

Advancing Nursing Informatics in the Next 5-10 Years: What Are the Next Steps?

Panel moderator: Charlene Ronquillo
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Abstract Objective: This panel will explore expert perspectives on what is needed to advance nursing informatics (NI) based on results of an international survey conducted by the IMIA-NISIG Student Group in 2015. This panel will build on results of the survey's thematic analysis findings, highlighting: research, practice, education, collaboration, and visibility, as key areas needing action. **Scope:** Each expert panelist will speak to one of the identified themes in the context of the survey results. Each panelist will then provide perspectives on additional areas of opportunities, potential challenges, and offer actionable recommendations. **Target audience:** nursing informatics leaders, educators, policymakers, researchers, clinicians, students.

Keywords. Nursing informatics trends, research, practice, education, leadership

1. Panel Organization

The proposed panelists are:

Connie White Delaney, University of Minnesota, delaney@umn.edu,

Dr. Delaney is Professor & Dean at the School of Nursing in the University of Minnesota. She also served as Associate Director of the Clinical Translational Science Institute – Biomedical Informatics, and Acting Director of the Institute for Health Informatics (IHI) in the Academic Health Center from 2010-2015. She is an active researcher and writer in the areas of national standards development for essential nursing and health care, outcomes/safety, and data science.

Joyce Sensmeier, HIMSS, IHE USA JSensmeier@himss.org,

Joyce Sensmeier is Vice President of Informatics for HIMSS, a global, cause-based, not-for-profit organization focused on better health through information technology (IT). In her current role she is responsible for the areas of clinical informatics, standards and interoperability programs and initiatives. She is co-founder and ex-officio chair of the Alliance for Nursing Informatics, a global collaboration of 30 distinct nursing informatics groups that represents a unified voice for nursing informatics professionals.

Heimar de Fátima Marin, Federal University of Sao Paulo (UNIFESP), hfmalin@unifesp.br

Heimar de Fátima Marin is a nurse who has devoted her professional career to improving patient care using information and communication technologies. She is Full Professor and Coordinator of the Graduate Program in Health Informatics at the

Federal University of São Paulo (UNIFESP). Dr. Marin has over 250 publications and has mentored over 20 Ph.D. students, 32 master students, and 85 specialists in health and nursing informatics.

Hyeoun-Ae Park, Seoul National University College of Nursing, President, International Medical Informatics Association (IMIA) South Korea, hapark@snu.ac.kr.

Professor Park has been teaching nursing and health informatics since the early 1990's. Prof. Park's research interests include use of nursing and health terminology and classifications and detailed clinical models in electronic health records to promote interoperability. Prof. Park's is currently working on a health avatar project developing and using intelligent virtual agents and quantified self for health promotion.

Patti Abbott, University of Michigan School of Nursing, pabbott@umich.edu

Patricia Abbott is a formally trained informatician and an Associate Professor at the University of Michigan School of Nursing. Dr. Abbott is a member of the Biomedical Computing and Health Informatics Study Section at the US National Institutes of Health. In 2014, she was appointed to the WHO e-Health Technical Advisory Group (TAG). Dr. Abbott is focused on e-Health applications and solutions for low-resource settings.

2. Panel Description

2.1. Format

Timeline of activities

- Moderator introduces panelists and discussion guidelines (5 minutes)
- Panelists give presentations (5 panelists x 10 minutes each)
- Questions & answers (30 minutes)
- Closing (5 minutes)

Sample list of debatable questions

- What actionable recommendations can you make to advance NI (research/ practice/ education/ visibility/ collaboration) across various roles (e.g., students, staff nurses, nurse informaticians, educators, etc).
- For places where NI is not well established, what are some "lessons learned" that might be especially useful from places where NI is relatively advanced?

2.2. Description

In summer 2015, the IMIA-NISIG Student Working group developed and distributed an international survey exploring the perspectives of nurse informaticians on current and future trends in nursing informatics. The survey was translated into six languages and distributed through the student groups' professional channels. Out of 402 total survey participants, 272 (response rate=67.7%) responded to the question regarding recommendations on the advancement of NI. The focus of the panel is to build on one of the open-ended survey questions that asked: "What should be done (at a country or organizational level) to advance nursing informatics in the next 5-10 years?" A

thematic analysis of survey responses identified five key areas for action: research, practice, education, collaboration, and visibility.

This panel brings together nursing informatics experts representing each of the five areas for action, who will share their insight as to the next steps that need to be taken within each of these key areas. Further, the panel discussion of debatable questions aims to begin the broader dialogue on additional areas of opportunities, potential challenges, and actionable recommendations.

Visibility

Dr. Park will introduce national and international organizations such as professional organizations, academic organizations and standard development organizations for us as nursing informatics experts to represent nurse informatics and discuss how we can get involved as in these organizations.

Practice

Ms. Sensmeier will describe [HIMSS Position Statement](#) on Transforming Nursing Practice through Technology & Informatics which identifies specific recommendations for eliminating barriers and addressing nursing's role in transforming healthcare through the use of IT. The discussion will emphasize that technology will continue to be a fundamental enabler of future care delivery models and nursing informatics leaders are essential to transforming nursing practice through technology.

Research

The research focus portion of this panel will highlight research priorities, including nursing's engagement in big data science-based research and personalized health. The importance of driving electronic data capture to represent the expanse of nursing and interprofessional care across the continuum of care will be discussed. Advancing interprofessional collaboration and team research are discussed. Within these research topics emphasis will be directed to opportunities and challenges.

Education

Nurses and allied professionals need to be prepared for leading and managing, or to assume new roles and positions in the global health sector. This preparation requires programs in Nursing and Health informatics in several levels and degrees (certificate, master, doctoral, specialization) - one type does not replace the other. Dr. Marin will discuss a number of priorities in education that cover aspects such as shortages of mid-career academicians, availability of resources and infrastructure, and defining curriculum and competencies for training programs, among others.

Collaboration

Dr. Abbott will discuss ways that nurse informaticians can take the lead in creating and participating in opportunities to collaborate with other health and informatics disciplines, approaches towards strengthening existing relationships, and ways that we can potentially capitalize on shared goals and resources to build stronger health informatics systems and communities.