



Patient with Total Hip Replacement: Bedside Simulation and Implications for Collaborative Practice and Improved Patient Safety

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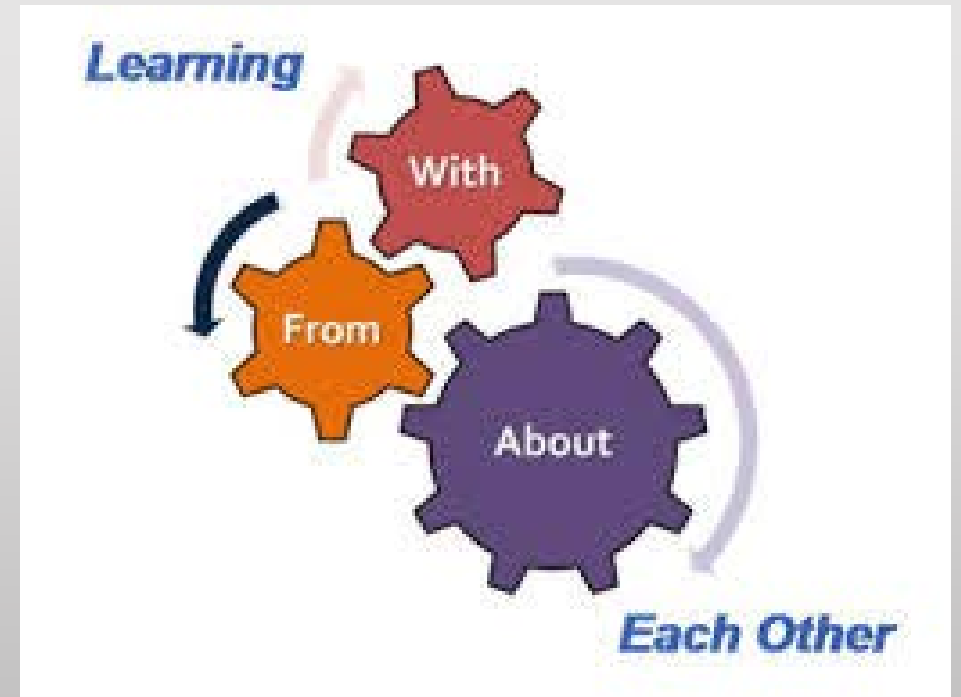
**MISERICORDIA
UNIVERSITY**

Dallas, Pennsylvania

Founded by the Sisters of Mercy

Objective:

- To share an experience that provides students with an authentic opportunity to perform, collaborate and learn roles and responsibilities during a simulated bedside experience with medical imaging (MI), nursing (NSG) and physical therapy (PT) students.

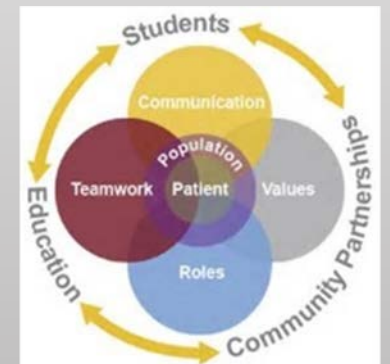


Introduction

- Misericordia University is a four-year, Catholic, co-educational liberal arts university located in Dallas, Pennsylvania.

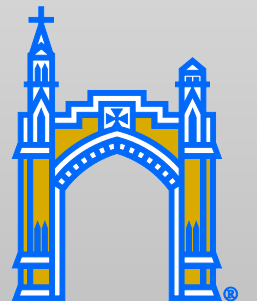
Misericordia's Interprofessional Education Mission:

To engage students and faculty in interprofessional education and experiences to support the collaborative team approach to patient-centered care.



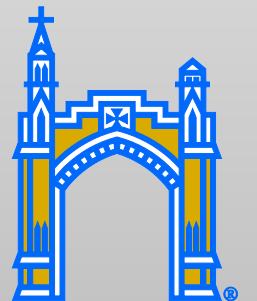
Our Simulation Activity

- Collaborative student teams attended to a simulated patient at the bedside in a nursing lab. Students experienced a realistic post-surgical inpatient simulation that allowed recognition of each others roles and responsibilities and required communication and teamwork to ensure patient safety.



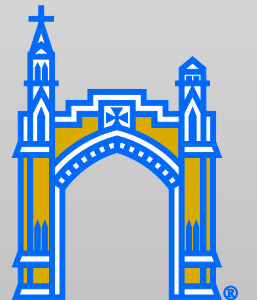
What Makes This Unique?

- Many IPE programs provide collaborative experiences between nursing and PT students, but opportunity for MI is not always present. This experience offers a unique model to allow integration of imaging as an important component of the team.



