Title: Critical Thinking/Clinical Reasoning Module

Learning Objectives:

Upon completion of this education module, the newly licensed registered nurse will:

1. Define critical thinking/clinical reasoning.
2. Describe what critical thinking is and how it relates to the practice of nursing.
3. Participate in simulated patient scenarios, successfully assess the patient and treat with existing orders and nursing interventions or call the primary care provider to report and request new orders.
4. Utilize a framing-the-issue process to critically think through a case study.

Interactive Exercises:

1. Simulated patient scenario
   a. Utilizing a high fidelity human patient simulator or a manikin, role play the following 3 scenarios. (Suggested resource: nursing lab of a school of nursing in the area.) within The preceptor will play the part of the patient. The SBAR format is to be integrated into these scenarios.

   Scenario # 1 – 78 y. old patient, who is hard-of-hearing, admitted for shortness of breath, possible pneumonia and urosepsis. Patient was transferred from a nursing home. It is the start of the shift. The nurse walks in the room to find the patient slumped down in the bed, 02 tubing is off, the bed linens are skewed and the patient is minimally responsive. The patient is to receive pre-breakfast medications.

   Identify the priority assessment. What are the probably assessment findings? What actions should the nurse take? What is the priority problem? Will the nurse give the medications?

   The patient then proceeds to attempt to get out of bed, is combative and does not respond to the nurse’s questioning. The patient continues to call out “nurse, nurse”. The patient has had an episode of fecal incontinence.

   What may be the issue? Does the nurse discover the incontinence? Does the nurse call for assistance or attempt to handle the situation by herself?

   Other activities to integrate in this scenario: new physician orders to prepare the patient for a colonoscopy (an enema is to be given, which the nurse is told to designate to the UAP), the client’s oxygen saturation remains below 90% and the respiratory problems worsen – the nurse has no orders other than the patient is to receive oxygen. The patient is responsive at times.
Scenario # 2 – 28 y. old male with pancreatitis, due to alcohol addiction. It is the start of the shift. The patient demands to go downstairs to smoke despite orders for bedrest and no smoking. Patient is on nicotine patches, is NPO as he is receiving TPN. Patient is demeaning and rude.

How does the nurse handle the communication? Does she allow the patient to get up and go outside to smoke?

The nurse discovers a bottle of alcohol in the patient’s bedside stand, as well as a large amount of money, cigarettes, and a bag of snack foods.

What is the priority action? How does the nurse communicate with the patient about these issues? Identify a physical and psychosocial issue to be addressed.

Other activities that could be integrated into this scenario: patient has episode of vomiting blood and becomes very anxious, demanding pain medication and using his call light continuously. Nurse has no orders for pain medication.

Scenario # 3 – 68 y. old male with a history of CAD, angina, and obesity. The patient has refused to shower, has intense body odor and has been non-compliant with his medication. His telemetry has been removed earlier in the shift and he is to be discharged to home. The nurse has received discharge orders, is to shower the patient prior to discharge, and review dietary teaching.

How will the nurse prioritize her activities?

As she begins, the patient has an episode of chest pain, becomes diaphoretic and short of breath.

What does the nurse do? What is the priority action? Does she call for assistance?

b. Review the decision points that occurred in these scenarios. The nurse is to evaluate her performance. (See framing criteria which follows.)

c. If there are several newly licensed graduate nurses in the orientation group, they should then meet in a group after each have completed the scenarios, to discuss their performance. The preceptor should offer constructive criticism.

2. Framing-the-issue process (Kennedy, 2010).

Review the following scenarios (from the Physician’s Orders Education Module) and then evaluate your decisions and actions using the criteria below. (Other scenarios can be found in the Physician’s Orders module that could be used specifically in an assisted living community.)
**Scenario #1 (Adult Med-Surg)**

Mr. O is 63 years old. He was dizzy and light-headed at home and almost fell. His wife brought him to the ER. He was admitted with syncope. He has been previously treated at this hospital for congestive heart failure and acute myocardial infarction. He feels like he is “pretty healthy” as he only takes NSAIDs for chronic back pain. He arrived on the unit at 1600. His nurse is Jenny, RN. She assessed: BP 138/84, T 98.6, P 76 and regular, RR 16. Lab test results were normal. The IV infiltrated during transport. She started a new IV and put a warm compress on the old site. She reported off to Ben, RN at 1900. At 2130, the UAP found Ben and told him that he had just helped get Mr. O off the bedpan. Mr. O had a large, black tarry stool and was complaining of not feeling well. Ben went to assess Mr. O: BP 94/66, P 114, RR 24, O₂ sat 97%. He was pale and his skin was clammy. Mr. O said he just didn’t feel well and could not get comfortable. He asked if he could have something for his belly. “It is really hurting!” Ben assessed his abdomen and found that it was distended and Mr. O had diffuse abdominal pain. He rated his pain a 6 on a scale of 1-10.

