

TIGER SUMMIT

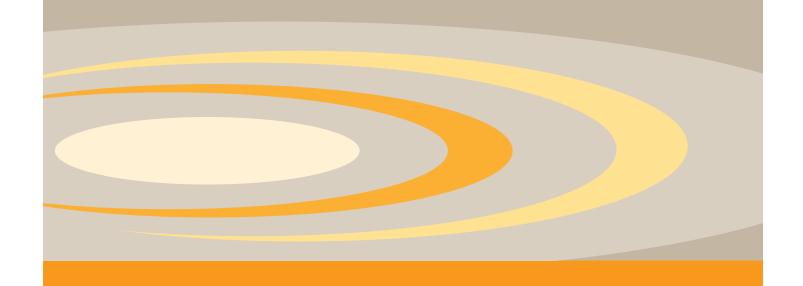
EVIDENCE AND INFORMATICS TRANSFORMING NURSING

OCTOBER 31-NOVEMBER 1, 2006

UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES BETHESDA, MARYLAND

SUMMARY REPORT

CONTACT US: MAIL@TIGERSUMMIT.COM





THE TIGER SUMMIT REPORT FORMAT

This report provides the context for the Summit, descriptions of each of the activities over the two days, notes on the participant experience, and photographs of the event, as well as insights and reflections from speakers. The intention of this format is to provide those who did not have an opportunity to attend a high-level understanding of the process that occurred over the two days to achieve the Summit objectives and outcomes. It is not intented to be a comprehensive document such as a white paper. Rather, the content enclosed incorporates descriptive paragraphs and phrases, as well as statements and quotes captured real-time.

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

— Angela Barron McBride

Distinguished Professor and University Dean Emerita
Indiana University School of Nursing



TIGER INITIATIVE

Our nation's nursing leaders and advocates are working together to catalyze a dynamic, sustainable, and productive relationship between the Alliance for Nursing Informatics (ANI), representing 20 nursing informatics professional societies, and the major nursing professional organizations that collectively represent more than 2,000,000 nurses.

TIGER VISION

Our vision is to enable nurses to use informatics tools, principles, theories, and practices to make healthcare safer, more effective, efficient, patient-centered, timely, and equitable by interweaving enabling technologies transparently into nursing practice and education, making information technology the stethoscope for the 21st century.





2006 TIGER SUMMIT SPONSORS

The TIGER Summit was graciously hosted by the Uniformed Services University of the Health Sciences in Bethesda, Maryland. We thank the following sponsors for supporting this historical gathering:









































Empowering Healthcare





















TIGER SUMMIT OVERVIEW

The invitation-only Summit, Evidence and Informatics Transforming Nursing, comes at a time when the nation is working full-speed to realize the 10-year goal of Electronic Health Records (EHR) for its citizens. This is a critical juncture for nurses, who comprise 55% of the healthcare workforce. They must become more involved at every level, or the Informatics Revolution will pass the nursing profession by, to the detriment of healthcare consumers.

This event gathered over 120 leaders from the nation's nursing practice, education, informatics and professional nursing organizations, government agencies, and other key stakeholders around a singular exploratory focus:

Creating a vision for the future of nursing that bridges the quality chasm with information technology (IT), enabling nurses to use informatics in practice and education to provide safer, higher-quality patient care.

Our goal over the Summit's two days was to create a 10-year vision and 3-year local and global action plan for transforming nursing practice and education to better prepare nurses to practice in an increasingly automated, informatics-rich, and consumer-driven health care environment.





7 KEY PILLARS

The TIGER vision is supported by seven key areas of focus within the healthcare ecosystem. These key "pillars" are both interdependent and essential for creating an environment that will enable nurses to use informatics to provide safer, higher-quality care.

During the Summit, participants engaged in conversation around these pillars with certain underlying assumptions in place: 1) The "practice" of nurses is in reference to "point of care" services that nurses provide across the continuum of care (home, hospital, ambulatory, long-term care, etc.), and 2) The "education" of nurses is in reference to all nursing preparation (all degree preparation and specific role preparation, e.g., APNs).