Preparation and Planning

- The goal was to create an experience that allowed for entry level students to have interprofessional exposure to augment their clinical education with an emphasis on communication and teamwork
- Planning began several weeks prior to the activity with a focus on developing the scenario, creating common objectives and simulating a realistic experience within an acute care setting



Preparation and Planning

- A “chart” was created to match the scenario information including physician orders, a medication record and a report in an SBAR format.

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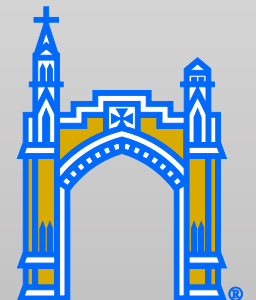
Patient Name: J. Pine
 Date of Birth: 6/24/45
 Physician: Brian Craig, MD

COUGAR UNIVERSITY HOSPITAL
 Physician Orders

Post-Operative Total Hip Replacement Orders

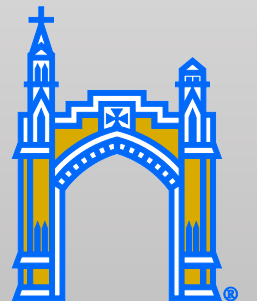
1. CODE STATUS: Full Code
2. VENOUS THROMBOSIS PHROHYLAXIS:
 - a. TEDS
 - b. Sequential Compression Boots
 - c. Loventox 40 mg SQ BID
3. NURSING
 - a. Vitals: hourly x1; every 4 hours x 4; then every shift
 - b. Nursing mobility progression
 - c. BED POSITION: slight flexion of the hips; slight elevation of the bed via controls
 - d. OOB with assistive device: morning after surgery with dislocation precautions
 - e. WEIGHT BEARING STATUS: as tolerated to both lower extremities
 - f. Elevated toilet seat
 - g. Incentive Spirometry
 - h. Apply ice to affected area: operative hip incision
 - i. Saline lock with peripheral flush every shift
 - j. Oxygen PRN
4. DIET/NUTRITION:
 - a. Full Liquid Diet; advance as tolerated to Regular Diet
5. SCHEDULED MEDICATIONS:
 - a. Biscodyl tablets (ducolax) 5 mg PO, HS, PRN
 - b. Senna (senokot tablets) 2 tabs BID, PO
 - c. Morphine Sulfate 5-10 mg every 2 hours IV, PRN
 - d. Tylenol #3, 1-2 every 4 hours, PO, PRN
 - e. Calcium Carbonate, 600 mg, PO, BID
 - f. Fosamax 70 mg, PO, WEEKLY
 - g. Metformin, 500 mg, PO BID
 - h. Coumadin as ordered
 - i. Glucose checks, AC and HS, report glucose >300mg/dL to primary provider
6. LABORATORY

Medications for J Pine					
Medication Administration Record					
Medications		Date Tuesday			
DRUG	AMOUNT	TIME	INITIAL	TIME	INI
Metformin	500 mg	0800			
		1700			
ROUTE	PO				
FREQ	BID				
DRUG	Morphine	TIME	INITIAL	TIME	INI
AMOUNT	5-10 mg				
ROUTE	IV				
FREQ	Every 4 hours PRN				
DRUG	Tylenol #3	TIME	INITIAL	TIME	INI
AMOUNT	1				
ROUTE	PO				
FREQ	Q 4 hours PRN				
DRUG	Fosamax	TIME	INITIAL	TIME	INI
AMOUNT	70 mg				
ROUTE	PO				
FREQ	WEEKLY				
DRUG	Calcium	TIME	INITIAL	TIME	INI
AMOUNT	600 mg	0800			
		2000			
ROUTE	PO				
FREQ	BID				
DRUG	Loventox	TIME	INITIAL	TIME	INI



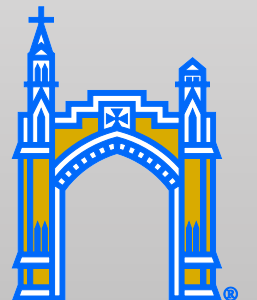
Preparation and Planning

- Interprofessional groups were created related to the number of students in each discipline
- Senior level students were recruited to be standardized patients; faculty were recruited to be debriefers and facilitators
- A “dry run” was organized with senior level students as the participants to estimate our run times and to assess for clarity of instructions and organization.
- The activity schedule was created: 5 simultaneous simulations at 45 minute intervals, repeated 5 times



Simulation Day

- Standardized patients reported early and were provided with demographic information, outline script, name band and moulage
- Facilitators reported early for a pre-activity briefing, given a list of expectations and facilitator questions
 - Roles/responsibilities, communication, teams/teamwork vs clinical skills
- An organizer helped manage the flow and prepared standardized patients



Brief



Simulation



Debrief

INTRODUCTION: You are working in an acute care setting, Cougar University Hospital. You receive orders for J. Pine who was admitted to the hospital and had a surgery yesterday.

