answer Options
   1. Encourage the client to use the incentive spirometer, cough and deep breath.
   2. Administer albuterol via nebulizer as prescribed.
   3. Request an arterial blood gas be drawn as prescribed.

4. Apply THIN Thinking - Help Quick — Need to act, there is enough information given that further assessment is not the top priority.
   1. Raise the head of bed (NurseThink® Strategy: Least invasive first)
   2. Assess pulse oximeter reading (NurseThink® Strategy: Nursing Process)
   3. Deliver albuterol (NurseThink® Strategy: Help Quick!)

5. Evaluate Options
   Reassess oxygen saturation if O₂ is applied and reassess lung sounds with albuterol delivery.

Scan QR code to see the correct answers.

Sample ONLY, Not for USE / Resale
Many of the concepts in Chapters 3 and 4 are commonly seen in clients and help with Next Gen Clinical Judgment. The goal of this section is to review and refresh on topics that will appear in the Go to Clinical Cases throughout the book. Be sure to follow the QR code on each page to access additional resources to help save time studying.

The Unfolding Concepts in Chapter 3 are physiological in nature. Each map provides the definition of the concept, the priority assessment or cues, and lab findings. Related concepts are listed to deliver additional guidance when caring for clients. Additionally, normal and abnormal findings are reviewed.

To best understand this material, it is important to apply the concepts as a nurse would. Be sure to explore the online resources for assistance and coaching in NurseThink®.

Clinical Hint: Use these Unfolding Concept Maps with every Go To Clinical Case (Patient Assignment) in the book. This will develop your Clinical Judgment Muscles!
CONCEPT: SEXUALITY

Reproduction

### Definition
The process by which humans produce a new life.

### Priority Assessment or Cues
- Maternal Health, Nutrition, Weight & Lifestyle Behaviors
- Current Medications
- Gravidity, Term Births, Preterm Births, Abortions, Miscarriages, Living Children (GTPAL)
- Menstrual Cycle Regularity
- Nausea/Vomiting/Hydration Status
- Blood Pressure, Edema
- Fetal Heart Tones and Movement
- Uterine Contractions, Spotting, Membrane Rupture
- Cervical Dilation

### Requirements for Normal Reproduction
- Sexual Maturity
- Functional Reproductive System
- Functional Endocrine System
- Access to Partner/Sperm/Ova

### Priority Labs
- Sexually Transmitted Infections Screenings, Human chorionic gonadotropin (hCG), Rh Factor, CBC, Hormone Levels

### Effective Reproduction
- Fertilization
- Implantation
- Maintenance of Pregnancy
- Healthy Delivery
- Healthy Term Neonate

### Ineffective Reproduction
- Infertility
- Fetal Demise
- High Risk Pregnancy
- Fetal Loss
- Miscarriage
- Maternal Fetal Complications
- Male Infertility

### Related Concepts
- Sexuality
- Nutrition
- Metabolism
- Comfort
- Coping
- Mood and Affect
- Grief

**Additional related concepts may be considered based on the client’s situation.**
CONCEPT: SEXUALITY

Sexuality

Definition
The factors allow a person to experience and express themselves as a sexual being. Facilitates a person's gender identity.

Influences of Sexuality
Perception
- Sexual Attitudes & Behaviors
- Adequacy of Hormones
- Adequacy of Sexual Physiology
- Acceptance of Self

Priority Assessment or Cues
- Physical Assessment of Sex Organs
- Physical, Sexual, & Psychological Health Status
- Sexual Relationships
- Sexual Desire, Connection, Consent, & Choice
- Sexual Self-Concept

Priority Labs
- Cultures for Sexually Transmitted Infections (STI), Hormone Levels

Normal Sexuality
- Positive Attitudes & Behaviors
- Well-Being
- Healthy Association with Others
- Free of Pain and Discomfort

Altered Sexuality
- Altered Libido
- Depression
- Adolescent Pregnancy
- Erectile Dysfunction
- Gender Identity
- Confusion
- Sexually Transmitted Infection

Related Concepts
- Safety
- Comfort
- Coping
- Immunity
- Reproduction
- Interpersonal Relationships
- Anxiety
- Communication

**Additional related concepts may be considered based on the client's situation.**
CONCEPT: CIRCULATION

Perfusion

**Definition**
The ability for the body to move blood through the vascular system to deliver nutrients and oxygen to the cells, while removing cellular waste.

**Requirements for Normal Perfusion**
- Functioning Cardiopulmonary System Including Vascular Tone and Adequate Pump
- Adequate Fluid Volume in the Vascular Space
- Free from Blockages Including Clots and Atherosclerosis

**Priority Assessment or Cues**
- Blood Pressure (Mean Arterial Pressure-MAP)
- Pulses - Capillary Refill
- Level of Consciousness (LOC)
- Bowel Sounds
- Urine Output
- Pain
- Skin color
- Temperature

**Priority Labs**
Hgb/Hct, RBC, Protein/Albumin, BUN/Creatinine, Cardiac & Liver Enzymes, Change to Brain Natriuretic Peptide (BNP)

**Adequate Perfusion**
- Alert/Oriented
- MAP > 65 mmHg
- Urine Output > 30 mL/hr
- Pulses WNL
- Warm to Touch
- Tissue Color WNL

**Inadequate Perfusion**
- Light-headed or Confused
- Sensation Loss
- Decreased Organ Function
- Ischemic Pain
- Cell & Tissue Necrosis

**Related Concepts**
- Clotting
- Comfort
- Oxygenation
- Digestion/Elimination
- Mobility/Sensory
- Tissue Integrity
- Reproduction
- Fluid and Electrolytes Balance
- Inflammation
- Intracranial Regulation

**Additional related concepts may be considered based on the client’s situation.**
SECTION 3

Clinical Cases & Exemplars
According to the World Health Organization (WHO), “Sexual health is a state of physical, mental and social well-being in relation to sexuality. It requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination, and violence.” (www.who.int) Although this definition is accurate in describing intimacy, it is not all-encompassing. Sexuality also includes perceptions of sex, sexual acts, gender identity, and sexual orientation, all of which can impact a person’s sexual health.

Reproduction requires a fine balance on the health and illness continuum. Reproductive health spans from childhood to middle-adulthood in most people, and although it is mostly a natural, healthy process, some people experience difficulty and illness. Consider the physical, emotional, and social impact of sexually transmitted infections, difficulties of fertility, and cancers of sexual organs. Each of these has a damaging and lasting impact on one’s ability to be sexually healthy.

Next Gen Clinical Judgment:
› How are sexuality beliefs and practices different among various cultures, religions, and generations?
› What impact does reproductive health have on sexuality?
› What impact does sexuality have on reproductive health?
› How are reproductive and sexual health different between men and women?
Case 2: Pregnancy with Delivery

Related Concepts: Comfort, Thermoregulation, Circulation, Hormonal
Threaded Topics: Diabetes Management, Medication Safety, Nutrition, Communication, Wellness

Olivia Hernandez is a 28-year-old who gave birth to a 4800-gram infant three years ago at 36 weeks gestation. Her daughter spent a week in the Neonatal Intensive Care Unit with unstable blood glucose levels, breathing, and feeding problems. She is currently 28 weeks pregnant with her second child. She is 5 ft 3 inches tall, and her pre-pregnancy weight was 170 pounds. She has an O+ blood type, is human immunodeficiency virus (HIV) negative, rubella immune, and is venereal disease research laboratory test (VDRL) non-reactive. She is married to Juan, her husband of six years. Both Olivia’s mother and grandmother have type 2 diabetes.

Olivia comes to the health care provider for a prenatal visit and glucose challenge test. The provider notes that she had gained 8 pounds since her last appointment two weeks ago. Olivia says she fasted the night before coming to the clinic, and typically eats a diet of rice, beans, tortillas, and some meat, prepared by her mother and grandmother.

1. **NurseThink® Prioritization Power!**
   Evaluate the information in the case above and determine the **Top 3 Priority** concerns or cues.

   1. _____________________________________________________________
   2. _____________________________________________________________
   3. _____________________________________________________________

2. **Based on the priority concerns, which action(s) should the nurse perform? Select all that apply.**

   1. Complete a glucose challenge test.
   2. Obtain a blood pressure.
   3. Complete a 3-hour oral glucose challenge test.
   4. Obtain a finger sample blood glucose level.
   5. Complete a 24-hour food recall.
3. The nurse is administering the glucose challenge test. Which instruction(s) should be given to Olivia? Select all that apply.

1. Serum blood sample will be drawn in 1, 2, and 3-hour intervals.
2. Client will be provided 100 grams of oral glucose.
3. Client will be provided 50 grams of oral glucose.
4. Serum blood sample will be drawn after 1 hour has passed.
5. Based on the results additional testing may be needed.
6. Client will not need to fast when the screen is done.

4. Based on the information in the electronic record, what action should the nurse take next?

1. Instruct Olivia that her test indicates she has gestational diabetes.
2. Educate Olivia on a gestational diabetic diet.
3. Instruct Olivia that the test was negative and no further testing is needed.
4. Inform Olivia that it is likely that additional tests are indicated on another day.
5. Olivia asks the nurse about the 3-hour glucose challenge test. What information should the nurse provide Olivia? Select all that apply.

1. She will need to fast the night before and during the test.
2. Blood will be drawn at the start of the test, and at 1, 2, and 3 hours.
3. She may have a cup of coffee the morning of the test.
4. She will drink a 100 grams oral glucose solution after the first blood draw.
5. Olivia will drink a 50 grams oral glucose solution after the second blood draw.

