

POSITION PAPER: The National Council of State Boards of Nursing Must Pause the *Next Generation NCLEX® Project* and Re-examine Phase One (Develop Clinical Judgment Model)

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BACKGROUND

Like many educators, I initially greeted NCSBN's excellent print and video communications about their new clinical judgment model (CJM) and Next Generation NCLEX® (NGN) project¹ with great interest. However, after months of analyzing NCSBN communications and related publications,^{2,3,4,5} I'm convinced that the CJM is flawed, has serious limitations, and is based on weak evidence. To avoid the dangers of a "Fire, Ready, Aim" approach,⁶ it's imperative that NCSBN leaders, education leaders, and all educators and nurses consider the points in this paper. (Find a CJM image here: <https://binged.it/2JFwaQJ>)

This paper addresses:

1. The profound effects of using the NCSBN CJM is likely to have on students, educators, nursing practice, and other nursing stakeholders.
2. Issues with the process and evidence used to develop the CJM and NGN
3. Specific CJM flaws and limitations.
4. Call for action

PROFOUND AND FAR-REACHING IMPLICATIONS

Implementing a new CJM has profound and far-reaching implications:

- **The CJM must be integrated into all curricula.** Making this change will be time-consuming and costly. All faculty must gain a deep understanding of the model, learn strategies to teach the model, and write test items applying it. Although the NGN project is *under development*, there are numerous national workshops, webinars, and YouTube videos encouraging its use, as if it were evidence-based best practice. I wonder how many schools have already hired a consultant.
- **All textbooks, NCLEX® test prep materials and learning management systems will require significant revisions.** Then, if the CJM fails to work in practice or education, we spend years undoing what was done. (Much like the task of integrating *North American Nursing Diagnosis-International* terminology; then struggling to remove it from textbooks and curricula when it became clear that it wasn't evidence-based and it wasn't used in hospitals).
- **Communication issues will emerge – impeding clinical judgment (CJ) –** rather than promoting it. Developing clinical reasoning and judgment requires a shared mental model; experts and novices must be "on the same page".

Four million nurses, all other health care professionals, and decision support systems use ADPIE (assess, diagnose, plan, implement, evaluate) to guide clinical reasoning. Novices schooled in the CJM will use FRE (form hypotheses, refine hypotheses, evaluation) or RAPGTE (recognize cues, analyze cues, prioritize hypotheses, generate solutions, take actions, evaluate outcomes). The "alphabet soup" that's created here sheds light on the challenges ahead if we stay on this path.



- **Switching to a new mental model is like changing operating systems on a computer.** Learning the new operating system is a brain drain that inhibits thinking until the new system is learned (this is a well studied phenomena). At a time when students, educators and nurses are already dealing with cognitive overload, learning a complex CJM may be overwhelming.
- **Preceptor and internship programs leaders will need to decide whether to learn the CJM** to understand novice reasoning habits; they may need to take time to teach novice nurses principles of ADPIE.
- **Educators who don't see value in using the CJM have no choice;** they have to teach it, causing issues with intellectual honesty (a key critical thinking trait) and even ethical distress (as it does for me). It may impact faculty hiring (e.g. I wouldn't work in a pre-license program).

Some educators believe that the NGN helps prepare new graduates for clinical practice by measuring CJ skills. This is misguided thinking. The NGN aims to *test* CJ, but it's nursing school faculty—many who have been blind-sided by this requirement—who are accountable for preparing students for NCLEX®.

The NCSBN has spent a lot of time and money developing the CJM and NGN. Yet, this investment pales in comparison with the *collective* time and cost nursing education, practice, and other key stakeholders will spend to make the above changes.

PROCESS & EVIDENCE FLAWS

Before going on to read about issues with the process and evidence behind the CJM, consider the sage words of Kathleen Stevens — Director of the Academic Center for Evidence-Based Practice (ACE), University of Texas Health Science Center at San Antonio:

“There are different forms of evidence that may support evidence-based practices—from expert opinion to meta-analysis (analysis that combines data from all available studies on a certain topic). Each form is not equally persuasive in making the case that a certain practice should become standard. Greater scientific rigor in producing evidence gives stronger evidence for influencing clinical or educational practices. The more important and unchanging the outcomes of practices are, the greater the need is for sound supporting evidence.”⁷

Here's how publications and NCSBN communications describe the process used to develop and test the CJM:^{1,2,3,4}

1. **They gathered a multidisciplinary team of experts** to conduct a qualitative comparative analysis of three leading frameworks (Intuitive-Humanistic Model, Dual Process Reasoning, and Information-Processing Model).⁸ Using a qualitative approach which is unclear, the team developed the CJM. The number of nurses and qualifications of the nurses on the team is unclear. No information is available to explain the analysis process, how the models were integrated into the CJM, or whether there were efforts to add information gained from quantitative studies, such as online surveys. Tanner, Lasater, and Benner's work were considered.^{8,9,10,11,12,13}

ADPIE was excluded from consideration.^{3,8} While they acknowledged that ADPIE is useful for beginners, they believed it failed to encompass the complexities of clinical reasoning and the factors that influence it.^{3,8}

It's surprising that a model that's useful for beginners was intentionally excluded. No SINGLE model encompasses the complexities of clinical reasoning. Rather, it takes several models, of which most are underpinned by principles of ADPIE.



