Clinical judgment models: To use or not to use?

UMD NextGen
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The first and last time we all met in person.

(left to right)

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Session Objectives

° Describe the design of a national study of clinical judgment in nursing.
° Summarize the results of a national study of clinical judgment in nursing.
° Explore ways that models can be used for preparation of students for practice and for testing.
Call to Action: Student Preparation

Where is the finish line?

What are we doing?

What can we learn from each other?
What did we explore and why?
CJ Study
Research Questions

- Are pre-licensure programs using clinical judgment models?
- If so, which ones?
- How are they used?
- What role do models have in developing CJ?
- How have models guided learning strategies?
- What outcomes are programs finding?
METHODOLOGY

► DESIGN: Cross-sectional survey
► TOOL: Online survey, devised by researchers
► SAMPLE: Deans and directors (2589)
What have we learned?

Results of a nationwide survey
Aim 1: Percentage of pre-licensure nursing programs using “clinical judgment” or “clinical reasoning” in program or course outcomes

- Yes: 64%
- No: 31%
- No response: 2%

BSN: 70%
ADN: 59%

N=234
Aim 2: Percentage of pre-licensure nursing programs using a clinical judgment model

- Use a clinical judgment model: 27%
- No, but intend to start: 51%
- No, do not intend to start: 21%
- Other: 1%

N=234
Aim 3: Primary clinical judgment models and how they are used to inform pre-licensure nursing curricula

- Clinical Judgment Educational Models
  - The Clinical Reasoning Cycle (Levett-Jones et al., 2010)
  - Developing Nurses' Thinking Model (Tesoro, 2012)
  - Outcome, Present, State-Test Model (Kuiper, Pesut, & Kautz, 2009)
  - Tanner Clinical Judgment Model (Tanner, 2006)
  - Other
Aim 3: Primary clinical judgment models and how they are used to inform pre-licensure nursing curricula

How are models used?
- Inform design and implementation of teaching/learning strategies
- Facilitate clinical teaching and evaluation

How are models incorporated into the curriculum:
- Integrated into curriculum
- Taught in an initial course, then integrated throughout curriculum
Aim 4: Influence of Next Generation NCLEX exam on dean/program director adoption of a clinical judgment model and teaching strategies to teach clinical judgment

Model Adoption Timeframe

- < 1 year - 27%
- 1-3 years - 30%
- 4-5 years - 20%
- 6 or more years - 23%
Aim 5: Relationship between the length of time a clinical judgment model has been in use, and dean/program director beliefs about the model’s influence on student outcomes

4 years or more
- Positive influence on outcomes
- Integral to preparedness for practice
- Quote:
  - “We think it is providing us with good program outcomes as it is forcing students to critically think, determine what factors could lead to poor patient outcomes, and help them develop a plan to intervene before the patient deteriorates.”

3 years or less
- Will improve clinical judgment
- Guiding teaching and learning
- Quotes:
  - Model use helps “better guide and develop their thinking, focusing on identifying a problem vs concern and knowing when and how to respond.”
  - “The model provides a step-by-step plan for faculty which makes it easier to identify an issue.”
Aim 6: Types of teaching strategies used to promote student development of clinical judgment

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Currently using model</th>
<th>Intend to start</th>
<th>Do not intend to start</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simulation</td>
<td>94%</td>
<td>97%</td>
<td>100%</td>
</tr>
<tr>
<td>Case studies</td>
<td>97%</td>
<td>98%</td>
<td>100%</td>
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<tr>
<td>Virtual technology</td>
<td>76%</td>
<td>82%</td>
<td>84%</td>
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<tr>
<td>Feedback</td>
<td>65%</td>
<td>66%</td>
<td>74%</td>
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<tr>
<td>Questioning</td>
<td>80%</td>
<td>78%</td>
<td>70%</td>
</tr>
<tr>
<td>Concept mapping</td>
<td>67%</td>
<td>71%</td>
<td>74%</td>
</tr>
<tr>
<td>Structured reflection</td>
<td>56%</td>
<td>55%</td>
<td>52%</td>
</tr>
<tr>
<td>Coaching</td>
<td>62%</td>
<td>43%</td>
<td>38%</td>
</tr>
<tr>
<td>Concept-based learning</td>
<td>48%</td>
<td>33%</td>
<td>38%</td>
</tr>
</tbody>
</table>
Aim 7: Dean/director beliefs about how use or non-use of a clinical judgment model and teaching strategies to guide student development of these skills is influencing student outcomes

