

# College of Nursing MICHIGAN STATE UNIVERSITY

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### PURPOSE

This poster explores the application of Donabedian's theoretical model to optimize simulation center operations at a satellite nursing campus. By examining the three key components—structure, process, and outcomes—we illustrate how their interaction enhances both simulation operations and simulation-based education. Key outcomes are discussed to improve efficiency, effectiveness, and overall learning experiences in simulation operations and nursing education

### STRUCTURE

### MSU College of Nursing- Detroit Campus

- Vibrant urban setting surrounded by several tertiary care hospitals
- 1.5 hours from the "main" campus in East Lansing, MI
- Accelerated Bachelors of Science in Nursing (ABSN) program and simulation center
- Unique setting-shares space with MSU College of Osteopathic Medicine
- Simulation center mirrors events from 2 "sister" simulation sites

### Physical Layout

- Simulation /Skills laboratory -8 bays equipped to create realistic hospital scenarios
- Clinical exam suite-4 exam rooms with recording capability
- Classroom and seminar rooms for pre-briefing and debriefing activities

### **Technology/Equipment**

- Advanced simulation technology-hi-fidelity patient simulators, virtual reality (VR) system
- Learning management platform to record events
- Task trainers, ventriloscopes and a variety of other equipment for simulation

### Staffing

- Since its establishment in 2015, the campus has grown, and in 2023, a site coordinator was hired to oversee daily operations
- Core team includes a site coordinator, a nurse simulation educator, and an academic technology coordinator
- Didactic faculty and clinical instructors are assigned to the campus each semester
- This staffing structure has been crucial in managing the campus and simulation center and ensuring the successful delivery of simulations and nursing education

## **Optimizing Simulation Center Operations: A Donabedian** Model Approach J. Tanafranca, DNP, RN, NPD-BC, L. Daily, MSN/Ed, RN, R. Adams

### **DONABEDIAN'S MODEL**

**Structure** refers to the attributes of the settings in which care occurs, including facilities, equipment, and staffing

**Process** involves the methods and procedures used to deliver care, encompassing the activities performed by healthcare providers

**Outcomes** are the results of care, including changes in patient health status and satisfaction. are the measurable impact made from structures and processes in place



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Danielle Huseman-Maratea, Judith Hahn, Ena Williams, Danielle E. Morton, Application of the Donabedian Model to Guide Virtual Magnet® Site Visit Preparations During a Pandemic, Nurse Leader, Volume 20, Issue 6,2022, Pages 580-584, ISSN 1541-4612, https://doi.org/10.1016/j.mnl.2022.03.004.

INACSL Standards Committee. (2017). INACSL standards of best practice: SimulationSM: Operations. Clinical Simulation in Nursing, 13(12), 681–687. https://doi.org/10.1016/j.ecns.2017.10.005

#### **PROCESS:** the 3 C's, the 4P's, and 2 S's

This component emphasizes the methods and procedures utilized to operate a satellite campus with a simulation center. Simulation operations requires attention to detail, patience and a focus on establishing a safe place for students to practice their nursing skills Collaboration Processes Scheduling Consultation Policies Standardization Procedures •Communication Planning

#### OUTCOMES

Exploring Donabedian's model provides a theoretical approach to optimize campus/ simulation center operations. The following outcomes resulted:

#### Simulation Center Data

- 20 students in Cohort 1 and 32 incoming students in Cohort 2
- 13 LAC Simulations for each cohort
- 7 Granger Simulations for each cohort
- ~40.25 hours per learner
- Cohort 1: ~805 learning hours
- Cohort 2: ~1288 learning hours

#### The 3 C's: Collaboration, Consultation, Communication Collaboration with "Sister Simulation" sites to ensure consistency in simulation delivery across all locations Collaborate with MSU COM for room scheduling and IPE's

- Virtual coffee and donuts
- Team building run throughs
- Weekly team meetings
- Training workshops for equipment/technology
- Professional development and continuing education
- Simulation membership in various organizations

#### The 4 P's: Processes, Policies, Procedures, Planning

- and simulation events
- Template for policies and procedures
- Developed "SIM Care Plan" template
- Developed "SIM Tech Set up" template
- Developed Microsoft List Inventory/Equipment tracking system
- Streamline Standardized Patient's hiring and orientation process

### The 2 S's: Scheduling, Standardization

- Developed standard templates for event communication
- Standardize scheduling process by utilizing Youcanbook.me to organize student skills sessions, remediations, and exams
- CAE LearningSpace for scheduling simulations, creating simulation schedule, recording and tracking of events
- Outlook for room reservations, capturing key data such as the number of learners, event details, and duration, while categorizing events
- Qualtrics for event surveys





Developed processes, policies and procedures for campus operations