<table>
<thead>
<tr>
<th>Glucose Challenge Test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fasting Glucose (&lt; 95 mg/dL)</td>
<td>100 H</td>
</tr>
<tr>
<td>1-hour Glucose (&lt; 180 mg/dL)</td>
<td>200 H</td>
</tr>
<tr>
<td>2-hour Glucose (&lt; 155 mg/dL)</td>
<td>180 H</td>
</tr>
<tr>
<td>3-hour Glucose (&lt; 140 mg/dL)</td>
<td>155 H</td>
</tr>
</tbody>
</table>

6. Explain the rationale for each of these post-procedure prescriptions.

1. Dietary Instructions.
2. Moderate exercise program.
3. Instructions for self-monitoring of blood glucose.
4. Daily dietary log and record all blood glucose levels. Bring these to the next appointment.

7. Olivia meets with the diabetes nurse educator about her diet before leaving the clinic. She identifies that her preference is a plant-based diet, preferring beans and grains to meat. She is counseled using the Latin American Diet Food Pyramid. Plan an appropriate meal for her based on her preferences and the Latin American Diet Food Pyramid.
Olivia returns to the clinic four weeks later for her prenatal visit with her food and blood glucose diary. She says she is having a hard time following the diet because her mother and grandmother insist on cooking for her and continue cooking food that is high in fat, salt, and sugar. Her blood glucose levels are persistently greater than 95 mg/dL fasting, and 2-hours post-meal levels are consistently higher than 120 mg/dL.

8. The provider places Olivia on lispro injections. Explain the rationale for each of these insulin instructions.
   1. Reason for the medication._____________________
   2. Administration 5-10 minutes before meals._____________________
   3. Need to eat immediately after injection._____________________
   4. Instructions for Olivia’s husband about insulin administration and symptoms of hypoglycemia._____________________

9. NurseThink® Prioritization Power!
   Evaluate the information in the case provided and pick the Top 3 Priority education needs about insulin administration.
   1. _______________________________
   2. _______________________________
   3. _______________________________

10. The provider orders a nonstress test to assess fetal status. What should the nurse expect to find if the results are normal?
   1. Two accelerations of fetal heart rate (FHR) within 20 minutes that are least 15 beats per minute above the baseline rate and last for a minimum of 15 seconds each.
   2. Three contractions that last at least 40 seconds within 10 minutes without the presence of late or significant variable decelerations.
   3. The absence of two fetal heart rate acceleration within 20 minutes.
   4. Three uterine contractions within a 10-minute period with late fetal heart decelerations.

11. To prepare for the nonstress test, which action(s) should the nurse take? Select all that apply.
   1. Place client in a side-lying position.
   2. Record vital signs.
   3. Apply electronic fetal monitor.
   4. Record baseline FHR and monitor for 20-30 minutes.
   5. Instruct Olivia to mark the paper with each perceived fetal movement.
   6. Stimulate uterine contractions until three contractions occur within 10 minutes.

Olivia experiences no further complications with her pregnancy. She is able to maintain her glucose levels within an acceptable range with insulin therapy. At 40 weeks gestation, she goes into labor and reports to triage in the labor and delivery department.
12. Which prescription(s) should the admitting nurse anticipate from the health care provider? Select all that apply.
   1. Monitor blood glucose levels every 1 to 2 hours.
   2. Administer IV fluid of D10W at 125 mL/hr.
   3. Monitor fetal heart rate patterns throughout labor.
   5. Assess maternal vital signs every 2 hours.

13. Olivia is connected to a fetal monitor, and early decelerations are noted. What action should the nurse take first?
   1. Continue to monitor the client.
   2. Change maternal position to side-lying.
   3. Increase the rate of maintenance IV fluid.
   4. Administer oxygen at 8 to 10 L/minute.

14. THIN Thinking Time!
   Olivia’s labor is progressing, her membranes rupture, with clear amniotic fluid and an epidural catheter is placed. Use THIN Thinking to prioritize her care during an epidural block.

   T - 
   H - 
   I - 
   N - 

15. Six hours later, Olivia successfully delivers a baby girl, vaginally. The infant is crying and is vigorous. What action should the nurse take first?
   1. Place the infant on the mother’s chest.
   2. Dry and stimulate the infant.
   3. Obtain vital signs of the infant.
   4. Obtain measurements of the infant.

Olivia’s baby’s Apgar Scores are 8 at 1 minute of age and 9 at 5 minutes of age and the infant weighs 8 lbs. 5 oz. The initial blood glucose level of the infant is 52 mg/dL. She successfully breastfeeds for 15 minutes. After the feeding, the infant’s blood glucose is 72 mg/dL. Four hours have passed, and Olivia and her baby girl are ready to be transferred to the mother/baby unit. Olivia’s blood glucose has remained stable.
16. Prepare the SBAR handoff report for the accepting nurse?

S - 

B - 

A - 

R - 

Clinical Hint:
S - Situation
B - Background
A - Assessment
R - Recommendation

17. NurseThink® Prioritization Power!
   Based on the SBAR report, what are postpartum nurse's Top 3 Concerns?
   1. 
   2. 
   3. 

18. Upon assessment, the nurse notices the uterus is flaccid and displaced to the right. What action should the nurse take first?
   1. Check bladder status and encourage voiding.
   2. Notify the health care provider.
   3. Place an indwelling urinary catheter.
   4. Perform fundal massage.

19. Olivia is successfully breastfeeding her infant but is concerned about her baby getting enough fluids. She says, “My mother says I should be giving her water and formula.” What is the nurse’s best response?
   1. “Let me consult with the lactation specialist and see what can be done.”
   2. “Your infant will receive all the nutrition and water she needs from your breastmilk.”
   3. “I will bring you some water and formula for the baby.”
   4. “This is an old wives’ tale, and you need to tell your mother that it’s not true.”

20. Olivia experiences no further complications and is breastfeeding her daughter without difficulties. The nurse provides discharge teaching to Olivia. For each potential post-delivery complication, write the symptoms Olivia should report to her health care provider.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Symptoms to Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infection</td>
<td></td>
</tr>
<tr>
<td>Uterine subinvolution</td>
<td></td>
</tr>
<tr>
<td>Signs of deep vein thrombosis</td>
<td></td>
</tr>
<tr>
<td>Signs of postpartum depression</td>
<td></td>
</tr>
</tbody>
</table>
1. Compare the sexual and reproductive needs of Anna Frey-Walters, Carol Frey-Walters and Olivia Hernandez during various phases of the case. How are they the same and how are they different?

2. Compare the nutritional needs of Anna, Carol, and Olivia during different phases of each case.

3. How was holistic care provided to the clients in both cases? How could it have been better?

4. In what areas of each case study was basic care and comfort utilized? How could it have been better?

5. What steps in each case did the nurse take that prevented hospital and community acquired injury?

6. How did the nurse provide culturally sensitive/competent care?

7. How will learning about the case of Anna, Carol, and Olivia impact the care you provide for future clients?
Conceptual Quiz: Fundamentals and Advanced

Fundamental Quiz

1. A client is recently hospitalized for depression. He states that he does not feel like he has normal sexual feelings for his age. How should the nurse respond?
   1. “Normal feelings are only defined by you. Please tell me what you are feeling.”
   2. “Your sexual feelings often change as you mature. I am sure that they will change.”
   3. “It sounds as if you are confused. Please tell me what you are confused about.”
   4. “It is not uncommon to have sexual feelings that are difficult to understand.”

2. A married lesbian couple comes to the office to begin prenatal care. Which nursing response demonstrates bias?
   1. The nurse asks the couple: “Which one of you is the mother?”
   2. The nurse documents that the client is single.
   3. The nurse asks the client: “How was conception achieved?”
   4. The nurse asks the significant other “Are you excited about this pregnancy?”

3. A 13-year-old and her parent come to the clinic for an annual pediatric examination. The parent informs the nurse that the daughter started her period last year. What is the appropriate nursing response?
   1. The nurse asks the client if she has any questions about preventing pregnancy.
   2. The nurse counsels the client about the consequences of sexually transmitted infections.
   3. The nurse documents that the age of menarche as twelve years.
   4. The nurse records that the age of menopause for the client is thirteen.

4. A sexually active young adult comes to the clinic for lesions on the head of the penis. It is determined that he has genital herpes. Which educational statements is/are a priority before discharge? Select all that apply.
   1. You must wear a condom when you have an outbreak to prevent the spread of the virus.
   2. If you have only one partner, there will not be spread of the virus.
   3. Spread can occur when using a condom since the virus may be in a location not covered by the condom.
   4. Herpes can be cured with the use of daily medication.
   5. Having herpes increases your risk of getting human immunodeficiency virus (HIV).

5. The nurse asks the client to provide a ‘teach-back’ when demonstrating the proper way to perform a breast self-examination when she states “I could not possibly feel my breasts like that.” How should the nurse respond?
   1. “I don’t understand what the problem is, can you tell me more?”
   2. “What are your concerns?”
   3. “Would it be easier if your husband does it?”
   4. “It’s really easy, let me show you again.”

Advanced Quiz

6. A client returns to the room with continuous bladder irrigation after prostate removal. The client is taking ice chips and has an I.V. infusing at 100 mL/hour. The catheter is draining light pink urine. After 3 hours, the nurse notes that the urine output is red and has dropped to 15 mL and 10 mL for the last 2 consecutive hours. What should be the nurse’s next action?
   1. Increase the fluid rate of the bladder irrigation.
   2. Assess the bladder using a bladder scanner.
   3. Increase the IV fluid rate.
   4. Assess the BUN, creatinine and potassium levels.