Intentional use of model promotes outcomes

- Currently using a model (27%)
- Intending to start (51%)

Use various teaching strategies in lieu of a model

- Not using and not intending to start (20%)
What deans and directors said

The most frequently described use of a model was to inform design and implementation of teaching strategies.

2nd most frequently described use of models was to facilitate clinical teaching and evaluation.

Many responded seeing improved clinical reasoning and judgment after implementing a model to inform curriculum.
So what?

Recommendations
Purpose of Clinical Judgment Models in Education

° **Useful as a framework** (Brown-Tyo and McCurry, 2019; Cappelletti et al., 2014)

° **Clinical judgment models as a framework produced better results** (Brown-Tyo and McCurry, 2019).

° **Provide a needed structure** (Jessee, 2018)
NCSBN- Clinical Judgment Measurement Model

- Integrates 3 thinking/cognition frameworks
  - Intuitive-humanistic model
  - Dual processing reasoning theory
  - Information processing model

- Includes developmental elements that measure analytic thinking, appropriate to the developmental level of the graduate nurse

- Model frames the Next Gen NCLEX and is intended to frame measurement

Dickison, Haerling, & Lasater, 2020; Dickison, Haerling, & Lasater, 2019
Utility of the CJMM

° Role in the Next Generation NCLEX (Dickison, et. al. 2019)
  • Improve the assessment of clinical judgment
° Useful to develop assessment and evaluation tools (Betts, et. al., 2019; Dickison, et. al. 2019)
  • Designing test questions
  • Simulation scenario designs
  • Case-Study development
CJM and CJMM together

CJ Models to Guide Teaching and Learning

CJMM Assessment and Evaluation
The Completed Puzzle

CJ Models to Guide Teaching & Learning

CJMM Assessment and Evaluation

Next Gen NCLEX Success & safe entry level practice

Multiple Teaching Strategies
Teaching model: Tanner’s Model of Clinical Judgment

Noticing

Interpreting

Responding

Context
Background
Relationship

Expectations

Reasoning Patterns
Analytic
Intuitive
Narrative

Action

Outcomes

Reflection on action and
Clinical Learning

Initial Grasp

Reflection in Action

Reflecting

CJMM and CJM

Recognize Cues
- Context
- Background
- Relationship

Noticing
- Expectations

Interpreting
- Reasoning Patterns
  - Analytic
  - Intuitive
  - Narrative

Responding
- Analyze Cues, Prioritize Hypotheses, Generate Solutions
- Take action

Initial Grasp

Reflection on action and Clinical Learning

Evaluate outcomes

Reflecting

Outcomes
- Reflection in Action
Where do we go from here?

Next steps and collaboration
We have work to do:

• Which clinical judgment model or models could you include in your nursing curriculum for teaching/learning and assessment/evaluation?

• What are ways you can integrate clinical judgment models in the learning environments? Classroom, Lab, Clinical

• What teaching strategies are you currently using to develop students’ clinical judgment?

• What is one teaching strategy that we can incorporate?
Resources:

• Clinical Reasoning Clinical Education Curriculum (Gonzalez, 2018; Gonzalez et. al., 2021).
• The Integrated Clinical Education Theory (Jessee, 2018).
• Concept-based learning activities (CBLAs) for deeper learning (Nielsen, 2016).
• A faculty guide to developing students’ clinical reasoning (Gonzalez, Nielsen, & Lasater, 2021).
• Insights into clinical judgment development for new nurse graduates (Monagle, et. Al, 2018).
• Lasater’s Clinical Judgment Rubric (Lasater, 2007)
Future Projects:

How can we collaborate?
References


References