

# Preparing Future Nurse Leaders Through Simulation

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Feb-17-2021

University of Washington,  
School of Nursing, Seattle, WA



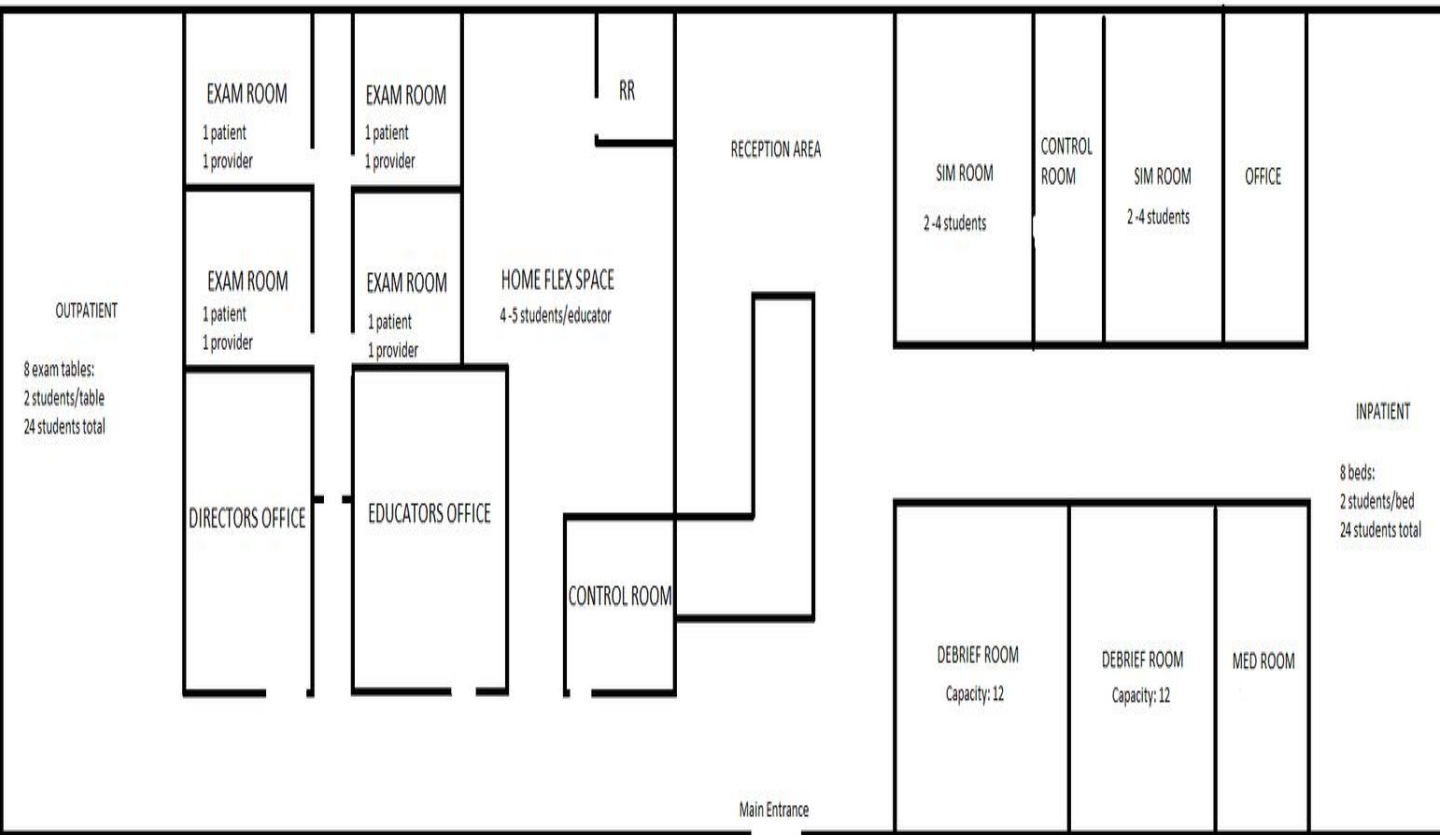
***BE BOUNDLESS***



# University of Washington School of Nursing, Seattle, WA Simulation Center



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# Clinical Curriculum Grid with Simulation (Undergraduate)