7. The nurse is caring for a pregnant client at 32 weeks gestation with an 8-year history of insulin-dependent diabetes. She comes to the clinic stating “I’m having low back pain, and there is some drainage in my underwear. I’m terrified and shaking.” What should be the nurse’s first action?
   1. Obtain a fingerstick glucose reading.
   2. Collect a urine specimen.
   3. Assess fetal heart sounds.
   4. Determine if there is a bloody show.

8. A client at 38-weeks gestation is admitted to triage with bright red vaginal bleeding. No contractions are reported, but she says that she has some ‘abdominal cramping.’ Vital signs are heart rate 100 beats per minute, blood pressure 108/67 (87 mmHg), and respirations 16 breaths per minute. Fetal heart rate is 120 beats per minute. What should the nurse do next?
   1. Determine if cervical dilation is present.
   2. Further, assess the abdominal cramping.
   3. Place an indwelling catheter and determine the urinary output.
   4. Observe the quantity of vaginal bleeding.
9. The nurse is caring for a client in active labor and begins to see late decelerations on the fetal heart monitor. Upon entering the room, the nurse observes this image. What should be the nurse’s next action?

1. Place the client in a right lateral position.
2. Notify the practitioner and prepare for surgery.
3. Place O₂ at 8 liters by non-rebreather mask.
4. Reassure the parents that everything is all right.

10. The grandmother of a stillborn infant tells the nurse she wants to see and hold the child. What is the nurse’s best response?

1. “I’ll check with the provider first to see if it is all right.”
2. “Let me dress him first, and I’ll bring him to you.”
3. “I don’t think it’s good for you to see him.”
4. “It will be better if I bring you a photo of him.”

### TESTS FOR PREGNANCY

<table>
<thead>
<tr>
<th></th>
<th>Prenatal Tests Throughout</th>
<th>First Trimester Months: 1-3</th>
<th>Second Trimester Months: 4-6</th>
<th>Third Trimester Months: 7-9</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blood pressure</strong></td>
<td>Screen for early signs of preeclampsia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Urine Analysis</strong></td>
<td>Screen for infection, preeclampsia, or diabetes</td>
<td></td>
<td>QUAD screen: alpha-fetoprotein (AFP), estriol, human chorionic gonadotropin (hCG), and inhibit A; Glucose screening at 6-7 months</td>
<td></td>
</tr>
<tr>
<td><strong>Blood Tests</strong></td>
<td>Screen for infections (syphilis, hepatitis B, and HIV) blood type (Rh factor), and anemia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cervical Fluid</strong></td>
<td></td>
<td></td>
<td></td>
<td>Group B Strep</td>
</tr>
<tr>
<td><strong>Ultrasound</strong></td>
<td>Gestational age</td>
<td></td>
<td>Growth and birth defects</td>
<td></td>
</tr>
<tr>
<td><strong>Carrier Genetic Screening</strong></td>
<td>Cystic Fibrosis (CF), spinal muscular atrophy (SMA), thalassemia’s, and hemoglobinopathies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cell-free Fetal DNA Testing</strong> (maternal serum sample)</td>
<td>After 9 weeks Down syndrome</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Chorionic Villus Sampling</strong> (placenta sample)</td>
<td></td>
<td>10-13 weeks Genetic conditions</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Amniocentesis</strong> (amniotic fluid)</td>
<td></td>
<td></td>
<td>Genetic and birth defects</td>
<td>Infant lung maturity and infections</td>
</tr>
</tbody>
</table>
Circulation is the movement of blood through the body and is dependent on the strength and function of a beating heart. Perfusion, although often used interchangeably with circulation, refers to the passage of oxygenated blood through the capillaries to the tissues and cells of the body. In order to have adequate perfusion, both circulation (blood movement) and respiration (the ability to receive oxygen into the blood) are required. Without both of these components, perfusion will be insufficient in meeting the oxygen needs of the body.

Clotting is a normal process within the body for most people. When the process of clotting is not functioning as expected, negative outcomes occur, including tissue necrosis from a blockage of blood flow or hemorrhage from the inability to form clots.

**Next Gen Clinical Judgment:**

If a client has poor circulation from a weak heart, what assessment changes can be observed?

- If there are excessive clots in the body, what changes will be seen in the peripheral circulation?
- What assessment differences will there be for a client with decreased perfusion from poor heart function compared to one with excessive clotting?
- How can the nurse determine if there is decreased perfusion to internal organs?
- Which serum labs are impacted by poor circulation or perfusion?
Go To Clinical Case

To review concept maps, visit NurseThink.com/casestudy-book54

While caring for this client, be sure to review the concept maps in chapters 3 and 4.

Case 1: Impaired Coronary Perfusion and Chest Pain

Related Concepts: Comfort, Adaptation: Coping & Stress
Threaded Topics: Health Promotion & Teaching, Clinical Calculations, Legal Issues, Communication

Kandice Sheridan is a 49-year-old female in the emergency department for “achiness” in the elbows that is atypical and worsening over the last three days. She states that the feeling awakens her at night. Ms. Sheridan has felt more short of breath with activity lately and has been under a lot of stress at work. She is planning a trip overseas in a few days and wants to confirm there is nothing significantly wrong before leaving the country.

1. The nurse is beginning the initial assessment. In what priority order should these actions be performed?

   **Answers:** _____, _____, _____, _____, _____.
   
   1. **PQRST pain assessment.**
   2. **Vital sign assessment.**
   3. **Health history and medication use.**
   4. **Place in a hospital gown.**
   5. **Assessment of contributing symptoms.**

   **Clinical Hint:**
   - **P** - Provocation/Palliation
   - **Q** - Quality
   - **R** - Radiation/Relief
   - **S** - Severity/Symptoms
   - **T** - Timing

   **Clinical Hint:** Mean Arterial Pressure (MAP) is a calculation that measures the blood perfusion to organs. A MAP < 65 mmHg indicates that there is inadequate perfusion. Ex: 145/88 (107). The MAP is 107.

### NURSING NOTE

**Name:** Kandice Sheridan  
**Health Care Provider:** M. Dixon M.D.  
**Code Status:** Full Code  
**Age:** 49 years  
**Allergies:** NKDA

**June 1 0730**

49-year-old female admitted with atypical pain in the elbows. Afebrile, RR 18, HR 88, BP 145/88 (107), sats 97% on room air (RA). Denies chest pain and shortness of breath at this time. Says her arms feel “heavy” and elbows feel “achy.” Describes achiness as “less than during the night last night.” Denies nausea or other discomforts. Skin moist to touch. History includes iron deficiency anemia, C-sections x 2, and appendectomy. Family history consists of a father with an acute myocardial infarction (AMI) at age 56.
2. NurseThink® Prioritization Power!
   Evaluate the information within the Nursing Notes from the emergency department and pick the Top 3 Priority assessment findings.

   1. 
   2. 
   3. 

3. After reviewing the orders, which action should the nurse take first?
   1. Request serum lab draw.
   2. Obtain 12-lead EKG.
   3. Place IV capped line.
   4. Apply O₂ at 2 L/nasal cannula.

4. In preparation for the IV insertion, the nurse should place a _____ gauge capped IV line.

5. Which observation(s) should the nurse make in the review of the 12-lead EKG? Select all that apply.
   1. The client has tachycardia.
   2. There is ST segment elevation in V leads.
   3. The client has premature ventricular contractions (PVCs).
   4. There is artifact on the tracing.
   5. The tracing is normal.
6. After reviewing the EKG, what should be the nurse’s next action?
   1. Apply continuous EKG monitor.
   2. Check to see if the serum lab report is back.
   3. Notify the healthcare provider.
   4. Apply the ordered oxygen.

<table>
<thead>
<tr>
<th>Lab</th>
<th>Normal</th>
<th>1000</th>
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<tbody>
<tr>
<td>WBC</td>
<td>4,000 - 10,000 µL</td>
<td>5,000</td>
</tr>
<tr>
<td>Hemoglobin</td>
<td>12.0 - 17.0 g/dL</td>
<td>11.1 L</td>
</tr>
<tr>
<td>Hematocrit</td>
<td>36.0 - 51.0%</td>
<td>39</td>
</tr>
<tr>
<td>RBC</td>
<td>4.2 - 5.9 cells/L</td>
<td>3.90 L</td>
</tr>
<tr>
<td>Platelets</td>
<td>150,000 - 350,000 µL</td>
<td>248,000</td>
</tr>
<tr>
<td>Calcium</td>
<td>9 - 10.5 g/dL</td>
<td>9</td>
</tr>
<tr>
<td>Chloride</td>
<td>98 - 106 mEq/L</td>
<td>98</td>
</tr>
<tr>
<td>Magnesium</td>
<td>1.5 - 2.4 mEq/L</td>
<td>2.0</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>3.0 - 4.5 mg/dL</td>
<td>3.1</td>
</tr>
<tr>
<td>Potassium</td>
<td>3.5 - 5.0 mEq/L</td>
<td>3.3  L</td>
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<tr>
<td>Sodium</td>
<td>136 - 145 mEq/L</td>
<td>139</td>
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<td>Glucose</td>
<td>70 - 100 mg/dL</td>
<td>110 H</td>
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<tr>
<td>BUN</td>
<td>3 - 20 mg/dL</td>
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<tr>
<td>Creatinine</td>
<td>0.7 - 1.3 mg/dL</td>
<td>1.0</td>
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<tr>
<td>Creatine Kinase (CPK)</td>
<td>30 - 170 U/L</td>
<td>378 H</td>
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<tr>
<td>CPK-MB</td>
<td>3 - 56%</td>
<td>6% H</td>
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<tr>
<td>Lactic Dehydrogenase (LDH)</td>
<td>50 - 100 U/L</td>
<td>150 H</td>
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<tr>
<td>Aminotransferase, Aspartate (AST)</td>
<td>0 - 35 U/L</td>
<td>30</td>
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<tr>
<td>Aminotransferase, Alanine (ALT)</td>
<td>0 - 35 U/L</td>
<td>33</td>
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<tr>
<td>GGT</td>
<td>9 - 48 U/L</td>
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<td>T. Bilirubin</td>
<td>1.2 mg/dL</td>
<td>0.9</td>
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<tr>
<td>Cholesterol</td>
<td>&lt; 200 mg/dL</td>
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<td>Triglycerides</td>
<td>&lt; 150 mg/dL</td>
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<td>Troponin I</td>
<td>&lt; 0.5ng/mL</td>
<td>0.10 H</td>
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<td>Troponin T</td>
<td>&lt; 10 ng/mL</td>
<td>12 H</td>
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<tr>
<td>Myoglobin</td>
<td>&lt; 170 ng/mL</td>
<td>168</td>
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<tr>
<td>PT</td>
<td>11 - 12.5 seconds</td>
<td>11.5</td>
</tr>
<tr>
<td>INR</td>
<td>0.8 - 1.1</td>
<td>0.8</td>
</tr>
<tr>
<td>aPTT</td>
<td>25 - 35 seconds</td>
<td>32</td>
</tr>
</tbody>
</table>
Case 2: Decreased Perfusion from Hypertension and Heart Failure

