Teaching Strategies to Promote Clinical Judgement

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S St. Anselm's Virtual Conference 2021

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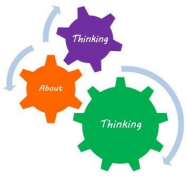
Metacognition

- Thinking about thinking
- Learning how to learn
- Active control over thinking processes in learning
- Deliberately teaching students how to approach thinking



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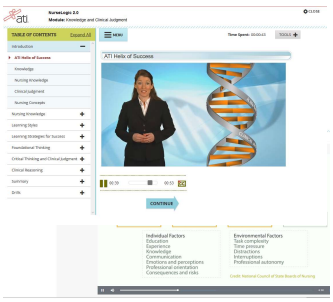
How can We Teach Metacognition?

- Deliberate explication of model
- Modeling thinking processes
- Providing practice opportunities for thinking

How can We Teach Clinical Judgement?

- Deliberate Explication of the model
- Modeling Clinical Judgement in classroom, clinical, and lab activities
- Providing practice opportunities in clinical, lab AND CLASSROOM!



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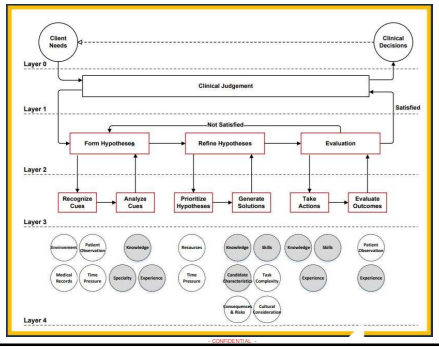
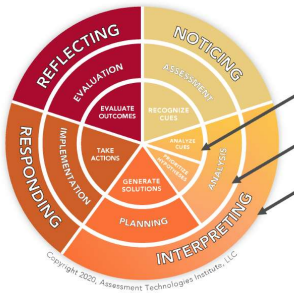
NCSBN Clinical Judgement MEASUREMENT Model



We do NOT need to teach the model!



Action Model (Cognitive Operations)

Nursing Process

Tanner Clinical Judgment Model

Case Study Example

Case Study

The nurse is caring for a 28-year-old client who is gravida 4, para 2, is at 40 weeks gestation and is in active labor.

Nurses' Notes

The client is receiving titrated intravenous oxytocin for augmentation of labor via the secondary line on an intravenous pump. The client is also receiving maintenance intravenous fluid of lactated Ringer's solution at 125 mL/hr via an intravenous pump. The client has a cervical dilatation of 5 cm and a cervical effacement of 100% with a fetal station of 0 in vertex presentation. Intact amniotic membranes are noted. Category I tracing of fetal heart rate (FHR) of 150 bpm, with moderate variability, and 3 accelerations of 15 bpm over the baseline lasting 15 seconds via external ultrasound. The client is experiencing contractions every 5 minutes, which are lasting 70 seconds with moderate intensity via tocotransducer. Vital Signs: HR of 88, BP of 115/78, RR of 15, T of 100.4°F (38.0°C). Has a continuous epidural infusion of 0.25% bupivacaine with fentanyl running at 10 mL/hr. Pain 0/10 at this time. Client states, "I had postpartum hemorrhage with my last vaginal delivery and I required a blood transfusion." Medical history of hypothyroidism and asthma.

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Enhanced Hot Spot Example

➢Click to highlight the findings that would require follow-up.

Case Study

Nurses' Notes

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Clinical Judgement: Recognize Cues/Analyze Cues

Using *Real Life Clinical Reasoning Scenarios*

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Lesson Plan for 90 minute In-class Respiratory Distress and Recognizing/Analyzing Cues Lesson

Objectives

1. Demonstrate mastery of respiratory alterations concepts
2. Apply metacognitive strategy of *Recognizing and Analyzing Cues* to patient problems

Activity	Who	What	How Measured	Time
Homework	Students	Complete ATI module in HealthAssess- Respiratory Complete ATI Skills Module- Oxygen Therapy Review Pharmacology Made Easy The Respiratory System: Introduction Read pgs. ### on respiratory management	10 question quiz	3 hours
Warm Up	Faculty	Administer 10 question quiz respiratory alterations		10 min
Review quiz	Faculty	Review answers as class and answer questions		5 min
Discuss Recognizing/ Analyzing Cues	Faculty	Lecture or review of metacognitive function using questions (see next slide)		15 min
Watch report and view transcript	Students	Decide which information is important break out into small groups to answer (use ZOOM break out rooms if online)	Participation, discussion threads	20 min
Debrief	Faculty and Students	Have students further pare down data to identify that which is of immediate concern (see discussion questions)	Participation, discussion thread evaluation, scores on	40 min

