

The AI Second Opinion Challenge

A ready-to-use clinical judgment activity for nursing students

**The goal is not to find the hidden AI mistake.
The goal is to decide what deserves your confidence—and defend why.**

October 2026 Educator's Toolbox Resource

The Digital Stethoscope | Charting the Course for AI in Nursing

Faculty Overview

The AI Second Opinion Challenge is designed to help students evaluate AI-generated clinical recommendations without assuming that AI is either automatically correct or automatically wrong. Students review a patient scenario, commit to an initial judgment about one AI recommendation, and then receive a second, contrasting but clinically plausible AI recommendation. They must compare the recommendations, identify assumptions and missing information, consider patient-safety risk, and decide what they would do as the nurse.

Suggested Uses

- Classroom clinical judgment activity
- Simulation prebrief or debrief
- Clinical post-conference
- Small-group discussion
- Online discussion or formative assessment
- Faculty development activity focused on AI literacy and clinical judgment

Suggested Student Learning Outcomes

- Evaluate AI-generated clinical recommendations using patient-specific assessment data.
- Identify assumptions, limitations, and missing information within an AI-generated response.
- Compare competing recommendations and determine what additional evidence or assessment is needed.
- Analyze the potential risks of accepting or rejecting an AI-supported recommendation.
- Defend a nursing decision using clinical judgment, evidence, patient context, and professional accountability.

Faculty Preparation

Give students the patient scenario and AI Recommendation A first. Ask them to complete Part 1 before revealing AI Recommendation B. This sequencing matters: students should commit to their own reasoning before seeing a second AI opinion. The case is intentionally designed so that neither AI response should be treated as the final clinical decision.

Student Activity: The AI Second Opinion Challenge

Patient Scenario

Maria Lopez is a 68-year-old woman admitted yesterday with community-acquired pneumonia. Her history includes hypertension and type 2 diabetes. She is receiving IV antibiotics and oxygen at 2 L/min by nasal cannula.

Finding	0800	1100
Temperature	38.1°C (100.6°F)	38.3°C (100.9°F)
Heart rate	96/min	112/min
Respiratory rate	20/min	26/min
Blood pressure	132/76 mm Hg	104/64 mm Hg
SpO ₂	94% on 2 L/min	92% on 2 L/min
Mental status	Alert and oriented	Alert; says she feels “more tired”
Urine output	Adequate overnight	150 mL since 0700

At 1100, Maria tells you, “I just don’t feel as good as I did this morning.” Her skin is warm. She has a productive cough and appears mildly short of breath when speaking. Her morning laboratory results include WBC $15.8 \times 10^9/L$, glucose 186 mg/dL, creatinine 1.2 mg/dL, and lactate 1.8 mmol/L.

AI Recommendation A

The patient shows expected physiologic stress associated with pneumonia, including fever, tachycardia, tachypnea, and mild hypoxemia. Continue prescribed oxygen and antibiotics, encourage pulmonary hygiene, administer antipyretics as ordered, and reassess vital signs and respiratory status in 30–60 minutes. Notify the provider if oxygen saturation falls below the ordered target, hypotension worsens, mental status changes, or other signs of clinical deterioration develop.

Part 1: Commit to Your Judgment

1. Do you agree with AI Recommendation A? Why or why not? Identify the patient data that support your position.

2. What is the AI assuming about this patient or her current condition?

3. What additional information would you want before acting on this recommendation?

4. What is the potential risk if you follow this recommendation and it is wrong? What is the risk if you reject it and it is correct?

5. What would you do next as the nurse? Defend your decision.

Part 2: A Second AI Opinion

After you have completed Part 1, review the second AI-generated recommendation below.

AI Recommendation B

The patient's trend is concerning for possible early clinical deterioration. The combination of increasing heart rate and respiratory rate, decreasing blood pressure, reduced urine output, worsening fatigue, and persistent oxygen requirement warrants prompt reassessment rather than waiting 30–60 minutes. Perform a focused respiratory and perfusion assessment, verify the vital-sign trends, review intake/output and recent medications, and promptly communicate the change in condition to the appropriate clinician or rapid-response resource according to facility policy. Continue ordered supportive care while additional evaluation is obtained.