William Jones is a 69-year-old man with a 25-year history of hypertension. He was discharged from the Veteran’s Hospital last week after a 2-day stay for hypertensive crisis. The home care nurse is making an initial visit to his home today. Mr. Jones greets the nurse at the door. He is tall with a large build. He walks with a limp and is mildly short of breath. His home is small but neat and well kept. There are no stairs or throw-rugs. He has a small dog, barking as the nurse enters. The smell of food cooking comes from the kitchen.

1. The nurse performs an environmental assessment. Why would each observation listed be a potential concern and area for further assessment by the nurse? List the action that the nurse should take.

- Large build
- Walks with a limp
- Mildly short of breath
- Small dog
- Smell of food

After completing the initial admission paperwork and physical assessment of Mr. Jones, the nurse documents the findings in the electronic record using a tablet computer.
69-year-old man discharged from the Veteran’s Hospital last week after a 2-day stay for hypertensive crisis. Health history includes hypertension x 25 years, diabetes x 2 years, and an enlarged prostate gland. Surgical history includes cholecystectomy 30 years ago and significant orthopedic surgery after a “blown out left knee” in Vietnam at the age of 20 years. Client lives with his wife who was his “high-school sweetheart.” VS = T 97.6°F (36.4°C), RR 22 breaths, HR 110 beats, BP 167/89 (115) mmHg, Sat 93% on room air (RA). Alert and oriented (A & O) x 3. Moves all extremities. Grips and pushes equal in upper extremities. Left leg weaker than right and knee is swollen. States knee pain of 5 on a 1-10 scale. Pulses strong in upper extremities, 2+ in feet. S1, S2, S3 heart sounds with some irregular beats. Fine bibasilar crackles. States feeling short of breath with activity. Bowel sounds active x 4. Last bowel movement yesterday and it looked “normal.” States hesitancy with urine flow but denies burning. Up to void 1-2 times each night. Client states morning blood glucose was 178, and he checks it daily. Ht. 6’1” Wt. 263 pounds. BMI 34.7.

2. **NurseThink® Prioritization Power!**
   Evaluate the information within the admission note and pick the **Top 3 Priority** assessment concerns.

   1. ________________________________________________________________
   2. ________________________________________________________________
   3. ________________________________________________________________

Next, the nurse reviews the client’s medication list.

**MY MEDICATIONS**

- Lisinopril 40 mg once a day by mouth
- Atenolol 50 mg once a day by mouth
- Metformin 1000 mg twice a day by mouth
- Tamsulosin 0.4 mg once a day by mouth
- Celecoxib 200 mg twice a day by mouth as needed

**Clinical Hint:** Always compare the actual medication bottles to a written/typed list that the client provides. Dosages may have changed and the list may be outdated.

**Next Gen Clinical Judgment:** For each of these medications, review the drug category and priority teaching point.
3. After further inquiry, it is discovered that no morning medications have been taken. Which medications should the nurse suggest Mr. Jones take now? Select all that apply.

1. Lisinopril.
2. Atenolol.
3. Metformin.
4. Tamsulosin.
5. Celecoxib.

Explain why you chose each medication as a priority.

4. The nurse completes a Fall Risk Assessment for Mr. Jones. His score is 13 (at-risk is >10). Which intervention(s) would be most appropriate? Select all that apply.

1. Ask him to find a new home for his dog.
2. Request a physical therapy referral.
3. Request an occupational therapy referral.
4. Get a brace for his knee.
5. Suggest grab bars in the bathroom.
6. Place a red “Fall Risk” band on his wrist.

Clinical Hint: Early fall risk assessment and interventions can save lives. The death rate from unintentional falls for adults aged 65 or more years has been increasing an average of 4.9% per year, according to the Centers for Disease Control and Prevention.

5. The nurse reviews Mr. Jones advanced directives. The forms indicate that he is agreeable to everything except being on life support. He has identified his wife as his Power of Attorney. How should the nurse interpret these preferences? Select all that apply.

1. His wife is the proxy and will make his health care decisions.
2. No intubation, should he stop breathing.
3. Perform defibrillation if his heart stops.
4. Provide nutritional support if he is in a vegetative state.
5. Perform CPR if he is found unconscious and not breathing.

6. NurseThink® Prioritization Power!

What additional concerns did the nurse not address on this visit?
7. One week later, Mr. Jones calls the home care nurse saying that he feels very short of breath since he awoke three hours ago and is having a hard time breathing. What actions should the nurse take next?

1. Change the plan for the day and make a visit to Mr. Jones.
2. Ask him to check his blood pressure and call you back.
3. Have him take an extra antihypertensive medication and lay down.
4. Tell him to hang up the phone and call an ambulance.

Mr. Jones chooses to have his wife drive him to the emergency department, where he is admitted. The nurse makes these notes in the electronic health record.

<table>
<thead>
<tr>
<th>VITAL SIGN RECORD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
</tr>
<tr>
<td>Sept. 13 1010</td>
</tr>
</tbody>
</table>

Brought in by wife per private vehicle. Alert and oriented x 3. Crackles bilaterally anteriorly & posteriorly. Moist cough. Some nasal flaring. States feeling like he cannot get his breath.

8. **NurseThink® Prioritization Power!**
   Evaluate the information within the emergency department note and pick the Top 3 Priority actions.

1. ____________________________________________
2. ____________________________________________
3. ____________________________________________

9. The nurse discusses the situation with the emergency department provider. Which prescription(s) should the nurse question? Select all that apply.

1. IV 0.9% sodium chloride at 100 mL/hr.
2. Delivery of sodium nitroprusside intravenously.
3. Portable chest x-ray.
4. Furosemide 5 mg intravenously.
5. Oxygen at 15 L by non-rebreather mask.
6. Arterial blood gas.

**Clinical Hint:** A prescription can be a medication, therapy, or anything ordered by the health care provider.
10. The nurse receives the arterial blood gas results above. What conclusions should the nurse make about the client’s situation?

1. In metabolic acidosis and has impaired renal function.
2. In respiratory acidosis and needs more oxygen.
3. Needs more oxygen and to breathe into a paper bag.

**Clinical Hint:** It is not important to “name” the blood gas but rather determine the best action the nurse should take in response to the lab report, based on the situation.

**Handoff Report to ICU:**

Mr. Jones is a 69-year-old with a history of hypertension, diabetes mellitus (DM) type II, and knee pain from a war injury. He came to the emergency department (E.D.) via private vehicle this morning after feeling severely short of breath. Upon admission to the E.D., he was found to be severely hypertensive and short of breath. His blood gases showed respiratory acidosis with hypoxemia, and his chest x-ray confirmed he is in acute cardiogenic heart failure. He’s on 4 L/NC, and his saturations are at 93%. We gave him the “now” dose of furosemide 40 mg of IV about 10 minutes ago and started him on sodium nitroprusside intravenously at 0.1 mcg/kg/minute 15 minutes ago, and his last blood pressure was 211/115 (147) mmHg, heart rate is 120 in a sinus tachycardia, with rare premature ventricular contraction (PVC), respirations are 24 breaths per minute. His wife is in the intensive care unit (ICU) waiting room.
1. Compare the impaired perfusion that Kandice Sheridan experienced with the impaired perfusion of William Jones. How are they the same and how are they different?

   

2. What was your single greatest learning moment while completing the case of Kandice Sheridan? What about William Jones?

   

3. How did the nursing (not medical) care provided to Kandice Sheridan and William Jones change the outcome for each of them?

   

4. Identify safety concerns for both Kandice Sheridan and William Jones for each case.

   

5. Identify in each case how the nurse provided basic care and comfort to best meet the client's needs.

   

6. What steps in each case did the nurse take that prevented hospital-acquired injury?

   

7. How did the nurse provide culturally sensitive/competent care?

   

8. How will learning about the case of Kandice Sheridan and William Jones impact the care you provide for future clients?

