



A Call to Action: Preparing nurses to practice

In an informatics intensive and consumer centric health care environment. The Tiger Initiative

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Summer Institute in Nursing Informatics

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Goals

- *To identify the Call to Action proposed by the TIGER Initiative*
- *To articulate strategies to promote the Call to Action*
- *To recognize key ingredients for a successful Call to Action*



Technology Informatics Guiding Education Reform

The TIGER Initiative aims to enable practicing nurses and nursing students to fully engage in the unfolding digital era of health care

TIGER Vision

- Allow informatics tools, principles, theories and practices to be used by nurses to make healthcare safer, effective, efficient, patient-centered, timely and equitable
- Interweave enabling technologies transparently into nursing practice and education, making information technology the stethoscope for the 21st century

Nursing Focus

- Nearly 3 million practicing nurses in the U.S.
- More than 55% of all health care workers
- Nurses are knowledge workers



“There is no aspect of our profession that will be untouched by the informatics revolution in progress.”

Distinguished Professor and University Dean Emeriti
Indiana University School of Nursing

Context

Converging forces that are serving as a catalyst for transforming nursing practice

1. Federal influences
2. IOM studies and reports
3. Emerging technologies
4. Growing consumerism
5. Nursing shortage

Federal Initiatives

April 2004 - Office of National Coordinator of Health Information Technology (ONCHIT) formed by Presidential Order

July 2004 – Dr. David Brailer provided recommendations to President for HIT adoption, including:

All persons in U.S. on electronic health records within 10 years

The Decade of Health Information Technology: Delivering consumer-centric and information-rich health care

<http://www.hhs.gov/onchit/framework/>

Four Cornerstones:

1. Inform clinical practice
2. Interconnect clinicians
3. Personalize care
4. Improve population health

IOM Vision

“All health professionals should be educated to deliver patient-centered care as members of an interdisciplinary team, emphasizing evidence-based practice, quality improvement approaches and informatics.”

Are Nurses Ready?

- Are nurses ready for data-driven decisions and Evidence Based Practice (EBP)?
- Are nurses ready for consumer-centric care?
- Are nurses ready for informatics-intensive environments?
- Are nurses ready for this electronic transformation?
- Are nurse educators ready???

Does 'informatics intensive' mean technology equipment?

If so, then another question may be: Are nurses ready for an Information intensive environment. They are becoming like

Phy...too much info coming at them. I think this is different than EBP

Are nurses ready for Evidence Based Practice?

“Our conclusion is that RNs in the United States aren’t ready for evidence-based practice because of the gaps in their information literacy and computer skills, their limited access to high-quality information resources, and above all, the attitudes toward research.”

Pravikoff, Tanner & Pierce (2005) AJN

NLN Faculty and Dean Survey

Electronic survey sent to Deans/Directors and faculty by NLN

- Respondents:
 - 549 Deans/Directors
 - 1557 Faculty
- Computer Requirement-No
- PDA Requirement-No
- Computer Literacy Requirement-50%
- Information Literacy Requirement
 - Deans 39%
 - Faculty 60%

Part of this challenge is that we put in hand held devices for the bedside care nurse but the manager/director/CNE do not use tech, they are still working with paper. What is the message to the bedside nurse?

Necessary Skills for Nurses Portfolio in 2007

- Computer Literacy Skills (includes software maneuvering and device comfortability) I have seen some who have finally mastered a pc but not 'jumping around in the software. She knows 'only how to do 1 thing on the computer'
- Information Literacy Skills
- Informatics Skills

Building the Work Force for HIT

A work force capable of innovating, implementing and using health communications and information technologies will be critical to healthcare's success.