Autumn Y3	Winter Y3	Spring Y3	Autumn Y4	Winter Y4	Spring Y4
기본간호학 I (lab) 2 hrs.	기본간호학 II (lab) 2 hrs.	기본간호학 III (lab) 2 hrs.			
건강사정 (lab) 2 hrs.	Sim lab 2 hrs.	Sim lab 2 hrs.	Sim lab 2 hrs.	Sim lab 2 hrs.	Sim lab 2 hrs.
Foundational Skills for Professional Nurses (Lecture 2hrs)	지역사회 학교, 보건소 실습	병원 실습 (일반 내/외과 병동)	정신/외래 실습	아동/모성간호 실습	Practicum: Transition to Clinical Practice
<ul style="list-style-type: none"> <li>• Simulator, SP (either in-person or zoom), web-based simulation, Vsim</li> <li>• Skills labs (often in the virtual, skill sets are provided, individual pick up at the school)</li> <li>• Continue to maintain 3-5 times in-Person Clinical at Hospitals + Vsim</li> </ul>			IPE Module, Attend 1 IPE sim	IPE Module, Attend 1 IPE sim	IPE Module, Attend 1 IPE sim

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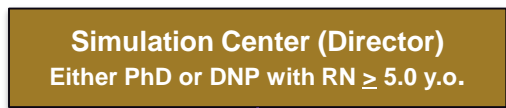
# Organization and Team Members

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## Eligibility

- MN or PhD/DNP levels
- Everyone should finish UW simulation training modules
- 2 times simulation teaching evaluation from the simulation center director
- Clinical RN experiences  $\geq$  3-5 years

*At the UW, Clinical nurse experiences: range 5-35 years;  
Clinical teaching experiences, range 3-22 years*



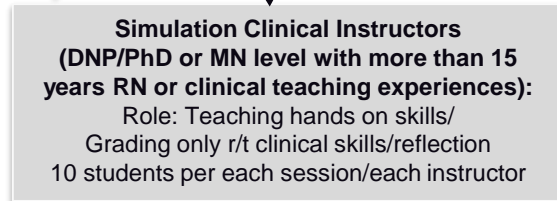
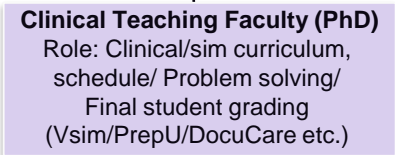
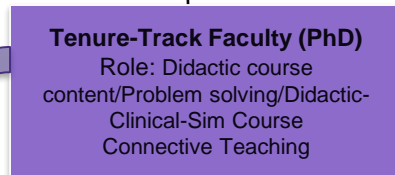
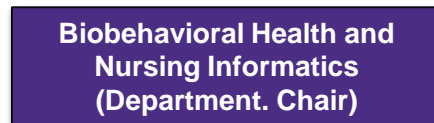
PhD or DNP in nursing or nursing education. RN ≥ 5 y.o.