   

Fundamental Quiz

1. A nurse volunteering at a first aid station during a race is caring for a participant who is feeling dizzy and lightheaded. What priority action should the nurse take?
   1. Have the runner drink some water.
   2. Take the client’s blood pressure.
   3. Have the client lay down.
   4. Determine how long the runner has felt poorly.

2. A client with a history of clot formation is experiencing sudden pain in the left great toe. What should the nurse do next?
   1. Determine circulation, movement, and sensation (CMS) to the feet.
   2. Offer pain medication.
   3. Assess for popliteal and dorsalis pedis pulses.
   4. Elevate the left foot.

3. The nurse is caring for a client on extended bedrest. What action(s) should the nurse take when getting the client out of bed for the first time? Select all that apply.
   1. Medicate for pain.
   2. Request additional assistance.
   3. Obtain orthostatic blood pressure readings.
   4. Apply a gait belt.
   5. Deliver additional intravenous fluids.
   6. Raise the head of the bed.

4. The school nurse is assessing a child with a newly placed cast on the right arm. The nurse notes that the fingers are slightly cooler than those on the left hand. What should the nurse do next?
   1. Nothing, this is normal.
   2. Ask the child if the cast feels tight.
   3. Assess the fingertips on each hand for blanching.
   4. Assess the radial pulse in the right wrist.

5. The nurse is caring for a client taking clopidogrel after having an embolic event. The client shares that since starting the medication he has noticed that his stools are darker in color. What is an appropriate response by the nurse?
   1. That is typical with this medication.
   2. Tell me what you mean by “darker”?
   3. Often dietary changes can cause this.
   4. When is the last time you had a bowel movement?

Advanced Quiz

6. The nurse is caring for a client whose mean arterial pressure has been < 60 mmHg for the last two hours. Which serum lab(s) should the nurse anticipate in response to this event?
   1. Elevation in the liver enzymes.
   2. Decrease in potassium level.
   3. Elevation in serum albumin level.
   4. Decrease in BUN and creatinine.

7. A client in the emergency department has been hydrated with normal saline over the last hour for hypovolemia. Assessment changes now include a rapid bounding pulse and shortness of breath. What action should the nurse delegate to the unlicensed assistive personnel?
   1. Raise the head of bed.
   2. Apply oxygen.
   3. Stop IV fluids.
   4. Obtain blood pressure.

8. A client has been treated with a diuretic for fluid overload and shortness of breath. After voiding 960 mL clear yellow urine over an hour, the client says she feels funny. What should the nurse do next?
   1. Reassess the oxygen saturation reading.
   2. Administer an additional dose of the diuretic.
   3. Assess the blood pressure.
   4. Obtain a serum potassium level.

9. The nurse is caring for a client who has had significant uterine bleeding after childbirth. The client is now critical. The electronic health record shows this information. What can the nurse conclude from the information? Select all that apply.
   1. The client’s condition is stabilizing.
   2. The changes indicate that an action is needed.
   3. The heart rate is increasing from the pain of delivery.
   4. The saturations are dropping because of the tachypnea.
   5. The respiratory rate and heart rate changes are a result of the loss of blood.

<table>
<thead>
<tr>
<th>Time</th>
<th>BP (MAP)</th>
<th>HR</th>
<th>RR</th>
<th>Sats</th>
</tr>
</thead>
<tbody>
<tr>
<td>0821</td>
<td>105/63</td>
<td>124</td>
<td>24</td>
<td>94% RA</td>
</tr>
<tr>
<td>0755</td>
<td>118/70</td>
<td>117</td>
<td>23</td>
<td>96% RA</td>
</tr>
<tr>
<td>0738</td>
<td>132/76</td>
<td>110</td>
<td>22</td>
<td>97% RA</td>
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</tbody>
</table>

1. The client’s condition is stabilizing.
2. The changes indicate that an action is needed.
3. The heart rate is increasing from the pain of delivery.
4. The saturations are dropping because of the tachypnea.
5. The respiratory rate and heart rate changes are a result of the loss of blood.
10. For each condition, select a potential action to take. There is only 1 priority action for each condition. Each potential action can only be used once. Not all potential actions are used.

<table>
<thead>
<tr>
<th>Potential Action to Take</th>
<th>Condition</th>
<th>Priority Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Hourly urine output</td>
<td>Hypovolemic shock</td>
<td></td>
</tr>
<tr>
<td>B. Recombinant tissue plasminogen activator</td>
<td>Pulmonary embolism</td>
<td></td>
</tr>
<tr>
<td>C. Orthostatic blood pressure</td>
<td>Acute coronary syndrome</td>
<td></td>
</tr>
<tr>
<td>D. High flow oxygen</td>
<td>Raynaud's Disease</td>
<td></td>
</tr>
<tr>
<td>E. Oxygen at 2 L/nasal cannula</td>
<td>Cardiogenic shock</td>
<td></td>
</tr>
<tr>
<td>F. Norepinephrine 2 mcg/min</td>
<td>Embolic stroke/brain attack</td>
<td></td>
</tr>
<tr>
<td>G. Blood pressure</td>
<td>Deep vein thrombosis</td>
<td></td>
</tr>
<tr>
<td>H. Nifedipine 20 mg by mouth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. Enoxaparin 1 mg/kg SC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Cognition is the mental action or process of acquiring knowledge and understanding through thought, experience, and the senses. The result of cognitive process is the development of perception, sensation, notion, or intuition about the world at large. The mental processes of cognitive function leads to the acquisition of knowledge and allows for the ability to carry out daily tasks. Cognition is considered a defining characteristic of being human and having a livelihood. For many, their greatest fear is living in a body without adequate cognitive function.

A variety of things impact a person’s cognition. Health problems, such as heart disease, diabetes, stroke, depression, and brain injuries; substances like medications, drugs or alcohol; and lifestyle choices, including diet, smoking, sleep patterns, social isolation, and a lack of physical activity, all have an impact. As a person ages, society begins to expect and accept a change in cognition as ‘normal.’

The nurse should recognize and teach that this is not as an anticipated event of growing older. Nurses lead the client, family and healthcare team in exploring other etiologies.

Next Gen Clinical Judgment:
- What is the difference between delirium and dementia? Compare and contrast.
- Do you think intellectual disability is considered a cognitive disorder? Why or why not?
- What are the early signs of cognitive disorder?
- List situations that would cause an acute change in cognitive functioning.
Case 1: Confusion, Dementia, and Loss of Independence

Maryann Huston is an 84-year-old female from Chicago, Illinois. She is widowed, has two adult children and seven grandchildren. Maryann is retired from a credit card company, where she spent 40 years in the customer service department. Maryann is 5 foot, 5 inches and weighs 165 pounds (BMI 27.5). Her past medical history includes hypertension, hypercholesterolemia, asthma, chronic obstructive pulmonary disease (COPD), and prediabetes. Maryann lives alone and enjoys cooking and watching game shows on television every night.

Maryann comes to the clinic today with her daughter, Therese. Therese expresses her concern that her mother might not be as “sharp” as she used to be. She has had very forgetful moments, such as leaving the stove on and forgetting doctor’s appointments. Therese shares that Maryann often has a hard time remembering the names of the people that she knows. Richard Spade, a Geriatric Nurse Practitioner, conducts a physical assessment on Maryann.

NURSING NOTE

Mar. 15
1300

An 84-year-old female, alert and oriented to person and place. Not aware of current city or state. Pupils are equal, round, and reactive to light and accommodation (PERRLA). Heart regular, normal rate and rhythm. Lungs diminished throughout. Strong grips and pulls. +2 pulses on all extremities, free from edema. Normal bowel sounds. Abdomen soft, non-tender.
The nurse conducts a mental status exam on Maryann.

**MENTAL STATUS ASSESSMENT**

<table>
<thead>
<tr>
<th>Client Score</th>
<th>Maximum Score</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
<td>“What is today’s date?”</td>
</tr>
<tr>
<td>0</td>
<td>5</td>
<td>“What state are we in?”</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>“Repeat these words and remember them, I’ll ask you again later; pen, tree, glasses.”</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>“I would like you to spell P-U-R-S-E backward.”</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>“Earlier I told you the names of three things. Can you tell me what those were?”</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>“Repeat the phrase: ‘no ifs, ands, or buts.’”</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>“Please read this and do what it says.” (Written instruction says “open your mouth.”)</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>“Please copy this picture on a blank piece of paper.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
</tr>
<tr>
<td><strong>9</strong></td>
<td><strong>24</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Score** | **Severity of Disease**
--- | ---
19-24 | No cognitive impairment
13-18 | Mild cognitive impairment
0-12 | Severe cognitive impairment

1. Based on Maryann’s mental state exam, how should the nurse interpret the severity of her cognitive impairment?
2. **THIN Thinking Time!**

Reflect on the events that have occurred since Maryann came to be evaluated by the nurse and apply **THIN Thinking**.

- **T** - ____________________________________________________________________________
- **H** - ____________________________________________________________________________
- **I** - ____________________________________________________________________________
- **N** - ____________________________________________________________________________

3. Maryann’s daughter Therese begins to cry and says, “How did this happen to my mom? Am I at risk too?”

How should the nurse respond? Select all that apply.

1. “We are not sure what ultimately causes Alzheimer’s, however it can be genetic.”
2. “One can develop Alzheimer’s from viruses, deficiencies of neurotransmitters, or autoimmune diseases.”
3. “Alzheimer’s can be caused by excessive amounts of certain medications, such as thyroid medications.”
4. “Yes, you are at risk for developing Alzheimer’s disease. You should start medications now as well.”
5. “Alzheimer’s can be caused by alcohol intake; how much does Maryann drink?”