For health Information Transformation

AHIMA and AMIA

http://www.ahima.org/emerging_issues/Workforce_web.pdf

Background

- July 2004 – Nursing representation missing from national conference on EHR convened by the Office of the National Coordinator of Healthcare Information Technology (HIT)
- January 2005 – TIGER Team formed at Johns Hopkins SON
- Fall 2005 – Approved program by IOM
- February 2006 – Decided to pursue Summit with private sponsorship
- October 2006 – Invitational Summit meeting
- February 2007 – Released Summary Report
- May 2007 – Creating Collaborative TIGER Teams

Catalyst for change

- Nursing participation in the National HIT agenda is no longer optional
- Nurses are organized around professional specialties (>100 organizations)
- Nursing specialty organizations and nursing informatics organizations are organized separately under an umbrella (NOA and ANI) organization but not necessarily connected together
- Difficult to identify a unified voice for nursing on National HIT issues
- A gathering of all nursing stakeholders would create an opportunity to define a unified 10-year vision for nursing and commitment to a 3-year action plan



TIGER Summit

Technology Informatics Guiding Education Reform

- October 31 -November 1, 2006
- Held at the Uniformed Services University for Health Sciences (USUHS) in Baltimore, MD
- 100 participants representing all stakeholders
- Created a collective vision for nursing practice and education within 10 years if nurses were fully enabled with IT resources
- Developed a 3-year action plan required to achieve this vision
- www.tigersummit.com

Stakeholders

- FOCUS: Leaders of Professional Organizations, Not Individuals
- Opportunity to bring together nursing informatics and specialty organizations
- More than 70 organizations were represented at the Summit
- Engage ***all stakeholders*** to take action to transform nursing education
 - *Nursing Professional Organizations*
 - *Academic Institutions*
 - *Healthcare Delivery Organizations*
 - *Information Technology Vendors*
 - *Government and Policy Makers*
 - *Health information management professionals and health sciences librarians*

AMIA	American Medical Informatics Association
ANIA	American Nursing Informatics Association
ASCI	Alabama Society for Clinical Informatics
BANIC	Boston Area Nursing Informatics Consortium
CARING	Capital Area Roundtable on Informatics in Nursing
CSRA-CIN	Central Savannah River Area Clinical Informatics Network
CHIN	Connecticut Healthcare Informatics Network
DVNCN	Delaware Valley Nursing Computer Network
HINJ	Health Informatics of New Jersey
HIMSS	Healthcare Information and Management Systems Society
INFO	Informatics Nurses From Ohio
MNIN	Michigan Nursing Informatics Network
MINING	Minnesota Nursing Informatics Group
MNRS	Midwest Nursing Research Society
NCNA	North Carolina State Nurses Association Council on NI
NISCNE	Nursing Information Systems Council of New England
PISUG	Perinatal Information Systems User Group
PSNI	Puget Sound Nursing Informatics
SCINN	South Carolina Informatics Nursing Network
UNIN	Utah Nursing Informatics Network





TIGER Stakeholders

Academy of Medical-Surgical Nurses
Air and Surface Transport Nurses Association
Alabama Society for Clinical Informatics
Alliance for Nursing Informatics
American Academy of Nurse Practitioners
American Academy of Nursing
American Association of Colleges of Nursing
American Association of Critical-Care Nurses
American Association of Neuroscience
Nurses
American Association of Nurse Anesthetists
American Association of Occupational Health
Nurses
American College of Nurse Practitioners
American Dietetic Association
American Health Information Management
Association
American Medical Informatics Association
American Nurses Association
American Nursing Informatics Association

American Organization of Nurse Executives
American Radiological Nurses Association
American Red Cross
American Society of PeriAnesthesia Nurses
Apptis
Army Nurse Corps
Association of Peri-Operative Registered
Nurses
Association of Women's Health - Obstetric
and Neonatal Nurses
Boston Area Nursing Informatics Consortium
Capital Area Roundtable on Informatics in
Nursing
Cerner Corporation
Clinical Information Technology Program
Office
CliniComp Intl.
CPM Resource Center
Delaware Valley Nursing Computer Network
Department of Veterans Affairs



TIGER Stakeholders

Eclipsys
Elsevier
Emergency Nurses Association
GE Healthcare Systems
Healthcare Information and Management Systems Society
IBM
Independence Foundation
Informatics Nurses from Ohio
Infusion Nurses Society
International Society of Forensic Nurses
McKesson
Minnesota Nursing Informatics Group:
MITRE Corporation
NANDA Intl.
National Association of Clinical Nurse Specialists
National Association of Directors of Nursing Administration in Long-term Care
National Council of State Boards of Nursing
National League for Nursing