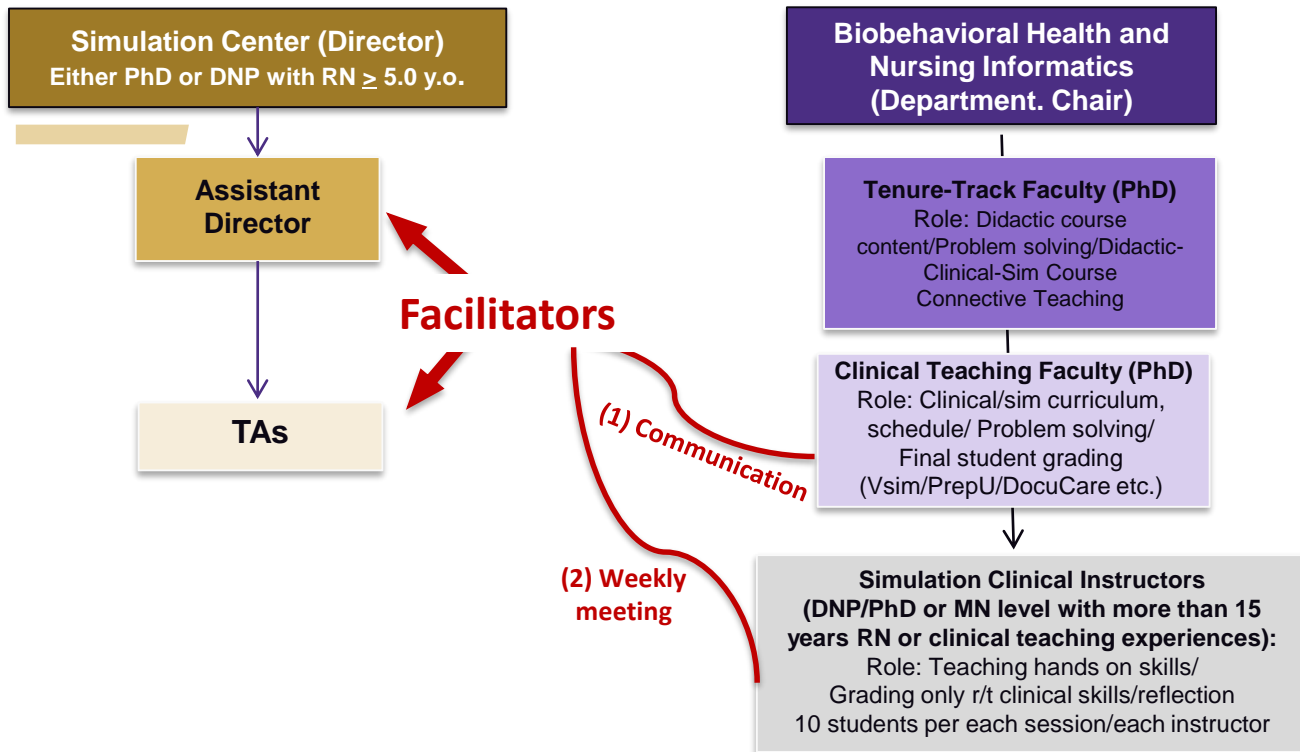


PhD or DNP or MN level students  
RN ≥ 3-5 y.o.  
Mixed with Full/Part Time TAs

Try to assign high fidelity simulation to the part time students who are currently working as an RN, or DNP Y2 or Y3 students who continue to maintain the current clinical.

Full time students: More likely assigned to foundational skills lab or physical assessment.





# Example of connective teaching: Didactic/Clinical Skills/Simulation



## **COURSE REQUIREMENT**

The following resources in Lippincott Course Point Nursing Concepts are used:

- Taylor: fundamentals of nursing 9e
- Lynn: Taylor's Clinical Nursing Skills: A Nursing Process Approach, Fifth Edition (optional video/text)
- PrepU adaptive quizzing
- vSIM for Nursing: Fundamental (utilized already before COVID-19)
- DocuCare



# Example of connective teaching: Didactic/Clinical Skills/Simulation

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## Foundational Skills for Professional Nurses (3 credits) from Winter quarter

Simulation Center	Independent coursework/ practice hours
<ul style="list-style-type: none"><li>Fundamental skills (2 hours) <i>Hands-on skill teaching &amp; Student demonstration and skill check-off</i></li></ul>	<p>vSIM/PrepU (2 hours)</p> <p>3 hours <i>online assigned readings and videos</i></p>
<ul style="list-style-type: none"><li>Clinical Simulation (2 hours) <i>Including both skills practice and clinical simulation (20 min scenario, 30 min debriefing)</i></li></ul>	<p><i>Request to students to reach the assigned mastery level set by the course each week, and practice assigned vSIM for Nursing. This knowledge and skills are requested to prepare students for simulation activities.</i></p>

**At the end of the session rotation, the student will:**

1. Practice preparation and techniques of safe medication administration by the parenteral routes:
  - Intramuscular
  - Intradermal
  - Subcutaneous
2. Apply the nursing process and critical thinking skills to safely prepare and administer parenteral medications.

## **ASSIGNED READINGS**

**Taylor: Fundamentals of Nursing, Ninth Edition**

### **1. Chapter 29: Medications**

Review from last week

- principles of medication administration, pgs 831-840
- [WATCH VIDEO](#): video 04-02 3 checks and rights of medications
- the nursing process for administering medications: assessing, diagnosing, outcomes identification and planning, pgs 840-841









### **New readings**

- different routes of medication administration:
  - Administering parenteral medications, pgs 845-856. *Stop at figure 29-15.*
  - skill 29-2: removing medication from an ampule, pgs 880-882
  - skill 29-3: removing medication from a vial, pgs 882-885
  - skill 29-5: administering an Intradermal injection, pgs 890-894
  - skill 29-6: administering a Subcutaneous injection, pgs 894-899
  - skill 29-7: administering an Intramuscular injection, pgs 900-904
  - [WATCH VIDEO](#) video 05-06 administering a subcutaneous injection
  - [WATCH VIDEO](#) video 05-09 administering an intramuscular injection



## Lab Prep

Review and bring these learning guided to the lab rotation. We are using these guides for IM, SC :  
Bring these documents with you to the lab.