The pillars were articulated as follows prior to the Summit:

Communication and Collaboration

The role of communication and collaboration among nurses, members of other disciplines, and patients is critical for success. Key discussion aspects include, but are not limited to:

- Communication Techniques and Methodologies
- Interdisciplinary Care
- Therapeutic Relationships and Technology



Education

Education reform is at the heart of the TIGER vision. Preparing the 21st century nurse with skills in technology informatics—allowing the integration of the art and science of nursing with new tools to provide the most knowledgeable and safe care possible—is critical for success. Key discussion aspects include, but are not limited to:

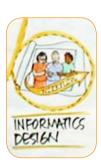
- Integration of Informatics and Education
- Informatics Core Competencies
- Faculty Readiness (Barriers and Strengths)
- Generational Considerations



Informatics Design

Emerging lessons from the field demonstrate the significance of informatics design to support the essence of nursing and effective care delivery. Key discussion aspects include, but are not limited to:

- Intentionally Designed Informatics
- Ease of Use in Professional Workflow
- Design Considerations for Education and Learning Enhancement





7 KEY PILLARS (CONT'D)

Information Technology

We are the generation that will lead and fulfill the Decade of Healthcare Technology. Technological infrastructures and support will be critical for success. Key discussion aspects include, but are not limited to:

- Electronic Health Record (EHR)
- Personal Health Record (PHR)
- System Interoperability
- Standards and Frameworks
- Technology Partners



As the saying goes, "culture eats strategy for lunch every day." When building transformational change by bringing technology into practice and education settings, the significance of culture cannot be underestimated. Key discussion aspects include, but are not limited to:

- Culture Transformation
- Journey Milestones—steps on the journey of culture change
- Change Theory/Management

Management and Leadership

The role of management and leaders—championing and supporting the call to integrate informatics into the day-to-day practice of nurses and education of students—is critical for success. Key discussion aspects include, but are not limited to:

- Creating Shared Vision
- Courageous Leadership
- Direction and Support

Policy

Local and global policy that will enhance or constrain the TIGER vision is important for our consideration and critical to our ultimate success. Key discussion aspects include, but are not limited to:

- Organizational Policy (Local and Global)
- Governmental Policy (Local and Global)











PREPARATION FOR THE SUMMIT

The TIGER Summit was a culmination of two years of intensive planning, fundraising, and raising awareness for this historical meeting. The following planning activities occurred prior to the Summit:

- The TIGER team reached out to the wide network of nursing specialty organizations, informatics organizations, government agencies, vendors and presenters to ensure a diverse representation of expertise and perspectives. This diversity was emphasized throughout the event and was both thoughtfully and purposely designed into each large and small group activity.
- TIGER invited Bonfire Communications to finalize the design of the event and facilitate, record and report on the two days, including refining the process design, developing messaging and communications, aligning speakers and vendors with the Summit's focus and objectives, training table facilitators, designing event materials, integrating audience response technology and supporting event logistics.
- Exemplars of excellence for both practice and education were asked to submit a 2-page Exemplar Report summarizing their innovative work integrating IT, sharing key successes and key learnings, as well as thoughts on where IT can take nursing in the future.
- Participants were sent a reading packet two weeks prior the Summit to review, including 4 articles, 7 Exemplar Reports, and the 7 Key Pillars of the vision. They were also asked to bring a copy of their strategic plan to review in consideration and alignment with the Summit's resulting action plan.

TIGER SUMMIT AGENDA

The two-day agenda incorporated keynote presentations, panel discussions, case study exemplars, large and small group dialogue, audience response technology, and experiential learning (Gallery Walk), as well as open-space facilitation with real-time graphic recording to maximize output from the 120 participants.





