

Inclusive Design in Healthcare Informatics

Jennifer Mack, MSN, BA, RN, CNL, NI-BC

Background

*"With the prevalence of patient-focused health information technologies, all nurses have a responsibility to advocate for equitable access and assist patients and consumers to optimally use these tools to engage in care, improve health, and manage health conditions."*¹

Rapid adoption of healthcare technologies without considering barriers to digital inclusion has led to inequities in the distribution and use of resources.^{7,8} If obstacles to technology access and adoption are not considered, informatics solutions may unintentionally widen healthcare inequities.^{3,4}

To promote digital inclusion, factors such as age, race, education level, and eHealth literacy must be considered. But no single tool exists to ensure that informatics solutions are equitable.^{6,8}

Objectives

Students will use a toolbox to determine if a proposed technology promotes inclusion and digital health equity.

Undergraduate nursing students in the newly developed (2024) Healthcare Informatics course at Edgewood will consider factors that contribute to inclusive design when developing their final project, "create an informatics solution to a current healthcare issues".

Methods

1. Identify the steps toward digital inclusion



2. Create a toolbox to promote digital inclusion based on a framework for inclusive design



Need Recognized

Digital medicine can prioritize inclusion through a human-centered, fir-for-purpose lens that ensures digital products do what they claim for all intended (Sharma et al., 2024).



Framework Determined

A clear framework for understanding is needed to address health inequity. A toolbox can help students build knowledge and skills to apply to their projects (Sabik, 2021).



Toolbox Created

Modeled off the intersectionality toolbox, students build a list of questions to co-create a toolbox and select the most relevant for their topic to address (Sabik, 2021).

Next Steps

*Social support and collaborative learning/design are strategies to improve inclusion.*²

- Informatics Inclusionary Toolbox (16 questions on barriers and inclusion strategies) will be added to Edgewood undergraduate Healthcare Informatics courses.
- Students will co-create additional questions to continue to build the toolbox.
- Informatics Inclusionary Toolbox will be added to Edgewood graduate Healthcare Informatics courses.
- Toolbox will continue to be refined and adapted for use with other nursing courses at Edgewood.
- Create a culture where principles of inclusion are hardwired into coursework.

References

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Biography

Jennifer Mack is a clinical nurse leader working as a nursing program specialist at UW Health in Nursing Quality and Safety. She received her Master of Science in Nursing from UW Oshkosh and is an adjunct instructor at Edgewood University teaching healthcare informatics at the graduate and undergraduate level. Jennifer has a passion for quality improvement and enjoys leveraging systems to identify and correct gaps in nursing practice to improve patient outcomes. She combines her background in critical care and nursing informatics to empower nurse leaders at the bedside and in academia to seek solutions to clinical concerns.

Jennifer's recent work includes leading organization wide fall, CAUTI, and CLABSI prevention committees. Her most recent projects include bringing focus "back to the bundle" for CLABSI and CAUTI prevention and creating a fall prevention bundle that is adaptable to changing patient factors. She also spearheaded formation of a clinical practice review committee that takes the perspective of the nurse into account when looking at trends in patient safety. Jennifer is passionate about incorporating new health care technologies that are cognizant of the unique perspectives of patients, with the goal to improve health care regardless of race, gender or social background.

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