-  [Learening.guide IM Medication Administration.docx](#) 
-  [Learning.guide ID Medication Administration.docx](#) 
-  [Learning.guide SC Medication Administration.docx](#) 
-  [Week 4 Parenteral medication administration - Case Studies.docx](#) 

## Simulation PREP

-  [UW Simulation Lin - Student Guide Win2020.docx](#) 

## ASSIGNMENT DUE

prepU

No prepU assignment this week!

vSIM Fundamental

[Week 4: Jared Griffin](#)



# Vsim/DocuCare



## Patient-Centered Care

The virtual patient scenarios include a variety of interactions allowing for a student-led patient experience. Explore 10 Medical-Surgical nursing scenarios based on the NLN Volume 1 Complex scenarios for Laerdal simulators.



Reference: <https://thepoint.lww.com/concepts>

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## Case: Copy of Fundamentals: vSim, Core: Rectal Cancer w/Colonoscopy: Marvin Hayes

[Show Learning Tips](#)[Return to Case Info](#)

Saturday, February 6, 2021 07:22

## Hayes, Marvin

MRN: PC6832484

## Allergies :

Drug Allergies (00) :

Food Allergies (00) :

Env. Allergies (00) :

Gender: Male

DOB: 3/25/XX

Age: 43 Years

Height: 70 in

Weight: 165 lb

Diagnosis: Colorectal Cancer

Isolation Precaution: Standard

Adv Directive: Full Code

Adm Provider: Allen Ryder, Admitting Physician

Facility: Parkwest

Adm On: 2/3/2021 07:22 [3 day(s)]

[Patient Info](#) **Assessment** [ADLs](#) [Notes](#) [Nursing Dx](#) [Patient Teaching](#) [Orders](#) [MAR](#) [I/O](#) [Vital Signs](#) [Diagnostics](#) [OT](#) [PT](#) [Forms](#) [Flowsheet](#)[HEENT](#) [Neuro](#) [Cardio](#) [Respiratory](#) **GI** [GU](#) [Musculoskeletal](#) [Mental Health](#) [Pain Scale](#) [Integumentary](#) [Vascular Access](#)[Save Assessment](#)[Clear](#)[Past Assessments ▼](#)

## Add New Gastrointestinal (GI) Assessment

Documented By:

-- Select --

Documented At:

0

days

0

hours

0

minutes

after admission

▼

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## Document Nursing Diagnoses/Care Plans

Priority	Diagnosis	Category	Type	Status	Originally Documented
1	<a href="#">Impaired Skin Integrity</a>	Physiological	Actual	Open	2/4/2021 07:22
2 ↑	<a href="#">Imbalanced Nutrition: Less Than Body Requirements</a>	Physiological	Actual	Open	2/3/2021 09:22
3 ↑	<a href="#">Knowledge deficit</a>	Behavioral	Actual	Open	2/4/2021 07:22
4 ↑	<a href="#">Disturbed Body Image</a>	Behavioral	Actual	Open	2/4/2021 07:22

[Create Care Plan Using NANDA Diagnosis](#)[Create Your Own Care Diagnosis/Care Plan](#)

## Orders

Add New Medication Order

Add New Non-Medication Order

Acknowledge Pending Orders

Filter Orders: -- All --

Search:




Order Name	Order Status	Timing	Frequency	Ordered On	Note	Provider	Due At	Department
<a href="#">Diet: full liquids, advance to regular diet as tolerated</a>	Active	Routine	cont.	2/3/2021 07:22		Allen Ryder, Admitting Physician	2/3/2021 07:22	Dietary
<a href="#">CBC and BMP</a>	Active	Routine	q24h	2/3/2021 07:22		Allen Ryder, Admitting Physician	2/3/2021 07:22	Laboratory
<a href="#">Diagnosis: Rectal adenocarcinoma</a>	Pending	Routine	cont.	2/6/2021 07:22	status post laparoscopic abdominal perineal resection...	Allen Ryder, Admitting Physician		Medicine
<a href="#">Vital signs</a>	Active	Routine	q4h	2/3/2021 07:22		Allen Ryder, Admitting Physician	2/3/2021 07:22	Nursing
<a href="#">Activity: Out of bed ad lib. Ambulate in hallway</a>	Active	Routine	cont.	2/3/2021		Allen	2/3/2021	Nursing

## Medication Orders

Color Key: Past Due Stat (not administered) Discontinued

Filter Medication Orders: -- All Medicines --

Search:

