# Global Simulation Nursing Collaborations to Improve Patient Safety: Practice, Education and Research

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### Conflict of Interest Disclosure

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## Objectives

- Discuss how nurses advocate for change to improve and influence global health and health policy
- Promote knowledge transformation and lifelong learning within practice and education
- Expand scholarly and philanthropic collaboration among nurses in practice, education, and research globally



# Preparing Nurse Educators to Evaluate Novice Nurse Competency: Collaborative Research Findings



## **Objectives**

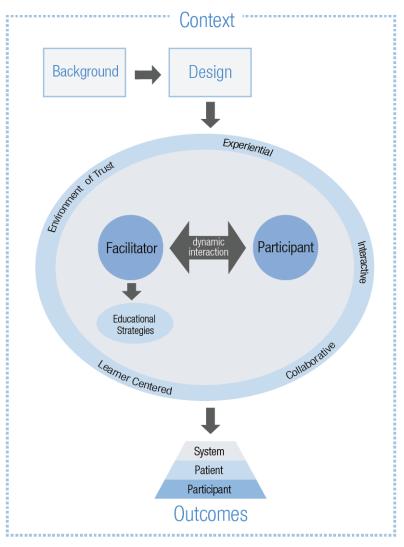
 Examine challenges in scoring high stakes assessment

 Discuss best practices for designing and implementing summative assessment using simulation, including tool selection



#### NLN JEFFRIES SIMULATION THEORY

# What and When to Evaluate



Jeffries, P. R. (2015). *The NLN Jeffries Simulation Theory.*National League for Nursing: Washington, DC.



### **NLN's Simulation Initiative**

Explore the use of simulation for high stakes assessment in nursing education



## MATCH IT UP?

1.



2.





3.



- A. Formative Assessment
- **B.** Summative Evaluation
- C. High Stakes Evaluation



#### Phase I

Convene Think Tank - June 8-10, 2010

#### Phase II

- Develops, pilots, revises simulations
- Evaluates existing tools, creates new tools
- Develops evaluator training

#### Phase III

Field testing across the country



## **Participants**

Barry Issenberg

Pam Jeffries

Kathie Lasater

Carrie Lenburg

Bridget Nettleton

Marilyn Oermann

Mary Anne Rizzolo

Terry Valiga

Linda Wilson



### **Desired Outcome**

#### More Questions than Answers

??

Rizzolo, M.A., Kardong-Edgren, S., Oermann, M.H., & Jeffries, P.R. (2015). The National League for Nursing Project to explore the use of simulation for high-stakes assessment: Process, outcomes, and recommendation. *Nursing Education Perspectives*, 36(5), 299, 303 doi: 10.5480/15-1639.



# Phase 4 – Extending the Study



## Standards Of Best Practice: Simulation

## International Nursing Association for Clinical Simulation and Learning (INACSL.org)



INTERNATIONAL NURSING ASSOCIATION for CLINICAL SIMULATION and LEARNING



## Challenges

Design Issues

Consistency of implementation

Audio/video

Selection of tools

Selection of raters

Training of raters



## Fair Testing Considerations for Your School

#### Faculty Development

- Assessing competence fairly and equally
- Having deliberate and intentional conversations
- Creating safe environment for learning
- Understanding simulation vs clinical evaluation
  - what and why differences?



# Preparing Nurses for Practice: Addressing the Gap from Education to Practice



## Objectives

- Discuss challenges for preceptors and educators and novice nurses during the transition to practice.
- Discuss collaborations between education and practice that address areas of novice nurse risk.



## Background: Errors





## Nurse Educator perspective



New grads struggle with

- Interpretation of assessment data
- Decision making based on the nursing process
- Recognition of changes in patient status
- Conducting appropriate follow up
- Taking initiative
- Medication administration



## Novice nurse perspective



- Difficulty managing a normal patient load
- Lack of confidence in skills
- Difficulty making clinical decisions for patients with complex diagnoses
- Difficult relationships with peers and preceptors
- Struggles with dependence on others, organization and prioritization
- Communication with physicians



## **Role Transition**



- Reality Shock
- Transition Shock

## Perspective from Literature

- Clinical Knowledge
- Clinical Reasoning
- Communication
- Management of Responsibilities
- Professionalism





## Strategies to Reduce Risk

## Novice Nurse Development



## Accelerating to Practice

#### Background

#### **Advisory Group:**

- Carondolet Health Network, St. Joseph's Tucson, AZ
- Cedars-Sinai Medical Center, Los Angeles, CA
- Indiana University Health, IN
- Novant Health Medical Center, Manassas, VA
- □ St. Dominic Jackson Memorial Hospital, Jackson, MS
- St. Thomas Health, Nashville, TN
- □ Texas Health Presbyterian Hospital, Dallas, TX
- University of Kansas Hospital, Kansas City, KS
- UW Medicine Valley Medical Center, Renton, WA



## Accelerating to Practice

#### Clinical Reasoning:

- Recognition of Need for Assistance
- Recognizing and Responding to Changes in Patient Status
- Patient Safety
- Decision Making Based on Interpretation of Patient Data
- Ability to Anticipate Risk

How do we create clinical experiences to enhance and measure these competencies?



