

# Developing Critical Thinking

## *Learning and Development Curriculum*

## Pediatric Learning Solutions



Identify the competency, performance criteria and learning needed to develop critical thinking and clinical reasoning skills. Use the foundational content as well as recommended activities for ongoing learning and role support.

This learning and development curriculum contains:



# Competency

Demonstrate critical thinking skills and apply to clinical practice, as evidenced by the use of sound clinical reasoning and judgment in the provision of evidenced-based patient care.

## Performance Criteria

1. Explain the importance of critical thinking in healthcare, listing characteristics of a critical thinker.
2. Demonstrate an understanding of the difference between information and inferences drawn from details presented.
3. Distinguish good clinical reasoning from poor or weak clinical reasoning.
4. Accurately gather all necessary information and then clearly express, in own words, the question or issue to reason or solve.
5. Critically analyze and prioritize clinical information of a given patient and/or scenario, accurately identifying changes in clinical status and the anticipated outcome.
6. Practice reflection to help identify own strengths and weaknesses, to allow for improvement in decision making.
7. Demonstrate the clinical judgment components of the Tanner Model of Clinical Judgment:
  - a. Noticing
  - b. Interpreting
  - c. Responding
  - d. Reflecting
8. Implement nursing clinical judgment when making practice decisions.

## Recommended Learning Activities for Bedside Clinicians

The following learning and practice activities have been curated/selected to help promote and enhance the bedside clinician's critical thinking and clinical reasoning and judgment skills. All handouts, PowerPoints and additional resources are available on the [PLS Community page](#).

### *Pediatric Learning Solutions' Courses*

1. Clinical Delegation (available in organization's LMS)
2. PLSim Pediatric Deterioration Recognition and Escalation of Key Findings (available on the [PLS Pediatric Acute Care Library community page](#), *login required and only available to organizations which purchase the library*).

### *Pediatric Learning Solutions' App Tools*

#### **PLS Case Studies:**

1. Jaundice, Fatigue and Nosebleeds in a 4-year-old (*Emergency Department, PICU*)
2. Respiratory Distress in a 34-week neonate (*NICU*)
3. Respiratory Distress in an Adolescent (*Emergency Department, PICU*)
4. Abdominal Pain and Vomiting in a 10-year-old (*Emergency Department, PICU*)

### *Instructor-Led and/or Simulation Activities*

1. Float Pool Escape Room ([Available in the Pediatric Acute Care Library Toolkit](#), *login required and only available to organizations which purchase the Pediatric Acute Care Library*).



3. PLSim Pediatric Deterioration Recognition and Escalation of Key Findings (direct link can be found on the [PLS Pediatric Acute Care Library community page](#), *login required and only available to organizations which purchase the library*).
4. Case Studies and/or Scenarios (available on the [PLS Community Page](#) under each Library “Resources” tab):

**Acute Care:**

- a. Fluid and Electrolyte Management: Dehydration Case Studies
- b. Fluid and Electrolyte Management: Replacement Therapy Case Studies
- c. Behavioral Safety Education Scenarios
- d. Case Studies in Respiratory Illness
- e. Rapid Response: Management of the Pediatric Patient Case Scenarios
- f. Status Epilepticus Case Study

**PICU/ED:**

- a. Sedation and Analgesia in the ICU
- b. Metabolic Disorders Jeopardy Game (*also for NICU*)
- c. Acute Care Cardiology Escape Room Documents (*designed for cardiac stepdown or ICU*)
- d. Cardiac Arrhythmia Puzzle Handouts and Answer Keys
- e. Cardiac Arrhythmia Riddles and Answer Keys

**NICU:**

- a. Glucose Homeostasis
  - b. Mechanical Ventilation
  - c. Neonatal Seizures Simulation
  - d. Neonatal Skin Care
  - e. Respiratory Distress Syndrome
  - f. Thermoregulation of the Newborn (*clinical scenario and skills demonstration*)
  - g. What’s Right What’s Wrong (*proper developmental positioning visuals*)
5. Children’s Mercy Kansas City’s BLACK CLOUD™ Nursing Critical Thinking Game: Board game designed to boost critical thinking skills for nurses in medical-surgical and critical care settings. Navigate through hypothetical patient scenarios and unexpected challenges while honing delegation and prioritization abilities. Engage in dynamic discussions to practice the art of juggling multiple tasks and patient acuities. Not a substitute for medical advice or training. [Available for purchase here.](#)

## Self-Learning Activities

**Web resources:**

1. [Introduction to Critical Thinking and Clinical Reasoning for Nursing Students](#): Outlines seven steps to critical thinking including video application opportunities with case scenarios.

**Other**

1. Learner Wish List: Keep a list of conditions and/or types of patients you want to know more about or need more help with and ask to be assigned to them with your preceptor.