**Scenario #2 (Cardiology)**

Mrs. S is a 72 year old who lives alone and is very independent. She was shoveling snow on Monday morning after the big storm. While shoveling she developed a crushing sensation in her chest. This is not the first time she has had chest pain. She has a history of angina, though she has never had a heart attack. She takes an aspirin every day and keeps nitroglycerin tabs in her pocket “just in case”. She took a nitroglycerin tab and an aspirin and drove herself to the hospital. Mrs. S was admitted to the hospital on Monday afternoon with chest pain, rule out myocardial infarction. She has been a patient on cardiology for 4 days. She has had no chest pain since Monday and has been ruled out for a heart attack. She has an IV of 0.9% NS at TKO and expects to go home in the morning. At 2200, Mrs. S put her call light on. Her nurse Sue, RN, answered the call light. Mrs. S stated that she was having chest pain and rated it a 9/10 on the pain scale. Sue had the UAP check her vitals and call the EKG technician to run a monitor strip. Sue, RN, went to get her a nitroglycerin tab. BP: 90/52, P 120, RR 36 with labored breathing, O₂ sat 85% on room air. Her EKG shows ST changes. Sue gave Mrs. S a nitroglycerin tab sublingually. There was no relief to her chest pain and her BP decreased to 80/52. Sue placed Mrs. S on oxygen at 2L and her O₂ sat improved to 91%. Mrs. S is very anxious and states she feels terrible. Sue increased her IV fluids to 100 mL/h and called the physician.

**Scenario #3 (Obstetrics)**

Margie, a 25-year-old primipara, is in the recovery room after a low forceps delivery of a nine pound, two ounce, term male. Margie plans to breast feed the baby. Forty-five minutes after delivery, Margie’s vital signs are BP 100/60, P 88 and RR 16. Her fundus is firm and is at the level of the umbilicus, no clots observed. She has a continuous trickle of bright red lochia. No change in perineal edema, ice pack applied and peripads changed. Peripads and chux weight indicate 300 mL blood loss. Fifteen minutes later the fundus is massaged and remains firm at umbilical level and midline. A constant trickle of bright red lochia persists with no clots expressed. Peripads and Chux weighed showing and additional 200 mL blood loss. Vital signs: BP 90/52, P 110 and RR 20.
Scenario # 4 (Respiratory)
Mr. Jones is a 35 year old and had a bowel resection 3 days ago. Yesterday morning it was noted that Mr. Jones required 4 L of oxygen to maintain SaO2 of 92%. His lung sounds were decreased in the bases, cough was weak and ineffective. He required much coaching to use his incentive spirometer, and was only able to generate inspiratory volumes of 400 mL. Mr. Jones was started on intermittent positive pressure breathing treatments to increase lung expansion. Today Mr. Jones states his pain is greatly reduced. He is able to use his incentive spirometer, and generate inspiratory volumes of greater than 1500 mL. His SaO2 is 94% on room air. He is able to produce a strong cough on command, and his lung sounds are clear in all lung fields.

Scenario # 5 (NICU)
Baby Z. is 3 weeks old infant in NICU. He was at 27 weeks gestation when delivered. He has been progressing well after a short period of CPAP and remains in 24% O2 support. He is receiving continuous tube feedings. He has demonstrated a steady weight increase. For the first time today, he has had episodes of apnea. When Sue, the evening nurse, came on and did her assessment she noted he was tachypneic with RR of 75. As she was documenting her assessment, Baby Z. had a episode of bradycardia and his O2 sat decreased to 75%. His heart rate returned to 130 with stimulation and Sue increased the oxygen to 28%. He also had some regurgitation of formula. His muscle tone is diminished and his coloring is mottled. She listened to his breath sounds and noted that they were equal and clear. His abdomen is soft and not distended. The day nurse reported that he had slept a lot today and his mother felt he wasn’t as alert as usual.

Scenario # 6 (Rehab)
Mr. D is a 55-year-old who was picking up a bag of cat food when he experienced pain to the low back and within an hour, the pain was radiating down the posterior aspect of the left leg and to the foot. He came in for an evaluation 2 days ago and was unable to complete the full evaluation because of pain. He had no weakness on evaluation but his left ankle DTR was slightly diminished. Both flexion and extension movements produced pain however flexion produced greater pain. No clear centralization was achieved. He returns today with a 9/10 pain. When he is placed on a bike to try a warm up, he noticed that he didn’t feel the seat very well. He is a hesitant to ride and distressed because last night he had an episode of bowel incontinence. He feels this happened because he has been “pushing so hard trying to urinate the last couple days, he just pushed too hard when he coughed.” He feels that if the bike makes him cough it may happen again. The bike does not change his pain and he has no demonstrated weakness today.
On further treatment, repeated movements did not improve his pain or symptoms. He does not centralize and continues to report numbness to his inner legs bilaterally and groin area. His left leg pain continues to radiate down the posterior thigh and to the foot

a. Consider the following in the evaluation process.
   i. Decide what the issue is and define it clearly.
   ii. Determine whether this issue is the most important one to address.
   iii. Define the questions related to the issue.
   iv. Identify relevant information and assess its relevance and accuracy.
   v. Develop well-reasoned conclusions, check for inferences.
vi. Develop solutions and test them against identified concepts, criteria and standards.