Medication Dose/Route	Timing	Frequency	Start/Last Admin	Note	Due At	Actions
<a href="#">enoxaparin sodium</a>  40 mg Subcutaneous (SC)	Scheduled	q24h			2/3/2021 07:22	<a href="#">Administer</a>
<a href="#">hydrocodone bitartrate-acetaminophen</a>  10/325 mg Oral (PO)	PRN	q4h			PRN	<a href="#">Administer</a>
<a href="#">omeprazole</a>  40 mg Oral (PO)	Scheduled	q24h			2/3/2021 07:22	<a href="#">Administer</a>

## Home Medication History

Medication	Frequency	Last Given	Note
No data available			
<a href="#">Add New Home Medication</a>			



## Vital Signs

	2/5/2021 03:22	2/4/2021 23:22	2/4/2021 19:22	2/4/2021 15:22	2/4/2021 11:22	2/4/2021 07:22
Blood Pressure	115/61	119/63	121/65	127/80	130/70	127/75
Heart Rate	62	66	69	78	81	72
Respiratory Rate	12	14	14	16	17	16
SpO2	95	97	96	98	95	97
Oxygen Delivery						
Temperature	98.2 °F	98.4 °F	98.2 °F	97.6 °F	97.8 °F	98.2 °F
Route	Oral	Oral		Oral	Oral	Oral
Weight						
Method						
Glucose Level (mg/dL)						

Add New Vital Sign Data

See Chart


Labs

Other Diagnostics

## Labs

Date Collected	Type	Department
<a href="#">2/4/2021 07:22</a>	Complete Blood Count without differential	Laboratory
<a href="#">2/4/2021 07:22</a>	Basic Metabolic Panel	Laboratory
<a href="#">2/4/2021 07:22</a>	Prothrombin Time (PT)	Laboratory
<a href="#">2/5/2021 07:22</a>	Complete Blood Count without differential	Laboratory

# Preparation worksheet before the Simulation Activities



## Sara Lin, Postoperative Pain Student Guide

**Scenario Title:** Sara Lin, Postoperative Pain

**Source:** NLN/Laerdal Fundamentals

**Course(s):** NCLIN 301/NCLIN 306

**Purpose:** The purpose of this simulation-based experience is for students to apply the nursing process to postoperative pain management.

### Learning Objectives

By the end of this simulation-based experience, the learner will be able to...

1. Perform a focused symptom assessment on a patient with uncontrolled pain.
2. Apply the nursing process to pain management, arriving a nursing diagnosis, desired outcomes, and a plan of care based on assessment findings.
3. Safely implement pharmacological and non-pharmacological pain management strategies as appropriate based on assessment findings.
4. Educate the patient and family on pain self-management following discharge.

**Expectations:** In this simulation-based learning exercise, students will be expected to provide care of a patient with post-operative pain following an appendectomy. You will be expected to perform a focused pain assessment. You will be re-checking your patient mid-shift and apply the nursing process to your decision-making and patient care. You may also be administering medications, so review the steps from Labs 1 and 2.

**Assignment to be completed:** Access **Sara Lin** in DocuCare and complete the abbreviated Clinical Preparation Worksheet at the end of this form. The purpose of the care plan is for you to have sufficient understanding of your patient's condition, provider orders, and nursing interventions to provide safe and effective care. Use your online resources to help complete your care plan. There are links within DocuCare to learning resources in Lippincott Advisor on the patient's diagnoses and medications. Use [Lippincott Advisor](#) as needed to look up other information, such as diagnostic tests. **Also print a copy of the Student Observer Form (at the end of this guide) and bring it with you to your lab session.**

### Required Student Preparation:

Skill	Resource
Pain assessment	Fundamentals of Nursing, Chapter 35, "The Nursing Process for Comfort and Pain Management" (pp. 1242-1243)
Pain management	Fundamentals of Nursing, Chapter 35, "Managing Pharmacologic Relief Measures" (pp. 1255-1258). Read through the end of "Non-opioid Analgesics"
Steps for giving medications	Brush up on your skills from the prior med administration lab session.
Planning the care of is patient	Complete the worksheet included with this Student Guide.

### Student roles:

Role	Description
Primary Nurse	The primary nurse will lead communication with the patient and decisions on assessment and treatment, if needed.
Secondary Nurse	The secondary nurse will perform delegated tasks, but might also make suggestions to the primary nurse.
Observer	Observers will watch the simulation on a video screen in the debriefing room. You will be given a worksheet to take notes about the care you observed. Observers will all participate in debriefing of the scenario.

### Simulation Agreement

I understand and agree to the following responsibilities for making simulation a valuable learning experience for all students. I agree to honor the following principles:

#### Fiction Contract

- I will treat the simulation as if it were a real clinical situation to the greatest extent that I can.