4. Match the stage of Alzheimer’s disease to the description on the right. Each stage may be used more than once.

<table>
<thead>
<tr>
<th>Stages</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Stage 1</td>
<td>_____ Major gaps in memory and cognitive defects.</td>
</tr>
<tr>
<td>B. Stage 2</td>
<td>_____ Retains names of others but disoriented to place and time.</td>
</tr>
<tr>
<td>C. Stage 3</td>
<td>_____ “Mild.”</td>
</tr>
<tr>
<td></td>
<td>_____ Loss of ability to speak.</td>
</tr>
<tr>
<td></td>
<td>_____ “Severe.”</td>
</tr>
<tr>
<td></td>
<td>_____ Total loss of facial recognition.</td>
</tr>
<tr>
<td></td>
<td>_____ “Moderate.”</td>
</tr>
<tr>
<td></td>
<td>_____ Mild cognitive decline.</td>
</tr>
</tbody>
</table>

5. Therese asks what additional diagnostic tests her mother will need to confirm the Alzheimer’s diagnosis.

Which tests may be ordered on her brain? Select all that apply.

1. Computerized tomography (CT) scan.
2. Magnetic resonance imaging (MRI).
3. X-ray.
4. Positron emission tomography (PET) scan.
5. Angiogram.
6. The nurse practitioner orders additional tests and procedures for Maryann. Complete the chart, identifying if they are appropriate or not appropriate for Maryann’s situation.

<table>
<thead>
<tr>
<th>Test Description</th>
<th>Appropriate</th>
<th>Not Appropriate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete blood count (CBC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrocardiography (ECG)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lumbar puncture with a collection of cerebrospinal fluid (CSF)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electroencephalography (EEG)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehensive metabolic panel (CMP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear stress test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thyroid hormone levels</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Maryann’s nurse practitioner, Richard, gives Therese a home healthcare referral. What is/are the duty(ies) and responsibility(ies) of a home health nurse? Select all that apply.
   1. Make an individualized plan of care.
   2. Administer medications as needed.
   3. Write prescriptions for medications.
   4. Coordinate care with other health care team members.
   5. Educate clients and families.

8. The healthcare provider prescribes donepezil. Therese asks the nurse how this medication will help Maryann. How should the nurse respond?
   1. “This medication will reverse the progression of Alzheimer’s disease.”
   2. “Donepezil helps break down the plaques that are found on the brain.”
   3. “This medication increases blood flow to the brain, which helps with cognition.”
   4. “It helps increase acetylcholine uptake in the brain, which helps maintain memory.”

As Maryann’s condition deteriorates, she moves in with Therese. Therese and her husband work to sell Maryann’s house and move her belongings into their guest room. The nurse visits Therese and Maryann at Therese’s home. Therese looks stressed, is short-tempered, and Maryann is screaming.

9. NurseThink® Prioritization Power!
   Evaluate the situation with Maryann and Therese and pick the Top 3 Priority actions.
   1. ____________________________________________________________
   2. ____________________________________________________________
   3. ____________________________________________________________
Fundamental Quiz

1. The nurse is caring for a newly admitted older adult in a skilled care facility. Which statement(s) by the client is/are most concerning? Select all that apply.
   1. “I don’t remember what I ate for breakfast.”
   2. “I don’t think I’ll enjoy being here.”
   3. “My cat ‘Mustang’ is my baby.”
   4. “Did my daughter bring my glasses?”
   5. “I’m in the emergency room.”

2. A military veteran is being seen at the clinic for what his wife calls “strange behaviors.” Which behavior(s) is/are concerning? Select all that apply.
   1. Panic attacks with an impending sense of doom.
   2. Forgettingfulness and leaving food cooking on the stove.
   3. Walking 4-5 times a day throughout the neighborhood.
   4. Hesitation and fear to use the city’s public transportation.
   5. Spending hours at the shooting range, firing weapons.

3. An older adult client is hospitalized with a lung infection and has been disoriented and confused since admission. Which cue(s) could be a reason(s) for the cognitive change? Select all that apply.
   1. Oxygen saturation level of 90%
   2. Administration of nephrotoxic antibiotics.
   3. Use of a bedtime sleeping pill.
   4. Temperature of 103.4°F (39.7°C).
   5. Unfamiliar environment.

4. The nurse is planning care for a client with dementia who is disoriented to location, day, and time. Physically the client is mobile and has a steady gait. Which priority action should the nurse include?
   1. Reorient the client frequently.
   2. Place suction at the bedside in case of aspiration.
   3. Determine the client’s code status with the family.
   4. Place a bed alarm.

5. The nurse is completing a focused assessment to determine the cognitive mental status of an older adult with symptoms of acute hallucinations. Which action is the priority?
   1. Perform the assessment when the client is well-rested.
   2. Reorient the client to time and place during the assessment.
   3. Perform the assessment in a location without distracting stimuli.
   4. Provide a sedative before the assessment to reduce anxiety.

Advanced Quiz

6. An elementary school nurse notices that a child is playing independently and not interacting with others. She gently touches the child on the back, and he jumps away saying “no, don’t touch me!” His teacher explains that he has an autistic spectrum disorder. What is the nurse’s best action?
   1. Talk gently to the child, keeping a physical distance.
   2. Walk away and leave the child alone.
   3. Encourage the child to play with other children.
   4. Ask the teacher more questions about the child.
   5. Provide emotional support to increase self-esteem.
   6. Remove any potentially harmful objects from the environment.

7. An adult being treated for attention deficit hyperactivity disorder (ADHD) is brought to the emergency department by paramedics after threatening to injure himself. Which is/are the priority nursing action(s)? Select all that apply.
   1. Provide a quiet, restful environment.
   2. Work with the client to agree to a “no self-harm” contract.
   3. Provide emotional support to increase self-esteem.
   4. Obtain continuous one-on-one observation.
   5. Remove any potentially harmful objects from the environment.

8. The nurse enters the room of a client with advanced dementia to administer routine medications. The client becomes angry and agitated and throws a water cup at the nurse. What should the nurse do next?
   1. Clean up the water spill and leave the room.
   2. Ask why the client is angry.
   3. Call for another healthcare team member to come to the room.
   4. Get another cup of water and try administering the pills again.
   5. Provide a quiet, restful environment.

9. A client comes to the clinic with her daughter a year after experiencing a stroke. The daughter says she is afraid that her mother has post-stroke dementia. Which symptom(s) support this belief? Select all that apply.
   1. Increased nighttime sleep to 8 hours each night.
   2. Difficulty eating and swallowing with harsh coughing after drinking thin liquids.
   3. A loss of short-term memory and increasing forgetfulness.
   4. The increasing inability to perform simple tasks.
   5. Wandering in the house with a bewildered expression.

10. A client comes to the clinic with a neighbor who reports that the client is often seen wandering in the neighborhood and cannot find the way home. Which question should the nurse ask the client to assess short-term memory?
    1. “Can you tell me your name?”
    2. “Who is the person who brought you in?”
    3. “Where were you born?”
    4. “What did you eat for breakfast?”

SECTION 4

Care of the Multi-Concept Client
In this chapter you will find 6-multi-concept cases. These cases are different in that they will combine multiple concepts and exemplars within each case. Rarely will you care for a client that does not have multiple diseases, issues and concerns. These cases are more realistic to the client that is seen in today’s health care system.
Case 5: Multiple Organ Dysfunction from Trauma and Shock

Related Concepts: Fluid and Electrolytes, Acid-Base Balance, Respiration, Hormonal Regulation, Tissue Integrity, Movement, Comfort, Protection, Homeostasis
Threaded Topics: Ventilator Management, Cardiac Arrest, Critical Care Medications

Gerald Luna is a 45-year-old client with a 15-year history of type 2 diabetes mellitus and a 30-year history of alcoholism. His blood glucose is not well controlled on an oral hypoglycemic agent, and he drinks one six-pack of beer per day. Gerald works at a casino as a slot machine repairman. His wife of 25 years, Andrea, is also employed by the casino in the accounting department. Gerald and Andrea live on a reservation near the casino in a rural setting.

Gerald was involved in a car accident on the way to work. He was not restrained and was thrown from the car into the roadside brush. The crash was witnessed, and bystanders called 911. First responders arrived to find Gerald unconscious with labored breathing and a deformed right lower extremity. A witness stated that Mr. Luna just drove off the road and appeared to be asleep. No other vehicles were involved. The first responders established monitoring equipment, intubated Gerald at the scene, started intravenous fluids with 0.9% normal saline, and splinted his right lower extremity.

1. **NurseThink® Prioritization Power!**
   Evaluate the information in the case and determine the **Top 3 Priority** concerns or cues.

   1. 
   2. 
   3. 
2. Based on the priority concerns, what action(s) should the nurse perform first as Gerald arrives at the emergency department?

1. Obtain a finger sample blood glucose level.
2. Obtain a oxygen saturation reading.
3. Take vital signs and place him on the cardiac monitor.
4. Complete a head to toe assessment.