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Metacognitive

Clinical Judgment Functions (Nursing Process Steps)	*Expected Responses and Behaviors*
Recognize Cues (Assessment) Filter information from different sources (i.e., signs, symptoms, health history, environment).	• Identify relevant information related to the client's condition. • Use knowledge, experience and evidence to assess clients. • Use verbal, nonverbal, written, and electronic modes of communication. • Recognize relevant subjective/objective client data. • Identify subtle and apparent changes in client condition and related factors
Analyze Cues (Analysis) Link recognized cues to a client's clinical presentation and establishing probable client needs, concerns, or problems.	• Compare client findings to evidence-based resources and standards of care. • Analyze expected and unexpected findings in health data. • Anticipate illness/injury and wellness progression. • Identify client problems and related health alterations. • Analyze client needs. • Identify potential complications. • Identify how pathophysiology relates to clinical presentation. • Identify data that is of immediate concern.

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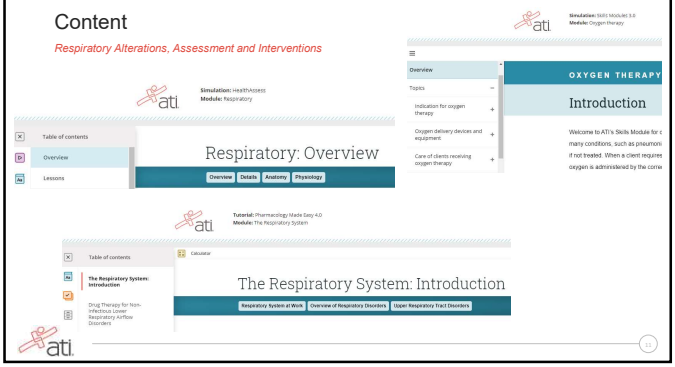
Content

Respiratory Alterations, Assessment and Interventions



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Small Group Activity

Report- Listen to the report from the ED nurse

(typing sounds) (phone rings) ALLYSON: Hello, this is Allyson, RN, General Medical Unit at the Medical Center. CINDY: This is Cindy in the Emergency Department. I'm sending you Mr. Gomez, a 68-year-old Latino gentleman. He came in with pneumonia and exacerbation of his COPD. His daughter found him on the floor at home, where he lives by himself. She said he was unresponsive. He recently lost his wife and there is a question of alcohol abuse. His temp is 99.2, pulse 100, respirations 36 and his sat is 91% on 5 liters of 02 per nasal cannula. His lung sounds are diminished in the bases. He has some occasional rhonchi, with wheezes in both the anterior and posterior upper lobes. His cough is productive of a greenish-yellow tenacious sputum. His blood pressure is 150 over 94. He denies pain. He appears anorexic although I don't know if he's had any recent weight loss. He's alert and oriented. I put a saline lock in his left wrist, which flushes fine. He voided 250 of clear, yellow urine. He's NPO. His antibiotic has not been given, but he's had two Albuterol nebulizer treatments. Check the MAR for his meds. We did ABG's, blood alcohol, CBC, chest x-ray, chem and metabolic profile, urine analysis and culture and sensitivity of his sputum. They're all pending. This is the end of my report. We'll be up shortly. ALLYSON: Okay, thank you.

Sample questions:
What information is relevant based on the client's condition?
What would you expect vs what is unexpected given the client's condition?
Is there information missing?

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Small Group Report

Recognize Cues

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Does his age/ethnicity/alcohol use/possible depression factor in? How?
What would be important to look up in his record?
Is there anything you wish you knew more about?

Recognize Cues (Assessment)
Filter information from different
sources (i.e., signs, symptoms, health history, environment).