# Recommended Learning Activities for Educators, Preceptors and Managers

The following learning and practice activities have been curated/selected to provide resources to educators, preceptors and managers to help in their efforts to promote and enhance the bedside clinician's critical thinking and clinical reasoning and judgment skills. All handouts, PowerPoints and additional resources are available on the [PLS Community page](#).

## Competency

Utilize a variety of learning strategies to promote the acquisition and application of critical thinking, clinical judgment and reasoning skills among bedside clinicians providing direct patient care.

## Performance Criteria

1. Explain the importance of critical thinking in healthcare, listing characteristics of a critical thinker.
2. Demonstrate an understanding of the difference between information and inferences drawn from details presented.
3. Distinguish good clinical reasoning from poor or weak clinical reasoning.
4. Practice reflection to help identify own strengths and weaknesses, to allow for improvement in decision making.
5. Demonstrate the clinical judgment components of the Tanner Model of Clinical Judgment:
  - a. Noticing
  - b. Interpreting
  - c. Responding
  - d. Reflecting
6. Use coaching questions and other strategies to assess and promote critical thinking.
7. Direct learners/bedside clinicians to available resources that provide practice opportunities to apply and enhance critical thinking and clinical judgment skills. (see resources listed under [Recommended Learning Activities for Bedside Clinicians](#)).

## *Pediatric Learning Solutions' Trainings*

### Webinars

1. Strategies for Fostering Clinical Reasoning and Judgment in Clinical Practice, Parts 1 and 2, presented by Mary Ann Jessee, PhD, RN (2023 PLS Webinar Recording—available on the [PLS Critical Thinking Resources page](#)).

## *Self-Learning Activities*

### Articles, Tools and Other Web resources:

1. Introduction to Critical Thinking and Clinical Reasoning for Nursing Students  
Outlines seven steps to critical thinking including video application opportunities with case scenarios. <https://nursehub.com/courses/critical-thinking/lessons/critical-thinking/topics/critical-thinking-an-overview-2/>
2. Competency-Education and the Revised AACN Essentials: Engaging Practice Leaders. By Jackson, M. (2023). Nurse Leader, 22(1), p50-54. [https://www.nurseleader.com/article/S1541-4612\(23\)00238-0/fulltext](https://www.nurseleader.com/article/S1541-4612(23)00238-0/fulltext)



3. Why Learning to Think Critically is Hard. Emerging RN Leader. By Sherman, R. (2024). Emerging RN Leader. <https://emergingrnleader.com/why-learning-to-think-critically-is-hard/>
  - Includes coaching questions to promote critical thinking.
4. Lasater Clinical Judgment Rubric
  - a. [https://nursesupport.org/assets/files/1/files/nspii/lasaterhandout\\_rubric.pdf](https://nursesupport.org/assets/files/1/files/nspii/lasaterhandout_rubric.pdf)
  - b. <https://www.keithrn.com/2023/08/how-to-assess-clinical-judgment-using-a-case-based-rubric/>
  - c. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8253357/>
5. Tanner's Model of Clinical Judgment  
Provides a comprehensive framework for developing critical thinking and decision-making abilities. <https://simplenursing.com/clinical-judgment-in-nursing/>
6. Clinical Reasoning Competency Scale (CRCS)  
Assess bedside clinicians' clinical reasoning competency  
<https://bmcnurs.biomedcentral.com/articles/10.1186/s12912-023-01244-6>
7. Nursing Clinical Judgment Template  
Questions tool to promote clinical reasoning and judgment.
  - a. The Nursing Clinical Judgment Template  
[https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.aacnnursing.org%2FPortals%2F42%2FEssentials%2FDatabase%2FCJ\\_Template\\_NursingCJ.docx&wdOrigin=BROWSELINK](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.aacnnursing.org%2FPortals%2F42%2FEssentials%2FDatabase%2FCJ_Template_NursingCJ.docx&wdOrigin=BROWSELINK)
  - b. Using a Clinical Judgment Template to Examine Quality and Safety, American Association of Colleges of Nursing  
[https://www.aacnnursing.org/essentials/database/kit/i/c\\_cj\\_template\\_exam\\_q](https://www.aacnnursing.org/essentials/database/kit/i/c_cj_template_exam_q)
8. NCSBN Clinical Judgment Measurement Model: A framework to measure clinical judgment and decision making. <https://www.nclex.com/clinical-judgment-measurement-model.page>
9. How to Best Develop Nursing Students' Clinical Judgment Skills. By Swift, H. (2021). *Health*. Wolters Kluwer. <https://www.wolterskluwer.com/en/expert-insights/how-to-better-develop-nursing-students-clinical-judgment-skills>
10. Thinking Like a Nurse: A Research-based Model of Clinical Judgement in Nursing. By Tanner, C. (2006). *Journal of Nursing Education* 45, no. 6: 204-211.