Name: Gerald Luna
Age: 45 years
Health Care Provider: Jennifer Smith MD
Allergies: PCN

Code Status: Full code

VITAL SIGN RECORD

<table>
<thead>
<tr>
<th></th>
<th>BP (MAP)</th>
<th>HR</th>
<th>RR</th>
<th>Sats</th>
<th>Temp</th>
<th>Glucose</th>
<th>Pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Hospital Nov. 7</td>
<td>108/46 (67)</td>
<td>104</td>
<td>30</td>
<td>94% on FiO2 60%</td>
<td>99.7°F</td>
<td>487 g/dL</td>
<td>Unable to assess</td>
</tr>
<tr>
<td>0750</td>
<td>92/40 (57)</td>
<td>114</td>
<td>34</td>
<td>91% on FiO2 60%</td>
<td>99.7°F</td>
<td>507 g/dL</td>
<td>Unable to assess</td>
</tr>
</tbody>
</table>

3. Indicate if the client’s condition is improving or declining based on the trends of data?

1. Temperature.
2. Pulse.
3. Respirations.
4. Oxygen Saturation.
5. Blood Pressure.

Gerald was admitted directly to the intensive care unit for care. The emergency room staff were able to reach Andrea who is having a friend drive her to the hospital.
Chapter 18 - Multi-Concept Client

INTENSIVE CARE UNIT PRESCRIPTIONS

Nov. 7 1030

- Admit to ICU.
- Volume cycled ventilation. Settings: Continuous Mandatory Ventilation (CMV); Rate 16; FIO2: 60%; Peep: +5.
- Arterial blood gas every morning and as needed.
- Consent and set-up for triple lumen central venous access device insertion.
- 0.9% Sodium Chloride at 100 mL/hour.
- Hourly central venous pressure readings.
- Glucometer reading every 1 hour.
- CBC, CMP, PT INR, serum blood alcohol level, and drug screen, now.
- Regular Humulin Insulin 100 Units in 100 mL Normal Saline - Titrate to the blood glucose level.
  - Blood glucose 199 or less, turn insulin drip off; recheck blood glucose in one hour; restart if blood glucose above 200.
  - Blood glucose > 200 - 2 units per hour
  - Blood glucose > 300 - 4 units per hour
  - Blood glucose > 400 - 8 units per hour
  - Blood glucose > 500 - 12 units per hour
  - Blood glucose > 600 Call the provider
- Dexmedetomidine 0.2 to 0.7 mcg/kg/hour. Titrate as needed for sedation.
- Fentanyl 1-2 mcg/kg/hour by continuous IV infusion or 25-200 mcg/hr. Titrate as needed for pain control.
- Insert an indwelling catheter.
- Insert orogastric or nasogastric tube and attach to low intermittent wall suction.
- Type and Crossmatch 2 Units of packed red blood cells, transfuse if hemoglobin is less than 7 g/dL.
- ICU Standard Emergency Care Protocol.

4. The nurse completes an assessment on Gerald. For each assessment finding, list why it is concerning.

1. Blood glucose.
2. Arousable, does not follow commands.
3. Lung sounds with crackles bilaterally.
5. Respiratory rate.
6. Deformity right lower extremity.
5. Gerald’s blood glucose on arrival to the intensive care unit is 520 mg/dL. What rate will the nurse start the regular insulin drip?

1. 2 units per hour.
2. 4 units per hour.
3. 6 units per hour.
4. 8 units per hour.

6. The nurse obtains additional information, documented in the chart on the left. Determine if the findings are related or not related to his current trauma situation.

<table>
<thead>
<tr>
<th>Medical History:</th>
<th>Finding</th>
<th>Related</th>
<th>Not Related</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 2 diabetes mellitus, alcoholism, smokes tobacco</td>
<td>Cardiac rhythm: Sinus Tachycardia with premature ventricular contractions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vital Signs:</td>
<td>Hyperglycemia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99.7°F (°C); pulse: 114; respiratory rate 34; 88/40 (56)</td>
<td>Respiratory acidosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iStat values:</td>
<td>Cool, clammy skin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hemoglobin 6.2 g/dL, K+ 3.2 mEq/L</td>
<td>Urine output 15 mL/hour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arterial Blood Gas:</td>
<td>Jaundice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH 7.21</td>
<td>Weak pulse right foot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO₂ 65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCO₃ 24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>paO₂ 58</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. **THIN Thinking Time!**

Reflect on the nurse’s collection of information for Gerald and apply THIN Thinking.

T - 

H - 

I - 

N - 

Scan to access the 10-Minute Mentor on THIN Thinking.
8. Based on the admission assessment and related information provided, what hypothesis can the nurse make?
   1. Vital signs are stabilizing.
   2. The respiratory condition is improving.
   3. Client’s vital signs indicate possible shock.
   4. The client is compensating effectively for loss of volume.

As Gerald’s condition is deteriorating, the nurse receives prescriptions from the provider to complete as quickly as possible.

9. **Explain the presenting symptom(s) that support(s) the need for each of the prescriptions.**
   Then describe why the prescription is indicated.

<table>
<thead>
<tr>
<th>Presenting Symptom</th>
<th>Prescription</th>
<th>Why is it needed?</th>
</tr>
</thead>
</table>

The nurse begins to complete the prescriptions for Mr. Luna as quickly as possible to help stabilize his condition. The nurse is planning to prepare the norepinephrine. While the nurse is in the medication room, a nurse colleague recommends that it would be essential to consider asking the provider for an order to administer furosemide after the blood transfusion is completed. The nurse consults materials from a drug reference.
### Norepinephrine

**Classification:** Vasopressor. Alpha and Beta-agonist.

**Indications:** To restore blood pressure in acute hypotension or severe hypotension during cardiac arrest.

**Dosage:** 2-12 mcg/minute by intravenous infusion, average dose is 2-4 mcg/minute.

**Administration:** Use a central venous catheter to minimize the risk of extravasation. Use an infusion pump. Monitor blood pressure frequently using arterial line if possible.

**Incompatibilities:** Alkalis, Iron salts, oxidizers, regular insulin, and thiopental.

**Side effects:** Headache, anxiety, bradycardia, severe hypertension, arrhythmias, ischemic injury, tissue irritation, necrosis and gangrene with extravasation.

**Precautions:** Contraindicated for clients with hypoxia, hypercarbia, and hypotension resulting from blood volume deficit.

**Nursing Considerations:** The drug is not a substitute for blood or fluid replacement. Gradually slow infusion rate when stopping the medication.

### Furosemide

**Classification:** Diuretic.

**Indications:** Acute Pulmonary edema, Hypertension.

**Dosage:** 40 to 80 mg intravenous injected slowly over 1-2 minutes. The maximum dose is 200 mg/dose.

**Administration:** For direct infusion, if high dose, dilute with saline, D5W, or lactated ringer solution. Onset is within 5 minutes when administering intravenously. May cause ototoxicity.

**Incompatibilities:** Acidic solutions, amrinone, ciprofloxacin, milrinone.

**Side effects:** Orthostatic hypotension, weakness, volume depletion and dehydration, hypokalemia, hyponatremia, hyperglycemia.

**Precautions:** Can cause severe diuresis with water and electrolyte depletion.

**Nursing Considerations:** Monitor fluid intake and output. Monitor glucose level in diabetic clients. Watch for signs of hypokalemia such as muscle weakness and cramps.

---

10. The nurse reviews material for the norepinephrine ordered. Highlight the key information in the reference that the nurse should consider with the administration of norepinephrine. Record the nurse’s decisions regarding about administering the medication.

---

The nurse colleague recommends that furosemide may be needed since the client is receiving a blood transfusion. Highlight the reasons why the nurse will ask or not ask the provider for a prescription to administer furosemide for this situation.

---

The nurse prepares the norepinephrine infusion in case it will be needed urgently, but has not started it. An updated assessment for Gerald is documented on the next page.
**INTENSIVE CARE RECORD**

<table>
<thead>
<tr>
<th>Lab</th>
<th>Normal</th>
<th>Nov. 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood Pressure</td>
<td></td>
<td>80/50 (60)</td>
</tr>
<tr>
<td>Pulse</td>
<td></td>
<td>115</td>
</tr>
<tr>
<td>Respiration</td>
<td></td>
<td>36</td>
</tr>
<tr>
<td>Temperature</td>
<td></td>
<td>100.1°F (37.8°C) Temporal</td>
</tr>
<tr>
<td>Pain</td>
<td></td>
<td>Unable to assess</td>
</tr>
<tr>
<td>Central Venous Pressure</td>
<td>2 – 8 mmHg</td>
<td>1 mmHg L</td>
</tr>
<tr>
<td>Hemoglobin</td>
<td>12 – 17 g/dL</td>
<td>5.8 L</td>
</tr>
<tr>
<td>Platelets</td>
<td>150,000 - 350,000 μL</td>
<td>75 L</td>
</tr>
<tr>
<td>White blood cells</td>
<td>4,000 - 10,000 μ/L</td>
<td>14.8 L</td>
</tr>
<tr>
<td>Potassium</td>
<td>3.5 - 5.0 mEq/L</td>
<td>3.0 L</td>
</tr>
<tr>
<td>Sodium</td>
<td>136 - 145 mEq/L</td>
<td>132 L</td>
</tr>
<tr>
<td>Glucose</td>
<td>70 - 100 mg/dL</td>
<td>323 H</td>
</tr>
<tr>
<td>Blood urea nitrogen</td>
<td>8 - 20 mg/dL</td>
<td>85 H</td>
</tr>
<tr>
<td>Creatinine</td>
<td>0.7 - 1.3 mg/dL</td>
<td>2.8 H</td>
</tr>
<tr>
<td>Albumin</td>
<td>3.5 - 5.0 g/dL</td>
<td>2.2 L</td>
</tr>
<tr>
<td>Total Protein</td>
<td>6 - 7.6 g/dL</td>
<td>4.3 L</td>
</tr>
<tr>
<td>Prothrombin</td>
<td>11 - 12.5 sec</td>
<td>37 H</td>
</tr>
<tr>
<td>INR</td>
<td>0.8 – 1.1</td>
<td>3.4 H</td>
</tr>
<tr>
<td>AST</td>
<td>0 - 35 U/L</td>
<td>142 H</td>
</tr>
<tr>
<td>ALT</td>
<td>0 - 35 U/L</td>
<td>136 H</td>
</tr>
<tr>
<td>Troponin</td>
<td>&lt; 0.10 ng/mL</td>
<td>0.2 H</td>
</tr>
<tr>
<td>Arterial Blood Gas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>7.35 - 7.45</td>
<td>7.11 L</td>
</tr>
<tr>
<td>pCO₂</td>
<td>35 - 45 mmHg</td>
<td>85 H</td>
</tr>
<tr>
<td>HCO₃</td>
<td>22 - 26 mEq/L</td>
<td>18 L</td>
</tr>
<tr>
<td>paO₂</td>
<td>80-100 mmHg</td>
<td>59 L</td>
</tr>
</tbody>
</table>

**Respiratory Assessment**
Intubated with #8.0 oral endotracheal tube measuring 23 cm at the lip line. Vent settings unchanged since admission.