vii. Check your assumptions with your preceptor and/or other group members.

viii. Think through the implications and consequences of potential solutions.

ix. Discuss the interdisciplinary nature of the decision-making process and in selecting the solution.

x. Choose a solution. (Kennedy, 2010, pp. 31-32)

b. After completion, discuss how decisions should be made and the process used, with the preceptor. This can also be a small group activity for new nurses orienting to the same unit. They should complete the case studies independently and discuss them as a group. Participation should be expected from all group members.

c. Consider a patient recently cared for during the orientation process. Describe the use of SBAR or a similar communication tool. Discuss how decisions were made, your actions and use the same criteria to evaluate the care given to this patient.


4. Write a nursing philosophy statement to reflect one’s own nursing practice. (See Appendix A, Hernandez, 2009.) Discussion should take place between new nurse and preceptor and/or nurse manager. This should include reflection on the mission statement of the facility or unit. Those involved in the discussion should be encouraged to complete the activity on their own and discuss findings with a nurse mentor. This philosophy statement should be sealed in an envelope upon completion of this initial discussion and then returned to the new graduate prior to completion of the first annual evaluation. This could form the basis for this evaluation or be a focus for reflection on the nurse’s first year of experience.

5. Review the nursing care planning process used in the facility.

   a. How is it like or different from what you did during your nursing education program? Who develops the care plan? How is it reviewed and updated? How is it evaluated?

   b. Are the decision points different as a new graduate nurse than they were when you were a student? How? Why? What is different?

   c. How do you transition to planning care or completing a care plan on one or multiple patients, when you have no pre-lab activity? Is this easier, more difficult?

6. Questioning. Can be used during patient care time (outside patient room) or during debriefing time after the shift has ended. The preceptor asks a series of questions about the care being given and the new nurse is expected to respond, drilling down until the new nurse has no answers and this results in new questions being posed by the new graduate. This is where more learning and understanding can occur. Utilize questions

7. Complete the following elearning program if made available by your facility.  
   http://learningext.com/hives/a0f6f3e8a0/summary

**Suggested References**


**Resources**


Appendix A

Philosophical Statement Instruction Guide

This is your own personal belief statement about nursing, therefore do NOT use any references. You articulate your beliefs, assumptions, and values related to the four concepts. The questions below are designed to help get ideas flowing and are not the only focus of your statement.

**Nursing (i.e., nursing actions)**
What is your definition of nursing?
Is the concept of nursing an art, a science, or both? Is it a process or a product (set of tasks)?
What is nursing mainly (e.g., caring, therapeutic healing, building relationships)?
What is the role reflected in nursing (e.g., doing for, being with [being present with], working with?
Where does ethics fit in?
Who or what is the object of nursing’s concern?

**Health**
What is your definition of health (e.g., includes absence of disease, ability to perform social roles)?
Is health on a continuum?
Can clients have a chronic illness and still be termed healthy in your definition of health?
What if the client’s view of health and your view of health are different?

**Person**
What is your definition of person (e.g., set of behavioral systems, biopsychosocial and spiritual being, energy field)?
Who is the person being nursed (e.g., client, family, community)?

**Environment**
What is it? Where is it found?
Are there different components to environment (e.g., emotional, spiritual, social, cultural, mainly physical)?
Is environment separate from person?
What is the nurse’s role in terms of environment?
Are there internal and external environments, or is what is internal to a person part of the person?

**Descriptions and Examples**
This philosophical statement is a statement of beliefs. However, for the purpose of articulating your beliefs, these should be divided into three types: definitions and descriptions, assumptions, and values. Each of these should be written in separate paragraphs to ensure clarity and comprehensiveness.

**Beliefs:** This should be a succinct definition (one or two sentences), followed by a broader description. For example, if part of your definition of person was the person as a biopsychosocial and spiritual being, then each of the component parts (e.g., spiritual being) would be described more fully.
Assumptions: A given, something that you take for granted that it is true. Examples are: Humans are rational beings. Individuals desire to work collaboratively with their nurses.

Values: Something you consider good (i.e., desirable, worthy, or of esteem). Examples: All persons are of value and are worthy of respect. Clients should be treated with dignity. Confidentiality and privacy are essential throughout off interactions with clients. Persons should be given choice in their treatment regimens.

(Hernandez, 2009, p. 344)