Having just completed the most comprehensive update of *Critical Thinking, Clinical Reasoning, and Clinical Judgment*¹⁴ that I've ever done, I know at a deep and personal level how much time, thought, and expert advice it takes to make sense of how reasoning models are inter-related. After many false starts — “walking miles trying to wear the CJM shoes” — I found that the only sensible way to include Tanner's, Lasater's, and the CJM work was by making connections to the ADPIE framework.

2. **The NCSBN began to test the CJM by gathering experts together to write test items** based on the model. They now have a research section using the questions, which is completed by random NCLEX® candidates who have not been schooled in the model.^{1,2,3}

They continued excellent print and media communications about progress with psychometric testing of the CJM. They published newsletters and articles explaining how to incorporate the CJM into their teaching and testing.^{1,2,3,8} (All this before studying things like, How do the outcomes of using the CJM compare with those of using ADPIE? What are the limitations of the CJM? Is it useful for education and practice as well as psychometric testing? What adverse outcomes may occur? and How much time, effort, and money will schools need to spend?)

Unanswered Questions

At a time when educational change should be based on data-driven analytics, there are many unanswered questions. It seems that little or no quantitative data was gathered. For example, online surveys could have been done to determine answers to questions such as:

- **How many clinical and academic educators believe that developing a new CJM is needed** to solve the problem with lack of clinical judgment? How many believe it may actually *contribute* to the problem? Answers to these questions may have stopped the NGN project before it began.
- **What are the most important factors impacting student's ability to develop clinical judgment?** For example: Lack of clinical experience? Curriculum overload? Over-emphasis on NCLEX® preparation, with too little emphasis on preparation for clinical practice (imagine the implications, if **this** is the problem)? Should we consider allocating NCLEX® preparation to outside organizations specializing in this, so that more time and emphasis on practice readiness is allowed? Should we survey clinical educators and ask for suggestions to improve the current NCLEX® or pre-license education? Is it unrealistic, as Benner says, to expect novices to have solid clinical judgment skills on entry to practice? Should formal preceptor and internship programs become standard practice?
- **How do outcomes of using the CJM compare with use of ADPIE?** What pieces of the current NCLEX® exam best support clinical judgment development?
- **How will adding a new CJM at a time when faculty, students, and nurses are dealing with cognitive overload affect learning?**
- **What is the learning curve for faculty?** How much work is likely to be involved in having to learn, teach, and integrate the CJM into curriculums?
- **What's the impact of using a model that's not aligned** with electronic health records and decision support systems (which apply ADPIE)? The relationship between clinical reasoning and documentation has been well studied. Human brains can't retain all the



needed information for CJ; nurses must reflect on documentation and make connections among patient data.

- **What are the ethical and legal implications?** Educators owe it to students to inform them that the CJM is a theoretical model that hasn't been used/tested in education or practice. What happens if educators fail to adequately prepare students for the NGN, or if a candidate is unable to pass the licensing exam and then realizes the test is based on weak evidence? A *Google* search will tell you that students and lawyers aren't adverse to class action suits; online articles like this one that are sure to emerge will support their cases.
- **How might this affect nursing school enrollments?** When applicants find out that they must learn a theoretical model that's not used in practice—and that the RN license exam is based on the same model—how many will continue application? The stakes are high for nursing and for students who dream of becoming a nurse.

SPECIFIC CJM FLAWS

There are specific flaws that are noted in the CJM. For example:

- **The CJM doesn't start with assessment.** Any problem solving model that doesn't start with *assessment*—ensuring data is validated and factual, relevant, and as complete as needed—fosters using guesswork, making assumptions, and jumping to conclusions.
- **The CJM begins with recognizing cues.** It's ironic that NCSBN recognized cues that new grads have issues with clinical judgment, but did very limited assessment and virtually no validation related to issues in the clinical and academic setting. Rather, it seems that they became victims of circular reasoning: They created a CJM, wrote research test items based on the model, and are gathering data through NCLEX® research section using these items. The NCSBN reports that the results of candidates taking the research section are promising for testing clinical judgment. Yet, if they're using a flawed CJM, how can they know if they're testing clinical judgment?
- **Planning—the most important reasoning habit to prevent adverse reactions, improve results, and keep patients and nurses safe—is omitted.** Many safety organizations advocate a “team pause” before implementing important procedures, to reflect on the plan before taking action.
- **The CJM is reactive, rather than proactive.** It addresses *evaluating outcomes* but not *predicting outcomes* (anticipating both negative and positive consequences of actions).
- **The model is complex and takes a lot of knowledge and expertise to understand;** students are likely to find that the jargon creates barriers to learning. For example, use of the term *hypotheses* is abstract.