GOAL: The goal of this experience is to work together as a patient centered team. The focus is not as much on your clinical skill performance as it is on your ability to communicate, work as a team and recognize the similarities and differences within each discipline!

PREPARATION:

- Orders were reviewed by each discipline
- Plan of care discussed with discipline specific groups to simulate orders received in each separate department

Nursing orders: post-operative assessment

PT orders: OOB, standard THR precautions

MI orders: AP left hip, DX: s/p THR, check alignment

Brief



Simulation

Debrief

- Facilitator transitions case to nursing students via an shift change communication in SBAR format
- Nursing students begin assessment
- PT student enters scenario to initiate pre-transfer assessment: goal of getting patient out of bed
- MI student enter scenario with goal of obtaining AP view of left hip
- Timing allowed for overlap of clinician roles / Interprofessional communication

Brief



Simulation



Debrief

Roles and Responsibilities

- Did you understand the roles of the different professions?
- Did you notice any similarities and differences with your roles?

Communication

- During the scenario, when was communication most important?
- Were you satisfied with your ability to communicate with each other?

Teams and Teamwork

- Do you feel that you worked together as a team?
- What would you do differently next time?

How do did this experience contribute to your understanding of improved patient-centered care?

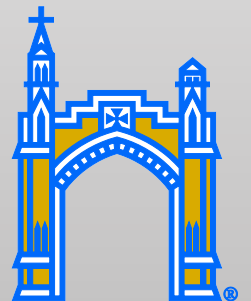
Assessment

- Surveys regarding the simulation activity were distributed to students, simulated patients and faculty facilitators
- Qualitative assessment performed from the perspective of the faculty and students
- Did we meet our objectives?



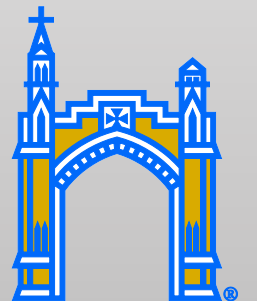
Organizers Perspective

- Very positive method to engage the 3 different health care students in a collaborative learning experience
- Successful in encouraging cooperative clinical partnerships
- Information was shared regarding patient safety (Meds, THR precautions, assist needs for positioning for imaging and OOB)
- Significant planning and preparation needed for activity (time, scheduling, space, materials, faculty and students)



Faculty Participant Perspective

- Impressed with activity and positive learning collaboration
- Exceeded expectations of realistic simulation of acute care setting and patient
- Included areas difficult/unable to portray in general class activity
 - Hip incision
 - Communication hand-off
 - Spontaneity of interactions: between student and patient and between students of different professions
 - Inclusion of important member of healthcare team (MI) that students do not often see in academia but interact often in acute care settings



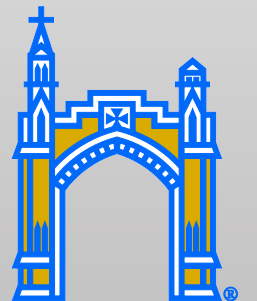
Student Perspective

1. Did the experience make you more aware of communication among health care disciplines?

94.8% agree or strongly agree

2. Did the experience make you more aware of the importance of teamwork within health care disciplines?

93.1% agree or strongly agree



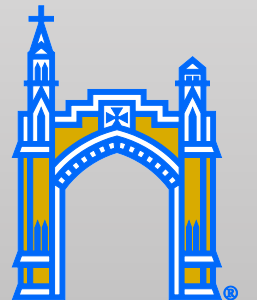
Student Perspective

3. Did the experience make you more aware of the roles and responsibilities of other disciplines?

92.3% agree or strongly agree

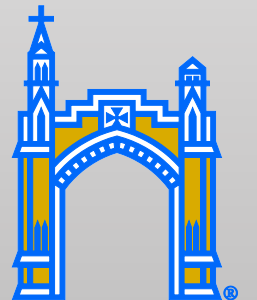
4. Do you feel this activity was beneficial to future practice?

96.6% Yes



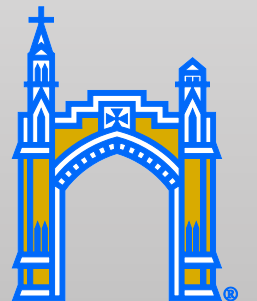
Relevance to collaborative practice and improved patient safety

- Not graded, so less threatening environment that facilitated communication and teamwork
- Significant recognition of role similarities and differences
- Awareness that not all disciplines have the same information prior to seeing a patient
- Recognition that information sharing ensures improved safety



Changes for Future?

- Mandatory participation for all disciplines
- Evaluation tool with performance checklist
- Filming to augment reflection process



Team Work

Good clinical care requires teamwork

Good Communication is the skill



Otherwise patient outcomes will be derailed

QUESTIONS??