## Modifying Simulation

#### Brief Summary – Vernon Watkins

Mr. Watkins is a 69-year-old male who presented to the Emergency Department 4 days ago with complaints of nausea, vomiting, and severe abdominal pain. He was admitted for a bowel perforation and underwent a left hemicolectomy. He is reluctant to use the incentive spirometer, and does not like to ambulate. Abdominal pain has been controlled with morphine. He has refused to ambulate this morning because of fatigue and a sore left leg.



## Creating Simulation Experiences for New Graduate Transition: Clinical Reasoning

Competency	Demonstration
Decision making based on Interpretation of patient data	<ul> <li>Restrict ambulation due to leg pain possibly being the result of a DVT</li> <li>Evaluating shortness of breath thoroughly</li> </ul>
Recognition of when to ask for assistance	<ul> <li>Contact the provider when leg pain and shortness of breath were reported by patient</li> </ul>
Patient Safety	<ul> <li>Intervenes to stop PT from ambulating with Mr. Watkins.</li> <li>Ensures patient identification prior to medication administration</li> <li>Ensures medication is administered per facility standards</li> </ul>

## Accelerating to Practice

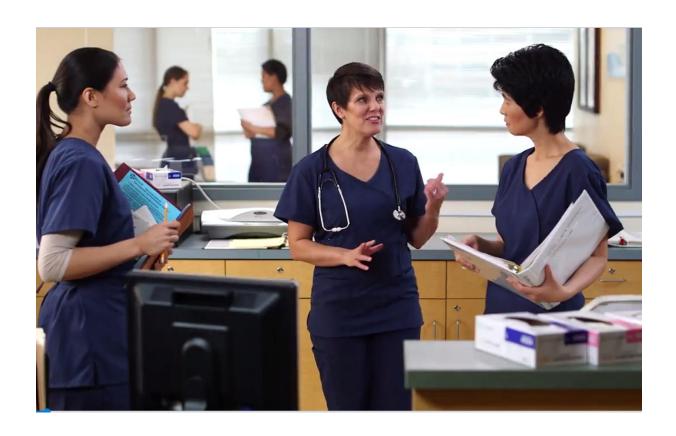
#### Communication:

- Interprofessional Team Communication
- Patient/Caregiver Education
- Conflict Resolution
- Patient Advocacy

How do we create clinical experiences to enhance and measure these competencies?



## Creating Simulation Experiences for New Graduate Transition: Communication





# Preparing Nurse Educators for Simulation Education: An International Development Model



## Objectives

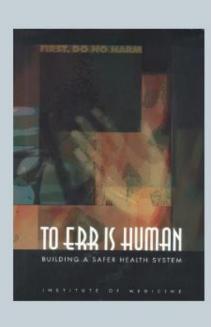
- Discuss research informed best practice in the use of simulation and debriefing across the curriculum.
- Discuss collaborations in nursing education and practice on faculty development initiatives in the use of simulation technology in the US, Asia and India.



#### To Err is Human...



"It is simply not acceptable for patients to be harmed by the same health care system that is supposed to offer healing and comfort"





http://www.iom.edu/~/media/Files/Report%20Files/1999/To-Err-is-human/To%20Err%20is%20Human%201999%20%20report%20brief.pdf

#### ...Learning from mistakes

#### Simulation is a powerful strategy...





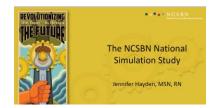
## NCSBN Multi-Site Study 2011

#### Results:

1.Up to 50% simulation can be effectively substituted for traditional clinical experience

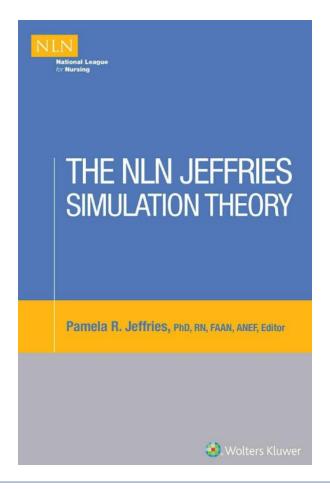
#### <u>Using:</u>

- Standards of Best Practice in Simulation
- High quality simulations
- Debriefing methods grounded in educational theory
- Trained and dedicated simulation faculty





