

## Sigma's 30th International Nursing Research Congress

### An Innovative Partnership Paradigm: Patient Engagement and Health Information Technology Curriculum for PhD Nursing Students

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**Purpose:** In 2017, the U.S. Department of Health and Human Services called for the increased use of health communication strategies, health information technology, and measures of patient post-encounter self-management competency to monitor and improve health care quality, to measure population health outcomes, and to achieve health equity (U.S. Department of Health and Human Services, 2017). Merely providing health information to people through technology, however, is not enough to ensure individuals are engaged in their care. Patients and their relatives are evolving into a new role designed to improve their experience and outcomes as well as completing tasks, such as tracking laboratory results and scheduling appointments, which were until recently the responsibilities of clinicians (Kensing, Lomborg, & Moring, 2017).

Patient engagement or empowerment requires processes, structures, and relationships to strengthen an individual's ability to make informed healthcare decisions, to weigh the costs and benefits of how to reach his or her optimal health, and, hopefully, to improve quality of life (Coulter, 2011; Millenson & Macri J, 2012; Piper, 2010). This new paradigm requires provider and patient skill building.

Traditionally, clinicians have been educated, trained, and socialized to be providers of care rather than care partners (Drenkard, Swartwout, Deyo, & O'Neil, 2016). Clinicians need to transition in order to manage an engaged care process including assessing patient engagement capacity, exchanging information and appropriately intervening through understanding of patient audiences and culturally appropriate and accessible health information resources (Allen, Auld, Logan, Montes, & Rosen, 2017). In particular, nurses have formidable direct and indirect influence on patient engagement as they are often the first point of care and leaders in organization transformation (Loan et al., 2018).

The primary goal of the patient engagement and technology seminar was to create an innovative curriculum aimed at developing a new generation of nurse scientists with the skills to implement patient engagement and to incorporate health information technology as part of their methodology. The purpose of this presentation is to report on the development and creation of a curriculum and to evaluate its feasibility and acceptability.

**Methodology:** Following a Patient Centered Outcomes Research Institute (PCORI) supported community-academic partnership addressing adolescent healthcare transition in an underserved community, the researchers conducted a mixed-methods assessment of patient engagement and use of health informatics technology. Building upon patient and family suggestions, we conducted an assessment of our program's inclusion of patient centeredness and patient engagement awareness as well as health information technology in our Doctor of Philosophy (PhD) curriculum.

A review of the literature showed common themes regarding patient engagement as they apply to research. A researcher with extensive patient engagement was selected to oversee the curriculum and to establish uniformity within the course, which included assigned peer-reviewed articles, applicable videos from conferences such as TedTalks, and evaluation of government provided patient engagement materials such as the Agency for Healthcare Research and Quality (AHRQ) Health Literacy Toolbox.

After identifying areas in which to expand our curriculum, we built upon literature review, first-hand experience, and patient-guidance to create a seminar in Patient Engagement and Health Technology designed to expose PhD students to state-of-the-art engagement techniques, to build interdisciplinary relationships that support patient-centered care and culture change, and to acquire knowledge and skills to effectively lead engagement and healthcare design initiatives.

The curriculum provided an interdisciplinary examination of the principles and concepts of patient engagement and patient activation as they relate to health, healthcare, and research methodology. Students became more familiar with the concurrent and related growth of patient centered outcomes research and the proliferation of health – related technology, including the electronic health record, patient portal, electronically reported patient outcome measures, personalized health data trackers (e.g. Fitbits), and computer/telephone applications.

The PhD students critically explored patient engagement and patient activation from multiple stakeholder viewpoints, including the health care provider, family member, patient, and other relevant stakeholders while analyzing and critiquing relevant research methodologies in patient engagement technology, including patient portals, health monitoring applications, social media, and other modalities. Students also explored the role of technology including tracking devices, social media and other platforms as sociocultural factors shaping health behavior and patient engagement.

**Results:** This comprehensive curriculum incorporated international research and a myriad of cultural approaches to engagement so our international student body would have practical tools applicable within a variety of cultural environments and health. Students applied their new expertise to their own area of research by creating a patient technology engagement project proposal addressing an element of patient engagement and patient-centered outcomes methodology applicable to their scholarly expertise or organizational need.

In debriefing sessions, students reported high levels of acceptance and noted multiple ways in which the course was influencing both their clinical practice and their research goals. The participants felt that the curriculum was sufficiently broad and had provided needed exposure to patient engagement theory as well as examples of patient engagement in practice. Participants suggested restructuring the presentation order of the themes and requested future seminars invite and incorporate patient or caregiver speakers to discuss their own experiences.

**Conclusion:** The primary objective of this presentation is to report the development of a curriculum and evaluate its feasibility, its acceptability, and the knowledge gained by PhD students. The findings confirm the curriculum is feasible and acceptable. This curriculum may help nurse scientists lead more effectively research activities that will support in creating meaningful patient engagement studies, which incorporate health information technology. Next steps include quantitative evaluation of knowledge gained as well as expansion to additional student cohorts

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**Title:**

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**Keywords:**

curriculum development, health information technology and patient engagement

**References:**

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### **Abstract Summary:**

An innovative graduate level patient engagement and technology seminar was developed to impart engagement and health information technology skills to nurse scientists. The presentation will highlight topics and skills to help nurse scientists lead effective projects that will support meaningful patient engagement and which incorporate health information technology.

### **Content Outline:**

Introduction:

1. Review of increased role of technology for patient to monitor their care
2. Discussion of patient ability to use technologies
3. Overview of changing role and expectations for clinicians as part of the patient engagement experience with nurses holding critical role in patient engagement

Body with main points:

1. Recognition of need to develop an innovative curriculum aimed at forming skills to implement patient engagement and to incorporate health information technology in engagement
2. Incorporation of Patient Centered Outcomes Research Institute (PCORI) supported community-academic partnership findings
3. Assessment of patient engagement awareness and health information technology in Doctor of Philosophy (PhD) curriculum in order to increase exposure to state-of-the-art engagement techniques, to build interdisciplinary relationships that support patient-centered care and culture change, and to acquire knowledge and skills to effectively lead engagement and healthcare design initiatives

4. Comprehensive curriculum incorporated international research and a myriad of cultural approaches for broad acceptance in a variety of cultural environments
5. Students applied their new expertise to their own area of research by creating a patient technology engagement project proposal addressing an element of patient engagement and patient-centered outcomes methodology applicable to their scholarly expertise or organizational need.

Conclusion:

1. Students reported high levels of acceptance and noted multiple ways in which the course was influencing both their clinical practice and their research goals
2. Students suggested restructuring the order of the themes presented
3. Further expansion of future seminars would invite patient or caregiver speakers to discuss their own experiences

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**Author Summary:** Ruth Bush is a Professor at the University of San Diego Hahn School of Nursing and Health Science where she teaches statistics, patient engagement, and supervises dissertation research in the PhD program. Her research focuses on patient-centered outcomes, incorporating health information technology into healthcare to encourage patient engagement, and the use of the electronic health record to facilitate comparative effectiveness research. Her current AHRQ funding examines the patient portal's relationship with patient engagement.

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