#### Professionalism

- I will complete preparatory assignments so I am ready to fully participate in the simulation experience and to support effective learning for the whole group,

#### Confidentiality

- Maintain confidentiality of debriefing discussions and students' performance in the simulation scenarios to support a safe and collegial learning environment; and
- Keep the content of this simulation activity confidential to avoid spoiling the experience for those who have not yet participated.

#### Respect

- I will offer comments to colleagues in a respectful and sensitive manner and will be respectful to persons with varied viewpoints, including those with whom I do not agree; and
- Appreciate the contributions of diversity to varied student and patient perspectives, seeking understanding, equity, and inclusion.

# Student Role Assignments & Time Arrangement

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- Weekly main relevant topic(s) review with clinical instructors (20min)
- 15 min Pre-briefing (instructor, and facilitator): Mostly, Facilitator-led
- Volunteer/Random assignment: 1 Primary Nurse /1 Secondary Nurse /8 Observers  
*(Instructors/TAs are often available to provide requested information as a doctor, charge nurse, or nurse aides, or family caregivers....given the pre-provided role play scenario).*
- Simulation (Huddle 5-10min, Simulation Role Play 20-25 min)
- Debriefing (30 min)

### Adult Case: Clinical Preparation Worksheet

Use DocuCare and your online resources (eg, Lippincott Advisor) to obtain the following information.

Age: \_\_\_\_ Gender: \_\_\_\_

**History of Present Illness (HPI)**, in DocuCare under "Patient Info" → "History of Present Concern":

**Medical/Surgical History:** List all. (DocuCare "Patient Info" → "Past Medical History")

**Allergies (include reaction):**

**Diet order/nutrition restrictions/ dentition issues (be specific):**

	Last VS (listed under "Flowsheet")	Are these values normal or abnormal? Would this impact your care?
Temperature		
Pulse		
RR		
BP		
SaO2 (room air vs. O2)		
Pain		

Last Shift Assessment in DocuCare*. Summarize below	Are these values normal or abnormal? Would this impact your care?
Neuro:	
CV:	
Resp:	
GI:	
GU:	
MSK:	
Skin:	

\*In the "Assessment" tab, you'll need to go to each system then click "Past Assessments" toward the right side of the screen.

### Medication Administration Record

Medication Name, Dose; Frequency; Schedule, Route	Drug Class/ Mechanism Of Action	Medications Purpose for this Patient	Nursing Considerations (adverse effects, contraindications, monitoring)
Oxycodone, 5 mg, 1 tablet orally every 4 hours PRN			

Acetaminophen, 325 mg, one tablet orally every 4 hours PRN			
Levofloxacin, 500 mg orally daily x 7 days			

What would be 2-3 nursing care priorities that you would want to address with this patient during your shift?

What are your top 2-3 concerns for the safety of this patient?

Do you have any concerns about the patient's medications?

What are you going to check before giving this patient's medications?

**Instructions:** This Student Observer Form is to help you apply critical thinking as you watch the simulation and to prepare you to actively participate in the debriefing. As you observe, complete the checklist based on the simulation learning objectives and take notes on the debriefing questions. At the end of the simulation and debriefing, complete the evaluation on the next page.

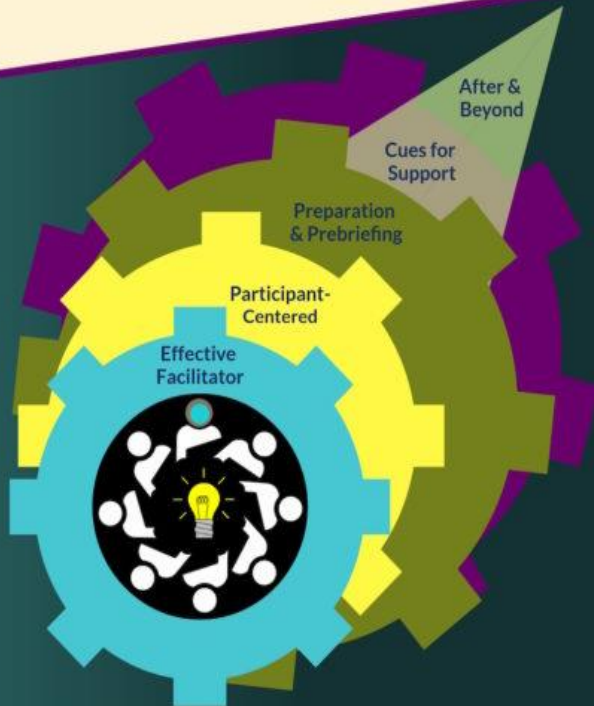
Learning Objectives	Observed?	Comments
1. Perform a focused symptom assessment on a patient with uncontrolled pain.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2. Apply the nursing process to pain management, arriving a nursing diagnosis, desired outcomes, and a plan of care based on assessment findings.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3. Safely implement pharmacological and non-pharmacological pain management strategies as appropriate based on assessment findings.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4. Educate the patient and family on pain self-management following discharge.	<input type="checkbox"/> Yes <input type="checkbox"/> No	