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Next- Large Group Exercise

Analyze Cues

(typing sounds) (phone rings) ALLYSON: Hello, this is Allyson, RN, General Medical Unit at the Medical Center. CINDY: This is Cindy in the Emergency Department. I'm sending you Mr. Gomez, a 68-year-old Latino gentleman. He came in with pneumonia and exacerbation of his COPD. His daughter found him on the floor at home, where he lives by himself. She said he was unresponsive. He recently lost his wife and there is a question of alcohol abuse. His temp is 99.2, pulse 100, respirations 36 and his sat is 91% on 5 liters of 02 per nasal cannula. His lung sounds are diminished in the bases. He has some occasional rhonchi, with wheezes in both the anterior and posterior upper lobes. His cough is productive of a greenish-yellow tenacious sputum. His blood pressure is 150 over 94. He denies pain. He appears anorexic although I don't know if he's had any recent weight loss. He's alert and oriented. I put a saline lock in his left wrist, which flushes fine. He voided 250 of clear, yellow urine. He's NPO. His antibiotic has not been given, but he's had two Albuterol nebulizer treatments. Check the MAR for his meds. We did ABG's, blood alcohol, CBC, chest x-ray, chem and metabolic profile, urine analysis and culture and sensitivity of his sputum. They're all pending. This is the end of my report. We'll be up shortly. ALLYSON: Okay, thank you.

Based on what you see which data relate most to client's current problem?

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Analyzing Cues Discussion

Questions for discussion:

- What is important here and why?
- Does his age/ethnicity/alcohol use/possible depression factor in? How?
- How bad is a PAO2 of 91 on 5L of O2?
- Why would he have a PAO2 like that?
- If O2 isn't helping what might help?
- What are the potential complications of O2 in people with COPD?
- What are the pathophysiological causes of his low PAO2, cough, lung sounds, RR, etc.?
- What is the most important lab result to you?

Analyze Cues (Analysis)
Link recognized cues to a client's clinical presentation and establishing probable client needs, concerns, or problems.

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Clinical Judgement: Prioritize Hypotheses

Using *Video Case Studies*

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Lesson Plan for 45-minute Lab Lesson

Objectives

1. Demonstrate mastery of priority setting frameworks
2. Apply metacognitive strategy of Prioritize Hypotheses for a group of patients

Activity	Who	What	How Measured	Time
Homework	Students	Complete Nurse Logic Module: Priority setting frameworks Read pgs. ### on priority setting	Bring in documentation	1 1/2 hours
Discuss Prioritizing Hypotheses	Faculty	Lecture or review of metacognitive function using questions (see next slide)		10 min
Watch VCS Priority Setting	Students	Discussion using questions from case study. May break out into small groups to answer (use ZOOM break out rooms if online)	Participation, discussion threads	20 min
Debrief	Faculty and Students		Participation, discussion thread evaluation, scores on unit exam	15 min

Note: This is a good exercise for students who have had some experience in clinical and have had assessment and some fundamentals.

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Metacognitive

Prioritize Hypotheses (Analysis)
Establish priorities of care based on the client's health problems (i.e. environmental factors, risk assessment, urgency, signs/ symptoms, diagnostic test, lab values, etc.).

- Organize client assessment information according to changes, patterns and trends.
- Use standards of care and empirical frameworks for priority setting.
- Establish and prioritize client problems/needs based on the analysis of information and factors.

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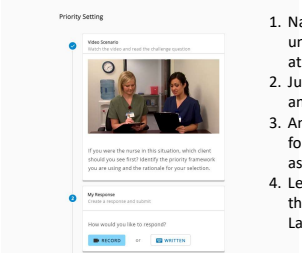
Video Case Studies: Priority Setting

Who should the nurse see first?



1. Nancy Jones has an infiltrated IV line. We were unable to start a new IV and her ampicillin is due at 08:00.
2. Justin Foster called for pain medication at 0700 and it still needs to be given.
3. Anna Chen is diagnosed with gastritis and called for assistance to the restroom. I've contacted assistive personnel and let them know this.
4. Lenny Williams contacted Laura, the aid, saying that he's experiencing pain in his right calf and Laura said his calf is red.

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Prioritize Hypotheses

Questions for discussion:

- Which patient should the nurse see first?
- Why?
- What framework did you use to decide?
- How did you know that the other patient in pain was NOT a priority?
- What if the patient needing the bathroom had a history of climbing out of bed and was a fall risk?

Prioritize Hypotheses (Analysis)
Establish priorities of care based on the client's health problems (i.e. environmental factors, risk assessment, urgency, signs/ symptoms, diagnostic test, lab values, etc.).

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Thank you!

Questions? Please feel free to email me at:
annie.moore-cox@atitesting.com

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