**Cardiac Assessment**
Peripheral pulses weak and thready, Capillary refill > 3 seconds, Mean arterial pressure 60.

**Neurological Assessment**
Arousable, pupils equal and reactive to light, moves upper extremities.

**Musculoskeletal Assessment**
Right lower extremity with a splint in place, unable to assess movement and sensation, weak pedal pulse.

**Chest X-ray**
Infiltrates in bilateral lung fields.
Case 6: Emergency Response Planning

**Related Concepts:** Perfusion, Respirations, Hormonal Regulation
**Threaded Topics:** Medication Prioritization, Electronic Medication Error, Prioritization, Triage

When multiple victims of an accident or disaster are identified at the scene or a care facility, the nurse is faced with the challenge of triage. The goal is to save and care for as many victims as possible by identifying who needs to be cared for first, second, third and so on. Triaging mass emergencies, such as car accidents, is done differently than the process of prioritization that is completed in acute care facilities. When multiple victims are present, the nurse or first responder will identify the victims with the most severe injuries who need care first, or they may not survive. Conversely, those victims who are dead and dying will not be the focus of attention or resources.

A school bus is headed to a local museum for a 3rd-grade field trip. On the bus are the driver, two teachers, three parents, and 30 students. On the way to the museum, it starts to rain, and the bus driver asks the children to keep the noise down since the weather is worsening. At that moment, an oncoming semitrailer truck starts to slide and hits the school bus head-on. A nurse is driving by and quickly stops to help.

While approaching the vehicles, the truck driver is getting out of the vehicle. The school bus driver’s head is down, and visible blood is noted around her. The back door of the bus is opened, and multiple children started jumping out, screaming.

1. **When arriving at the scene of an accident, what is the nurse’s most important concern?**
   1. Determining how many people have injuries.
   2. Identifying the location of the accident.
   3. Determine if it is safe to enter the accident scene.
   4. Find the victim that has the most severe injury.

2. **Put in order the triage tagging system listing the most critical to the least critical.**

   , _______, _______, _______.
   1. Minor or green tag.
   2. Delayed or yellow tag.
   3. Dead/Dying or black tag.
   4. Emergent/Immediate or red tag.
3. Which victim should be tagged delayed or yellow?
   1. Child with a laceration on the right arm.
   2. Adult with a deformed left leg.
   3. Child having pain in the left arm.
   4. Adult with shortness of breath and chest pain.

4. The nurse is asked to triage victims using triage tags. What triage category is appropriate?

<table>
<thead>
<tr>
<th>Triage Tag: No. 3542</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: _______________</td>
</tr>
<tr>
<td>Address: ____________</td>
</tr>
<tr>
<td>Phone #: ____________</td>
</tr>
</tbody>
</table>

**Major Injuries:**
- Oriented
- Disoriented
- Unconscious

<table>
<thead>
<tr>
<th>Time</th>
<th>Pulse</th>
<th>B/P</th>
<th>Respiration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Allergies:**
- Dead or Dying
  - No respirations after head tilt
- Immediate
  - Respiratory rate over 30
  - Capillary refill over 2 seconds
  - Mental Status: Unable to follow simple commands
- Delayed
- Otherwise
- Minor
  - Move the walking wounded

1. The semi driver is walking over to the first responders crying and saying that he is so sorry, but his truck lost control, and he had no way to stop.
   Triage Tag: ________________

2. The bus driver was carried out and positioned on the ground for triaging. He is unconscious and is not breathing.
   Triage Tag: ________________

3. One of the children that was able to climb off the bus and walk to the minor injury care area is now confused and will not follow commands. A large bruise is noted on her forehead.
   Updated Triage Tag: __________

4. An adult on the bus is yelling for help. She is holding her chest. On closer assessment, a large contusion is noted on the left chest with paradoxical chest wall movements. Her respiratory rate is 34 breaths per minute.
   Triage Tag: ________________
5. When the first victim arrives at the hospital emergency department, this information is written on Triage Tag No. 5467. The first victim arrives with oxygen at 6 liters by nasal cannula and normal saline 0.9% running wide open. What should be the nurse’s first action?

1. Call a code blue.
2. Apply a simple mask at 10 liters.
3. Start a large bore peripheral intravenous line.
4. Call for a stat chest x-ray at the bedside.

<table>
<thead>
<tr>
<th>Time</th>
<th>Heart Rate</th>
<th>Blood Pressure</th>
<th>Respiratory Rate</th>
<th>Oxygen Saturation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>100</td>
<td>106/50 (69)</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>1015</td>
<td>112</td>
<td>84/46 (59)</td>
<td>35</td>
<td>89%</td>
</tr>
</tbody>
</table>

6. **NurseThink® Prioritization Power!**
Reflect on Rose’s assessment findings and identify the **Top 3 Priority** concerns.

1. 
2. 
3. 

7. **What critical labs and tests should be ordered for Rose?** Select all that apply.

2. Complete blood count.
3. Coagulation labs.
4. Arterial blood gas.
5. Venous Doppler study.
6. Abdominal CT scan.
Chapter Exemplars

Chapter 5: Sexuality: Reproduction / Sexuality
Case 1: Infertility; Conception; Miscarriage; Domestic Violence
Case 2: Pregnancy; Gestational Diabetes; Vaginal Delivery; Newborn Care; Maternal Health

Chapter 6: Circulation: Perfusion / Clotting
Case 1: Acute Myocardial Infarction
Case 2: Hypertension; Heart Failure;

Chapter 7: Protection: Immunity / Inflammation / Infection
Case 1: Hip Fracture; Perioperative; Catheter Associated Urinary Tract Infection
Case 2: Severe Allergic Reaction; Appendicitis; Pediatric

Chapter 8: Homeostasis: Fluid and Electrolyte Balance / Acid-Base Balance
Case 1: Aspirin Toxicity; Blood Gases; Older Adult
Case 2: Diabetes; Renal Failure;

Chapter 9: Respiration: Oxygenation / Gas Exchange
Case 1: Emphysema; Blood Gases
Case 2: Pneumonia; Pleural Effusion; Chest Tube; Pediatric

Chapter 10: Regulation: Cellular / Intracranial / Thermo
Case 1: Melanoma; Central Line; Death and Dying
Case 2: Brain Injury; Ventilator; Seizure;

Chapter 11: Nutrition: Digestion / Elimination
Case 1: Diverticular Disease; Intestinal Obstruction; Nasogastric Tube
Case 2: Hepatitis; Liver Failure; Pediatric

Chapter 12: Hormonal: Neuroendocrine / Glucose Regulation / Metabolism
Case 1: Metabolic Syndrome; Type 2 Diabetes; Insulin Dependence
Case 2: Pituitary Tumor Removal; Perioperative

Chapter 13: Movement: Mobility / Sensory / Nerve Conduction
Case 1: Parkinson's Disease; Fall Risk; Fracture
Case 2: Paraplegia from Fracture

Chapter 14: Comfort: Pain / Tissue Integrity / Fatigue
Case 1: Pressure Ulcers; Confusion; Older Adult
Case 2: Burns; Pain Management; Perioperative

Chapter 15: Adaptation: Stress / Violence / Coping / Addiction
Case 1: Obsessive Compulsive; Ineffective Coping; Mental Health
Case 2: Opioid Addiction; Professional Role; Mental Health

Chapter 16: Emotion: Mood / Anxiety / Grief
Case 1: Anxiety; Loss; Mental Health
Case 2: Bipolar; Depression; Suicide; Mental Health

Chapter 17: Cognition: Cognitive Functioning
Case 1: Confusion; Dementia; Older Adult
Case 2: Brain Attack

Chapter 18: Multi-Concept Clients
Case 1: Depression; Sexual Identity; Diabetes; Crohns; Pediatric
Case 2: Fibromyalgia; Hypothyroidism; Cushing’s Disease; Diabetes; Hypertension; Anxiety; Depression
Case 3: Lung Cancer; Liver Metastasis; GI Bleed; Transfusion
Case 4: Hypertension; Diabetes; Acute Kidney Injury; Heart Failure; Implantable Cardioverter Defibrillator
Case 5: Trauma; Ventilator; Blood Transfusion; Cardiac Arrest; Multi-Organ Failure
Case 6: Triage of Mass Victim Event; Pediatric
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