#### Debriefing Questions

1. What do you (or the students) think went well?
2. What could have gone better?
3. What is one thing you would do differently?
4. What is one take away that you will incorporate into practice?



# FACILITATION



## Criterion 1 - Effective Facilitator

Effective facilitation requires a facilitator who has specific skills and knowledge in simulation pedagogy.

## Criterion 2 - Participant-Centered

The facilitative approach is appropriate to the level of learning, experience, and competency of the participants.

## Criterion 3 - Preparation & Prebriefing

Facilitation methods before the simulation-based experience include preparatory activities and a prebriefing to prepare participants for the simulation-based experience.

## Criterion 4 - Cues to Support Learning

Facilitation methods during a simulation-based experience involve the delivery of cues (predetermined and/or unplanned) aimed to assist participants in achieving expected outcomes.

## Criterion 5 - Learning Occurs After Event and Beyond

Facilitation after and beyond the simulation-based experience aims to support participants in achieving expected outcomes.

## Standards of Best Practice: Simulation<sup>SM</sup>

For the complete version go to: [www.nursingsimulation.org/standards](http://www.nursingsimulation.org/standards)





# Simulation Scenario development

## Resources

- Link to the Laerdal simulation industry/Lippincott website for scenarios (scenario is consistent with Vsim, Docucare & real simulation task)  
*“However, the Vsim is not always the same for real simulation activities, or 100% online virtual simulation - Unfolding case study & role play.”*
- UW simulation team (Primary facilitator) developed template and scenarios for selected courses



# Global Consistencies & Standardization in Simulation Education: International Nursing Association for Clinical Simulation and Learning (INACS) Standards

Clinical Simulation in Nursing (2016) 12, S5-S12



Clinical Simulation  
in Nursing

[www.elsevier.com/locate/ecs](http://www.elsevier.com/locate/ecs)

Standards of Best Practice: Simulation

## INACSL Standards of Best Practice: Simulation<sup>SM</sup> Simulation Design

INACSL Standards Committee

### KEYWORDS

pedagogy;  
simulation design;  
simulation format;  
needs assessment;  
objectives;  
prebriefing;  
debriefing;  
fidelity;  
facilitation

### Cite this article:

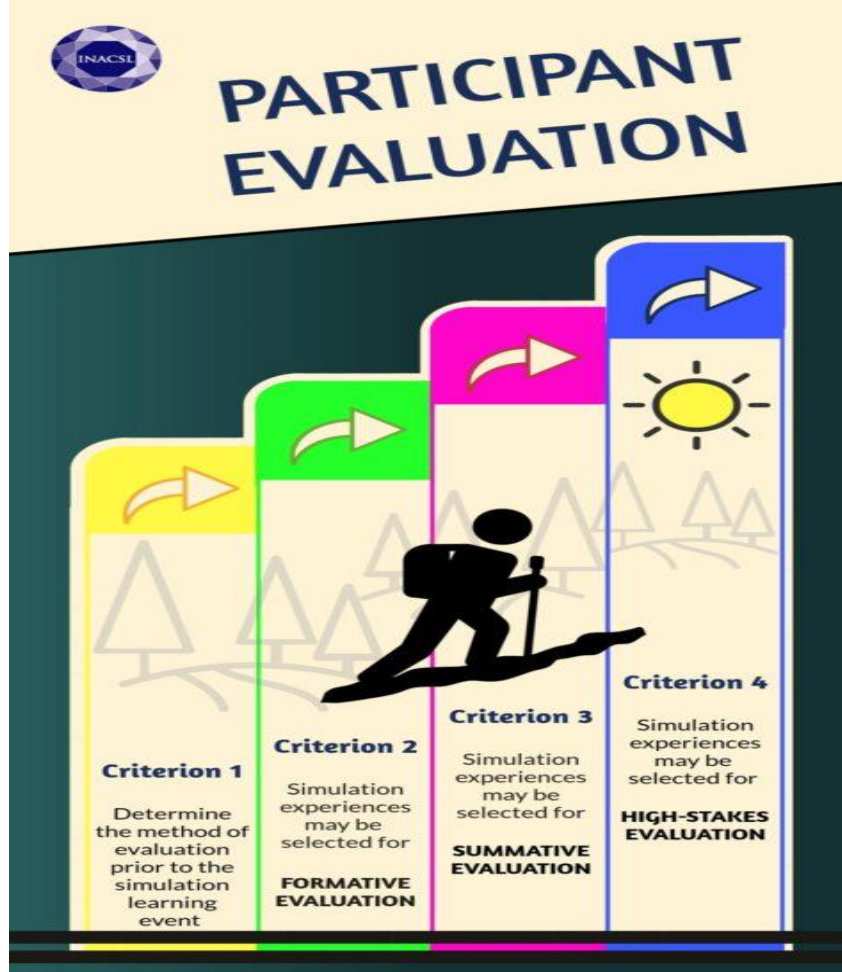
INACSL Standards Committee (2016, December). INACSL standards of best practice: Simulation<sup>SM</sup> Simulation design. *Clinical Simulation in Nursing*, 12(S), S5-S12. <http://dx.doi.org/10.1016/j.ecns.2016.09.005>.