National Library of Medicine
National Organization of Nurse Practitioner Faculties
North Carolina State Nurses Association
Council on NI
Nurse Insurers Association of America
Oncology Nursing Society
QuadraMed
Robert Wood Johnson Foundation
Sigma Theta Tau Intl.
Society for Vascular Nursing
Tenet Healthcare
Thomson Healthcare
Uniformed Services University of Health Sciences
U.S. Dept of Health & Human Services – Health Resources and Service Administration
Utah Nursing Informatics Network
The Wound, Ostomy and Continence Nurses Society

3-Year Action Plan

- Based on a common “vision” of ideal EHR-enabled nursing practice
- Focused on identifying the “gaps” in nursing preparedness to practice in an EHR-enabled environment
- Agree to take actions within the next 3 years that can close these gaps
- Main focus of deliverables is on the creation of educational tools and resources that can be shared with entire healthcare community

Summit Report

- Executive Summary
- The 3-Year Action Plan
- Background
- Case Studies
- Recommendations
- Summit Participants
- Available at
www.tigersummit.com



Key Pillar: Management & Leadership

Revolutionary leadership that drives, empowers and executes the transformation of health care

- ***Publish TIGER outcomes and execute the 3-year action plan***
- Identify strategies for increasing the power, influence and presence of nursing through professional organizations in governmental and legal bodies
- Create specific leadership, management, education and development strategies

Phase I

- Generated agenda for each pillar
- Based upon responses from Summit Participants
- Individual Organizations developed plans
- Analysis and Alignment into meaningful priority areas.

Key Pillar: Education

Collaborative learning communities that maximize the possibilities of technology toward knowledge development and dissemination, driving rapid deployment and implementation of best practices

- ***Reform the nursing curriculum through integration of IT, information literacy and informatics and the infusion of technologies for learning***
- Seek funding to develop and implement learning innovations, foster faculty development and ensure necessary infrastructure
- Identify, model and implement collaborative partnerships among public and private academic, service and industry enterprises
- Increase faculty acceptance of technology through education and training, incentives and necessary supports
- Convene a national group to develop strategies for the recruitment, retention and training of current and future workforces in informatics education, practice and research



Key Pillar: Communication & Collaboration

Standardized. Person-centered, technology-enabled processes to facilitate teamwork and relationships across the continuum of care

- **Convene stakeholders to establish, disseminate, and support a shared vision, core values and goals**
- **Establish demonstration projects to model collaborative relationships across the continuum of care.**
- Localize Tiger vision by creating regional sharing (among practice, education, research and informatics)
- Establish demonstration projects to model collaborative relationships across the continuum of care.

Key Pillar: Informatics Design

Evidence-based, interoperable intelligence systems that support education and practice to foster quality care and safety

- ***Include multi-disciplinary end-users in the design and integration/incorporation of informatics that is, intuitive, affordable, usable, responsive and evidence-based across the continuum of care***
- Develop guidelines for integrating informatics infrastructure: intelligence systems, IT hardware architecture, data documentation and warehousing, universal database and portals of knowledge
- Design systems that promote the mining and use of data for analysis, clinical decision making, and measurement to improve the quality of care
- Create and implement multi-disciplinary, multi-lingual standards

Key Pillar: Information Technology

Smart, people-centered, affordable technologies that are universal, useable, useful and standards-based

- ***Integrate interoperability IT standards to clinical standards (practice and education)***
- Educate practice and education communities on IT standards and establish hard deadlines for adoption
- Strive for secure and reliable access to IT based on needs and standards

Key Pillar: Policy

Consistent, incentives-based initiatives (organizational and governmental) that support advocacy and coalition-building, achieving and resourcing an ethical culture of safety

- **Require nurses' involvement in a National Health IT agenda, congressional testimony and participation in policy decisions at all levels toward technology that supports ethical, safe patient care**
- Endorse consistent, agreed-upon IT standards
- Obtain funding for curriculum expansion, research and practice in nursing informatics and IT
- Identify incentives that support the adoption of innovative technologies
- Support a personal health record (PHR) for every person in the United States

