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Accelerating the Global Workforce Demand for Nurse Informaticians: Advanced Health Informatics Certification (AHIC)

Cynthia GADD^a, Connie W, DELANEY^b, Heimar de FÁTIMA MARIN^c, Karen GREENWOOD^d, Jeffrey J. WILLIAMSON^d

^a Vanderbilt University, Nashville, TN, USA; ^b University of Minnesota, Minneapolis, MN, USA; ^c Universidade Federal de São Paulo (UNIFESP), São Paulo, Brazil; ^d American Medical Informatics Association (AMIA), Bethesda, MD, USA

Abstract: Advances in professional recognition of nursing informatics vary by country but examples exist of training programs moving from curriculum-based education to competency based frameworks to produce highly skilled nursing informaticians. This panel will discuss a significant credentialing project in the United States that should further enhance professional recognition of highly skilled nurses matriculating from NI programs as well as nurses functioning in positions where informatics-induced transformation is occurring. The panel will discuss the professionalization of health informatics by describing core content, training requirements, education needs, and administrative framework applicable for the creation of an Advanced Health Informatics Certification (AHIC).

Keywords: Clinical Competence; Informatics; Health Education; Workforce Development

1. Panel Description

The goal of this panel is to describe development efforts by the AMIA to create an advanced health informatics certification credential (AHIC) for the informatics workforce including nurse informaticians. Panelists describe the project from inception to its current state of maturity. We will highlight training efforts at different levels of maturity for nurses in Brazil and the interprofessional education movement in North America in order to demonstrate progress toward the global need for an AHIC-type credential. Perhaps most importantly, this panel will identify opportunities for leveraging certification and education resources through dialogue from the world's top informatics subject matter experts through moderated interactive panel discussion.

AMIA has been working on the issue of certification for individuals who practice clinical and health informatics since 2005. AMIA's efforts led to the medical subspecialty of clinical informatics, Board certification, the AMIA Clinical Informatics Board Review Program, and formal relationship with the Commission on Accreditation

of Health Informatics and Information Management (CAHIIM). In February 2012, the AMIA Academic Forum created a Task Force on Advanced Interprofessional Informatics Certification (AIIC) and turned its attention to creating a credential serving a complimentary and equivalent health informatics certification program. This task force issued a consensus statement that established three basic principles:

- a pathway to certification for individuals not eligible for the subspecialty certification is critical,
- such a pathway should focus on the core informatics content that is relevant to all professions, and
- health informatics certification should be at the graduate level, based on the same core content used for the subspecialty certification, have the same rigor as the subspecialty certification process and convey the same level of assurance of competency as the subspecialty certification.

In December 2014, AMIA convened a multi-disciplinary work group to build on the work of the AIIC task force and recommend the core content and eligibility pathways for AIIC. This work group includes representatives from clinical informatics research, dentistry, nutrition, nursing, osteopathy pharmacy, public health, and radiology. To inform their deliberations, work group members have solicited input from related AMIA Working Group Chairs and over 45 individuals from the various disciplines. The work group's recommendations were approved by the AMIA Board of Directors in November 2015 and two official AMIA White Papers will be published in the Journal of the American Medical Informatics Association (JAMIA) in July 2016 entitled *Creating Advanced Health Informatics Certification* and *Eligibility Requirements for Advanced Health Informatics Certification*.

AMIA is analyzing options for establishing a trusted, professionally neutral home for developing and administering the examination. A new organization would establish the final core content and eligibility pathways for AHIC. These advances in professional recognition of nurse informaticians through certification activities have implications that extend beyond certification and impact training program curriculum, accreditation efforts, and workforce development as individuals train, learn, and are recognized for the informatics competence by the public. The goal of this panel is share with the global nursing informatics audience AHIC progress in the USA and have interactive discussion about implications and collaborations throughout the world.

2. Panelists and Moderator

Cynthia Gadd, Vice Chair for Education and a Professor of Biomedical Informatics, Vanderbilt University, Nashville, TN, USA, cindy.gadd@Vanderbilt.Edu. Dr. Gadd has published numerous articles in her primary area of research, the implementation and evaluation of integrated clinical information systems from a sociotechnical perspective.

Connie White Delaney, Dean and Professor, School of Nursing, University of Minnesota, Minneapolis, MN USA, delaney@umn.edu <u>delaney@umn.edu</u>. Dr. Delaney, an internationally recognized health informatics scholar educator, researcher, writer and sought after speaker in the areas of national standards development for essential nursing outcomes/safety data.

Heimar de Fátima Marin, Full Professor and Director of the graduate Program in Health Informatics at the Federal University of São Paulo (UNIFESP), São Paulo, Brazil, <u>heimarfm@gmail.com</u>. Dr. Marin is a nurse who has devoted her professional career to improving patient care using information and communication technologies.

Karen Greenwood, Executive Vice President and Chief Operating Officer, AMIA, Bethesda, MD, USA, <u>karen@amia.org</u>. Karen serves as a member of AMIA's Executive Committee and is the organizational liaison to several other associations including the Alliance for Nursing Informatics.

Jeffrey J. Williamson, Vice President of Education and Academic Affairs, AMIA, Bethesda, MD, USA, <u>jeff@amia.org</u>. Jeff's experience is in informatics training, education, workforce development, and he is responsible for AMIA certification and accreditation.

3. Timeline of Panel Activities

J. Williamson will provide brief introductions, panel topics, panelist introductions, discussion guidelines, and moderate a discussion with the audience. (5 Minutes)

C. Gadd is the Chair of the AIIC Work Group and will describe the effort to produce the core content and training requirements to frame the certification, as well as other general information about the rationale for the project. (10 Minutes)

C. Delaney is a member of the AIIC Work Group and will discuss outreach to the nursing informatics community as well as efforts to nurture interprofessional education in the USA. (10 Minutes)

K. Greenwood will discuss AMIA's involvment in CAHIIM and effort to create an entity to host, administer and sustain AHIC. (10 Minutes)

H. Marin will talk about nursing informatics education and workforce development in Brazil and provide her reaction to the AHIC efforts including global opportunities and possible barriers in adoption of the credential. (10 Minutes)

Example Discussion Forum Questions (Remaining Time)

- 1. What are examples of advances in informatics professional recognition from around the world? How is AHIC similar or different?
- 2. How will health informatics certification activities impact accreditation and informatics educators in training programs?
- 3. Will the professionalization of informatics through certification and accreditation fundamentally alter the discipline of informatics? In what ways?
- 4. Will the AHIC credential have a leveling effect in professional status for nurses who preform equivalent informatics functions to their medical colleagues?
- 5. What professional roles and titles will individuals with an advanced informatics credential assume?
- 6. Can efforts like AHIC and other informatics certifications help the public better understand what informaticians do? If so, how?