## **NLN/Jeffries Simulation Theory**





## Standards Of Best Practice: Simulation

## International Nursing Association for Clinical Simulation and Learning (INACSL.org)



INTERNATIONAL NURSING ASSOCIATION for CLINICAL SIMULATION and LEARNING



### **NLN Vision Statements**

#### Teaching with Simulation

- Connect simulation to learning outcomes
- Incorporate Standards of Best Practice
- Interprofessional simulation

#### Debriefing Across the Curriculum

- Integrate debriefing techniques in the classroom, clinical teaching, and simulation to shape student thinking
- Use evidence based resources for evaluation of competence
- Pay attention to the impact of personal bias during debriefing



## Teaching with and about context



## ...a structure for conversation

## CRITICAL CONVERSATIONS: THE NLN GUIDE FOR TEACHING THINKING

Guided Questions for the Learner Directions for the Guide	
Context	Identify Patient's Story
› How did caring for this patient/family make you feel?	Uncover the thinking and emotions.
> Who is this patient?	Describe the patient care story.
> What are your main concerns?	<ul> <li>Determine if all important aspects of the situation have been identified.</li> </ul>
Content	Understand and Guide Thinking
› I saw	Use concrete objective data to clarify perspective.
> I think	<ul> <li>Discuss your impressions of their thinking.</li> </ul>
› I wonder	Provide your perspective based on past experience.
<ul> <li>Describe what you were thinking about during your experience.</li> </ul>	<ul> <li>Relay strategies that have worked in the past.</li> <li>Understand the knowledge guiding their thinking.</li> </ul>
What sources of knowledge influenced/should have influenced your thinking?	Control of the contro
How have past experiences helped you to make sense out of the current situation?	
Course	Integrate into Practice
Set immediate course: So based onwhat are your next steps going forward?	<ul> <li>Discuss how this experience might influence thinking and practice going forward.</li> </ul>
<ul> <li>Set long term course:         How would the care differ if you (compare and contrast care situations (e.g. patient age change, setting change, etc.)     </li> </ul>	<ul> <li>Discuss the aspects of this situation that affected learning and will help them to remember this experience.</li> </ul>
What will you do differently moving forward?	



## **Faculty Development**

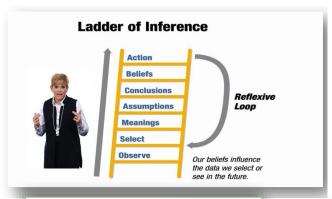


#### Collaborations:

- United States
- China
- India



## **Faculty Development**





- Nursing Leadership
- Curriculum
- Faculty Skills in Simulation and Debriefing



### References

Cheng, A., Eppich, W., Grant, V., Sherbino, J., Zendejas, B., & Cook, D.A. (2014). Debriefing for technology- enhanced simulation: a systematic review and meta-analysis. *Medical Education*, 48: 657-666.

Darling, Parry, & Moore (2005). Learning in the Thick of It. Harvard Business Review. July.

Dreifuerst, K. T. (2009). The essentials of debriefing in simulation learning: A concept analysis. *Nursing Education Perspectives*, 30(2), 109-114.

Dreifuerst, K. T. (2012). Using debriefing for meaningful learning to foster development of clinical reasoning in simulation. *Journal of Nursing Education*, 51(6), 326-333.

Edmundson, A. (2002). Managing the risk of learning: Psychological safety in work teams. *International Handbook of Organizational Teamwork*. London: Blackwell.

Fanning, R. M., & Gaba, D. M. (2007). The role of debriefing in simulation-based learning. Simulation in Healthcare: The Journal of the Society for Medical Simulation, 2(2), 115-125.

Forneris, S. G., & Peden-McAlpine C. (2006) Contextual learning: A reflective learning intervention for nursing education. *International Journal of Nursing Education Scholarship* 3(1, article 17), 1–18.

Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development* (1st ed.). Englewood Cliffs, NJ: Prentice-Hall.

Rudolph, JW, Simon, R. Rivard, P., Dufresne, R. & Raemer, D. (2007). Debriefing with Good Judgment: Combining Rigorous Feedback with Genuine Inquiry. *Anesthesiology Clinics*, 25, 361-376.

Senge, P.M., Kleiner, A., Roberts, C., Ross, R.B., and Smith B.J. (1994). The ladder of inference. From *The Fifth Discipline*.