Aligning TIGER-related activities

- Formalize activities/action steps into collaborative TIGER Teams (9 identified)
- Better leverage the activities of participating organizations to gain momentum and market strength
- Enable additional organizations and individuals to join the TIGER activities
- Define measurable outcomes of each collaborative team
- Provide the infrastructure and support to facilitate the development and dissemination of the activities of the collaborative

Phase II – TIGER Activities

- Identify which organizations/individuals will participate in each collaborative
- Obtain additional funds to support collaborative activities
- Initiate monthly conference calls with each collaborative
- Identify collaborative chair or co-chair positions
- Develop work plan and measurable outcomes for each collaborative

Phase II – Collaborative Outcomes

Work plan and measurable outcomes for each collaborative, to include:

- An inventory of existing resources
- Identify and obtain access to constituent targets
- Two educational web-based audio conferences
- One national conference presentation
- A comprehensive white paper-type document
- Define topic-specific evaluation criteria
- Submit articles for publication and dissemination amongst broader TIGER audience

9 Collaborative TIGER Teams

1. Fully Engage in the Health Information Technology (HIT) Standards and Interoperability Development
2. Fully Engage in the National Healthcare IT Agenda – specifically working with the Office of the National Coordinator
3. Create Comprehensive Informatics Competencies for All Areas of Nursing
4. Reform Educational Curriculum, Faculty and Program Development

9 Collaborative TIGER Teams

5. Create Innovative and Effective Staff Development/Continuing Education Programs
6. Improve Clinical Applications Used by Nurses
7. Create a Demonstration Gallery/Center to Showcase Best Practices
8. Engage and Support Nursing Leadership
9. Engage and Support Healthcare Consumers

1. HIT Standards – suggested activities for TIGER workgroup:

- Identify the most relevant HIT standard setting efforts that are important to the TIGER mission.
- Assess whether there is adequate representation/input of the TIGER mission/perspective on said efforts.
- Take action to close gaps that exist.
- Communicate the existence and importance of HIT standards and initiatives to the broad nursing community.
- Create tutorials on standardizing data elements, implementing electronic health records, using nursing terminology, and using evidence-based practice tools.

2. Fully Engage in the National Healthcare IT Agenda

(Specifically working with the Office of the National Coordinator)

- Identify the most relevant HIT agendas and policies that are important to the TIGER mission.
- Assess whether there is adequate representation/input of the TIGER mission/perspective on said policy issues.
- Take action to close gaps that exist.
- Communicate the existence and importance of the National HIT agenda and policies to the broad nursing community.

3. Create Comprehensive Informatics Competencies for All Areas of Nursing:

- Harmonize and set informatics competencies for all levels of nursing education: nursing assistants, associate degree, diploma, undergraduate and graduate.
- Harmonize and set informatics competencies for nursing practice.
- Advocate for and support adding informatics competencies into nursing specialty certifications.
- Include informatics competencies in the scope and standard statements (and like documents) of nursing specialties.

4. Reform Educational Curriculum, Faculty and Program Development:

- Use the informatics competencies, theories, research and practice examples throughout nursing curriculums.
- Create programs and resources to develop faculty with informatics knowledge, skill and ability and measure the baseline and changes in informatics knowledge among nurse educators and nursing students.
- Develop a task force to examine the integration of informatics throughout the curriculum.

4. Reform Educational Curriculum, Faculty and Program Development

- Improve and expand existing Nursing/Clinical/Health Informatics education programs.
 - Encourage existing Health Services Resources Administration...
 - Encourage foundations...
- Develop strategies to recruit, retain, and train current and future nurses in the areas of informatics education, practice, and research.
- Collaborate with industry and service partners to support faculty creativity in the adoption of informatics technology and offer informatics tools within the curriculum.

5. Create Innovative and Effective Staff Development/Continuing Education Programs:

- Create educational resources and affordable programs within the practice setting that foster IT innovation and adoption.
- Create competency-based, cost-effective staff development and continuing education programs and training strategies specifically for informatics knowledge, skill and ability.
- Improve and expand existing Nursing/Clinical/Health Informatics education programs by collaborating with industry, service and academic partners to support and enhance the use of technology and informatics in practice.