Compare the Recommendations

1. Which recommendation do you find more convincing, if either? Why?

2. What does Recommendation A recognize well? What are its limitations?

3. What does Recommendation B recognize well? What are its limitations?

4. Did the second recommendation change your original thinking? If so, what changed it?

5. If two AI systems gave you different recommendations at the bedside, how would you decide what to do?

Your Final Decision

In 3–5 sentences, state what you would do as Maria’s nurse and defend your decision.

Faculty Answer & Discussion Guide

This case is not intended to produce a single scripted student response. The emphasis is on whether students recognize the significance of the patient's trend, seek appropriate additional information, avoid over-reliance on either AI recommendation, and articulate a safe next step.

Key Clinical Judgment Cues

- Heart rate increased from 96 to 112/min.
- Respiratory rate increased from 20 to 26/min.
- Blood pressure decreased from 132/76 to 104/64 mm Hg.
- SpO₂ decreased despite continued oxygen at 2 L/min.
- Urine output is reduced over several hours.
- The patient reports feeling worse and appears more fatigued.
- No single finding independently determines the response; the trend and overall clinical picture matter.

Recommendation A: Strengths and Concerns

Recommendation A appropriately recognizes pneumonia-related physiologic stress, supports continuation of ordered therapy, and identifies several escalation triggers. Its main limitation is the suggestion to wait 30–60 minutes for reassessment despite multiple concurrent changes. A strong student response should question whether the patient has already crossed the threshold for more immediate reassessment and communication.

Recommendation B: Strengths and Concerns

Recommendation B gives greater weight to the trend across several data points and appropriately emphasizes prompt focused reassessment and communication. It is still not a substitute for nursing assessment or local escalation criteria. Students should recognize that an AI recommendation cannot determine the complete clinical context, facility policy, provider plan, baseline status, or patient preferences unless those data are available to it.

What Strong Student Reasoning May Include

- Recognition that the pattern of change matters more than any single isolated value.
- A focused reassessment of respiratory status, perfusion, mental status, pain, and other relevant findings.
- Verification of vital signs and review of trends, intake/output, medications, orders, and recent interventions.
- Prompt communication or escalation based on reassessment findings and organizational policy.
- Continued attention to prescribed oxygen, antibiotics, and other ordered supportive care.
- Recognition that the nurse remains responsible for evaluating the patient and determining the appropriate next action.

Important Faculty Note

Avoid turning the debrief into “Recommendation B is the correct AI answer.” The educational value comes from showing students that a more persuasive AI response still requires verification, patient assessment, contextual knowledge, and nursing judgment. The student—not the AI comparison—must ultimately make and defend the decision.

Debriefing Questions

- What made one AI recommendation sound more authoritative or convincing than the other?
- Did the wording or confidence of either response influence your judgment?
- At what point did the patient trend become more important than any individual data point?
- What information did neither AI response have that could change your decision?
- How might automation bias influence a nurse who receives Recommendation A? Recommendation B?
- When is seeking another human perspective more useful than asking AI for another answer?
- How would you communicate your concern to another member of the healthcare team?
- What does professional accountability mean when AI contributes to a clinical recommendation?

Optional Extension: Change the Patient

After discussion, add one new piece of information and ask students whether it changes their decision.

Examples:

- Repeat blood pressure is 92/56 mm Hg.
- SpO₂ improves to 95% after repositioning and coughing.
- The patient becomes newly confused.
- The provider documented that the patient's baseline systolic blood pressure is 100–110 mm Hg.
- The patient states she does not want aggressive interventions and asks to discuss her goals of care.

Ask students: Does this new information change what you would do? Does it change how much confidence you place in either AI recommendation? What additional information do you need now?

AI Safety Pause

STOP – CHECK – THINK

STOP before acting on an AI-generated recommendation.

CHECK the patient, the data, the evidence, and what may be missing.

THINK about the consequences, your professional responsibility, and what you will do next.

Educational use only. This activity is designed for nursing education and is not a clinical decision-support tool or substitute for institutional policy, current evidence, or professional clinical judgment.