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# Evaluation

Credit/Non-Credit  
Pass or Fail?  
Grading Score (4.0?)  
A+~D-?

*Formative versus Summative*



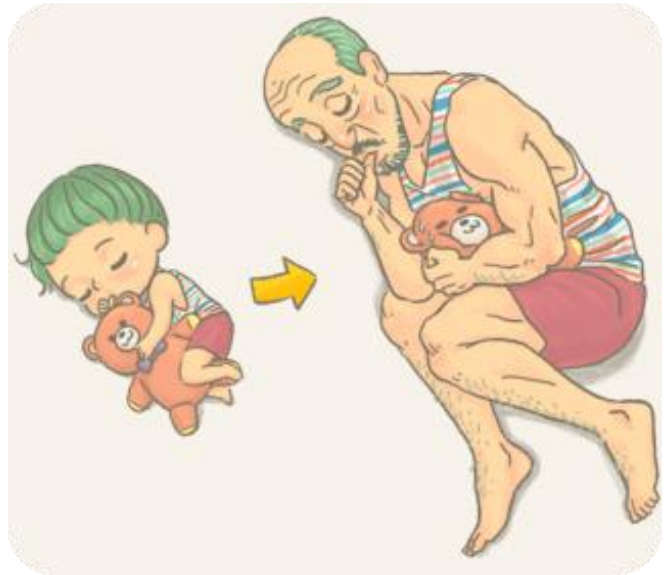
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# Simulation Scenario Development



## Take-Home Messages!

- **What is the matter?**
  - ✓ Levels of complex cases are NOT ALWAYS the matter
  - ✓ Problem solving skills, Safety, Ethics, Accuracy, Evidence-based, Delegation, Responsibility, Time management, Awareness in the real clinical situations are the matter
- **Recent direction:** Include DEI (Diversity, Equity, Inclusion), Communication Skills, Ethics, COVID-19 topics, Family communication and patients/family educations
- **Teamwork trainings:** Interprofessional education (IPE) for all health care professional students when they are in the undergraduate or graduate programs
- A **safe space to make mistakes** and learn from their mistakes.



**세 살 버릇 여든까지 간다 (Old habits die hard)**

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# Helpful resources



INACSL Standards of Best Practice: Simulation available at:

[www.inacsl.org](http://www.inacsl.org)

[www.nursingsimulation.org](http://www.nursingsimulation.org)

SSH Simulation Dictionary

[www.ssih.org/dictionary](http://www.ssih.org/dictionary)

IPEC Competencies 2016

<https://ipecollaborative.org>

NCSBN National Simulation Study (Hayden et al., 2014)

<https://www.ncsbn.org/5644.htm>

NCSBN Simulation Guidelines (Alexander et al, 2015)

[https://www.ncsbn.org/Alexander\\_NCSBN\\_simulation\\_guidelines\\_for\\_prelic\\_ensure\\_nsg\\_programs.pdf](https://www.ncsbn.org/Alexander_NCSBN_simulation_guidelines_for_prelic_ensure_nsg_programs.pdf)

**감사합니다.**

Contact information:

[jyh0908@uw.edu](mailto:jyh0908@uw.edu)

A large, three-dimensional graphic of the letters 'Q&A' in a vibrant red color. The letters are positioned on a light gray surface against a matching gray background, casting soft shadows to the right.

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