6. Improve Clinical Applications Used by Nurses:

- Capable of interoperating with other systems
- Support for standardized terminologies
- Support evidence-based practice
- Enables collaborative and interdisciplinary care
- Informed by and/or positively transforms nursing workflows
- Systems designed using principles of human factors
- Provide seamless access to published literature, knowledge
- Speed the translation of research into practice
- Support the creation of new knowledge
- Work with system developers to maximize clinical system effectiveness and efficiency for nurses.

7. Create a Virtual Demonstration Gallery/Center to Showcase Best Nursing Practices through the effective use of IT:

- Provide visibility to the 10 year vision of *IT-enabled* nursing practice and education to broader healthcare audience.
- Demonstrate the breadth and depth of IT resources in use by nurses to enhance their practice and educational environments.
- Demonstrate collaboration between industry, healthcare organizations academic institutions, and professional organizations to create educational modules for nurses that are based upon informatics competencies.
- Provide universal accessibility to this demonstration for all nursing stakeholder groups.
- Use practice examples from different practice environments that can demonstrate best practices, results of research, case studies and lessons learned by partnering with nursing professional organizations.
- Demonstrate how integrated IT systems impact nurses and the quality and safety of patient care.

8. Engage and Support Nursing Leadership:

A relatively small investment of TIGER effort with nursing leaders will be multiplied many times due to the leaders' power and influence in their organizations and the profession.

- Develop programs for nurse executives that stress the value of information technology and empower them to use IT knowledgeably, giving the leaders of the profession a strong and identifiable voice.
- Facilitate nursing leadership to understand, promote, own, and measure the success of IT projects.

9. Engage and Support Healthcare Consumers:

Consumers are becoming more empowered healthcare participants. Informatics can mediate consumers drive for improved health and healthcare as well as broker the relationship between nurse and client.

- Establish efforts to develop health information literacy with the public and healthcare consumers.
- Work with Personal Health Record (PHR) advocates and developers to optimize PHRs as they relate to nursing.

Key Ingredients for Successful Call to Action



Using Intellectual and Social Capital

- *Tiger is all about harnessing...*
 - *Intellectual Capital*
 - *Social Capital*

to move an **AGENDA!**

Intellectual Capital

Intellectual Capital assets are the non-financial resources of an organization. Intellectual Capital can be roughly described as comprising

Human Capital, Structural Capital, and Relational Capital.

Jay Chatzkel (1998)

Social Capital

- Robert Putnam's definition of social capital as "the degree to which a group uses mechanisms such as social networks, trust, reciprocity and shared norms and values to facilitate collaboration and cooperation. Social capital can't be hoarded by an individual the way economic or cultural capital can; it is valuable only because it circulates."

Social Capital

“Trust, reciprocity, shared values, networking, and norms are all things that, according to social capital theory, add value in a firm, or between firms, by speeding the transfer of information and the development of new knowledge.”

McElroy (2001)

Social Capital

- The social capital of a society includes the institutions, the relationships, the attitudes and values that govern interactions among people and contribute to economic and social development. Social capital, however, is not simply the sum of institutions which underpin society, it is also **the glue that holds them together**. It includes the shared values and rules for social conduct expressed in personal relationships, trust, and a common sense of 'civic' responsibility, that makes society more than just a collection of individuals. (World Bank 1998)

Social Capital Approaches

- Micro-approach--value of collective action
- Macro-approach-value of integration and social cohesion
- Meso-approach - potential of social networks to produce resources

Franke (2005)

Strategies

Diversified leadership-Getting the right people at the table

Harnessing intellectual capital

- Experiential learning

Creating and Building on social capital

- Open space facilitation

- Consensus building

- Priority Setting

- Incorporation into strategic mission and goals of an organization

Unified voice in Nursing

We encourage you to join our program

- If you are interested in becoming involved, please join one of the Collaborative TIGER Teams being formed this month
- Email your contact information and the team that you are interested in joining to donna@tigersummit.com
- Monthly calls will start in June 2007
- Share this information with your colleagues
 - TIGER Summary Reports available at website to download at <http://www.tigersummit.com>
 - TIGER Summary Reports available for meetings/mailings – contact donna@tigersummit.com

Thank You!

Tiger URL : www.tigersummit.com

QUESTIONS?