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SCHOOL of NURSING

Simulation Implementation Utilizing Telepresence Robots in an Online Nurse Practitioner Program

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Disclosures

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Objectives

- ▶ Describe the need for innovative methods of formative and summative assessment
- ▶ Describe the Johns Hopkins Post Master's Pediatric Acute Care Nurse Practitioner (NP) program
- ▶ Demonstrate the use of telepresence robots in a simulated setting
- ▶ Discuss the limitations of the use of telepresence robots in a simulated setting

Simulation for formative and summative assessment

- ▶ Simulation is used widely in nurse practitioner programs
- ▶ Increasing numbers of online programs
- ▶ Increasing need for innovative solutions to assess student progress

Johns Hopkins Post Master's Acute Care Pediatric Nurse Practitioner Certificate Program

- ▶ Post graduate certificate for currently certified pediatric primary care nurse practitioners
- ▶ Most working full time
- ▶ Live in various states across the U.S.

The need

- ▶ Students have exposures to:
 - different types of patients and conditions in the clinical setting
 - various preceptors

The Innovation-telepresence robots for use in simulation

► Goals:

- Provide a robust, interactive opportunity for formative evaluation and competency development remotely
- Provide students an opportunity to manage multiple patients during this experience



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Remote simulations: telepresence robot

- ▶ A user operated device that allows the learner to control what they see and how they interact with participants in a simulated experience
- ▶ Allows the end user/learner to participate in simulations taking place on-site



Simulation development

- ▶ Developed a multiple patient simulation experience
 - Team included an expert in healthcare simulation
 - Utilized the National League for Nursing Jeffries Simulation Theory
 - Specific diagnoses selected from the acute care PNP competencies
- ▶ Students provided with a patient census

Telepresence robot in action

Benefits

- ▶ Able to evaluate students in managing a variety of patients without the need for multiple room setups
- ▶ Students able to participate from their homes

Limitations

- ▶ Requires faculty engagement in a similar fashion to traditional simulation
- ▶ Time involved in the scenario is unchanged from in-person simulation
- ▶ Technology limitations
 - Unstable internet, disconnections

Future steps

- ▶ Multiple simulation room set ups
 - Multiple students utilizing multiple robots
- ▶ Increased use across programs
 - History taking, mental health assessment, etc.

Questions

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