The NCSBN points out that the CJM is *iterative* (you repeat phases again and again until you get the best results). **ADPIE is also iterative:** If you have issues with *diagnosis*, you go back to *assessment*; if evaluation shows that you're not achieving outcomes, you go back to all the other phases (ADPI). To stress the importance of assessment and evaluation, clinical educators have taught the following useful mantra for years: “assess, act, re-assess” (How simple is this language?).



- **The CJM isn't aligned with ANA standards** ("the nurse assesses, diagnoses, plans, implements and evaluates"). It widens the gap between education and practice.¹⁵
- **Finally, consider the following comments** made by reviewers — educators, clinicians, nurse internship and residency program leaders, professional development nurses and nurse researchers — for this paper:
 - "What studies and analysis have been done with clinical practice agencies to validate this model? How are clinical practice sites expected to support the concepts and student development? Their process seems to have left clinical practice agencies completely out of the loop!"
 - "NCLEX is supposed to REFLECT nursing practice not DRIVE nursing practice."
 - "The NCSBN has jumped to redefining nursing judgment when their primary job should be to develop good exam questions that reflect how the competent and prudent nurse currently acts in practice. New labels on previously researched ideas are just creating unnecessary problems for nurse educators."
 - "How can anyone build a sustainable thinking model from one that does not address the novice level? It builds on a structure with no foundation under it."
 - "I'm sorry I didn't get back to you — I've read the article on the new model twice and I'm still trying to process it. I can't get past the gibberish and jargon".
 - "I have to wonder how Benner views this work. It negates her call for three high level apprenticeships and the skills acquisition model (novice to expert)."
 - "The impact in the clinical setting that includes rural, critical access agencies could be very negative - many will not be aware of this major shift in direction until new hires arrive with verbiage about this 'new and better model'."
 - "How can they dictate policy with so few stakeholders involved in the process?"
 - "The NGN questions are really nothing new, just enhanced versions of what already is being used." (This may be a good thing, going forward.)
 - "We need more science before this model is ready for use in nursing. Applying systems thinking, the NCSBN must examine the inter-connections among education, clinical practice and testing more deeply."
 - "Have any nursing organizations have endorsed this work?"
 - "No further work on NGN should happen until a CJM is developed using more rigorous methodology...innovation without evidence is dangerous."

SUMMARY / CALL FOR ACTION

The NCSBN has been transparent and diligent in communicating NGN project progress through print, online webinars, and their web page. They have a difficult task; their commitment to nursing and public safety is unquestionable. Their web page states. **"If the evidence during any individual step of NGN project development indicates that potential innovations will not support the rigor and quality of the NCLEX®, the project will be re-examined at all levels"** (<https://www.ncsbn.org/next-generation-nclex.htm>).



The phases in **red font** below show current progress of NGN development:¹⁶

Develop CJM → **Item prototype development** → **Item usability testing** → **Item data collection** → Measurement research → technology build → Alpha/beta tests → NGN launch

Clinical judgment is a critically important skill. More science is needed behind the CJM model before promoting its use. The *effect* of using the CJM on nursing education must be studied. The NCSBN must pause the NGN project and thoroughly re-examine the first level: CJM development. If the CJM is flawed, then the whole process is flawed.

Education practices and patient safety calls for sound evidence-based practices. Thanks to the NCSBN's transparency and communications, nursing has the opportunity to use their collective power by conveying their concerns to the NCSBN. If the project is not paused and re-examined, then the profound and far-reaching issues that students, educators, and other key stakeholders are likely to experience for years will be overwhelming.

To learn more, and converse nurses, educators, leaders and students on this topic, join the **NEW NCSBN Clinical Judgment Model Discussion Group** (https://www.facebook.com/groups/338943946787516/?hc_location=group) on Facebook. We hope that large numbers in this group will eventually make our voices heard.

If you don't want the NCSBN to mandate that we integrate an untested theoretical CJM into curricula and that students learn clinical reasoning using a model that's never been used in practice, they **MUST** hear from YOU. Cut and paste the below statement and send it via one of the links in the gray shaded section that follows.

I agree with Alfaro-LeFevre's position paper at <http://alfaroteachsmart.com/ngn.html>: **The CJM is flawed and the NCSBN must pause the NGN project and re-examine the first phase.**

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