OPENING NIGHT RECEPTION

At the Opening Night Reception on Monday night, participants had the opportunity to dialogue with Deans attending the national American Association of College of Nursing (AACN) meeting, special guests, government dignitaries, speakers and participants. In addition, the Gallery Walk was open to attendees for a self-guided, interactive experience of current and emerging technologies.

Members of the TIGER Team (Marion Ball, Diane Skiba, Angela McBride) and representatives from the Uniformed Services University of the Health Sciences (Pat Hinton Walker, Bill Bester) welcomed participants to the Summit, noting that this was the first time that the Deans had gathered together with informatics and professional nursing organizations. In addition, the TIGER team presented Angela McBride with a lighted candle, symbolizing her role as a guiding light for the TIGER initiative over the last two years.

A presentation was given by Karen Bell, Director of the Office of Health IT Adoption, National Health Information Technology Coordinator. She underscored the importance of the Summit in bringing visibility to the nursing profession, as well as the important role that nurses have in leading the informatics revolution.









OVERVIEW OF DAY ONE: TUESDAY, OCTOBER 31ST

After Welcome and Introductions by the TIGER team, the Facilitator oriented the participants to the two-day agenda. As explained, the activities of the morning would lead the large group through a process of "divergence" with presentations, interactions, and experiential learning that would expand their minds beyond any walls and silos of their current expertise and thinking.

In the afternoon, these "mind-expansion" activities would then fertilize their conceptualization of the ideal state for each of the 7 Key Pillars in small and large groups, leading to the creation of a collective and compelling 10-year vision. It is at this "pinnacle" of divergence that the process would become "convergent," and the group would prioritize the importance of the 7 Key Pillars in achieving the vision, as well as articulate the Key Actions required in the next 3 years to achieve our 10-year vision.

Participants moved through four spaces during the course of the first day: they gathered in the auditorium for the presentations, moved to the lobby during the first Gallery Walk session, ate lunch in the cafeteria, returned to the lobby during the second Gallery Walk session, then spent the remainder of the day back in the cafeteria, which had been converted to a meeting space.





WELCOME AND INTRODUCTION

TIGER Team Members

Marion Ball, Ed.D.

Fellow, IBM Global Leadership Initiative

Professor, Johns Hopkins University School of Nursing

- TIGER formed after a major healthcare conference unveiling the federal government's plan to achieve the integration of technology into every aspect of healthcare delivery. Despite the fact that nurses perform around 50% of all healthcare, some participants felt the role was not adequately represented. This group committed to plan a major summit to build a roadmap for the profession's future.
- This Summit is the culmination of a two-year effort, and would not be possible without the TIGER team members who have volunteered their time, energy, and expertise.
- Thanks to all who worked on this with recognition to the TIGER core team, especially Diane Skiba (Executive Chair), Michelle Troseth (Program Committee), Donna DuLong and Patrick Shannon (Logistics and Facilities), Brian Gugerty and Karen Greenwood (Fundraising), and Pat Hinton Walker (USUHS).
- "We are in a position to make a major difference in the field of nursing."
- "We must use science to put power into the hands of the caregiver and extend our abilities to give better care."
- "Each of you brings such knowledge and wisdom of how to revolutionize healthcare at the bedside. It can only be accomplished by you, the foot soldiers."



We need to put the latest tools into the hands of those who take care of patients around the world.



Diane J. Skiba, Ph.D., FAAN, FACMI

Professor and Option Coordinator, Healthcare Informatics

University of Colorado at Denver and Health Sciences Center School of Nursing

- "We are here for the next two days as captives to put forward this agenda."
- "A dynamic, energetic session is planned to help unleash your brilliance."
- Bonfire Communications will help facilitate our sessions, including audience-response voting and graphic recording.
- Our end result will be a graphic roadmap with everything we need to ensure nursing stays visible and on the forefront of the next decade.



We must think out of the box, and ask: What can we collectively do to make sure nurses are prepared for this decade of health information technology?



Angela Barron McBride

Distinguished *Professor and University Dean Emerita Indiana University* School of Nursing

- "This isn't about adding on; it's a transformation taking place."
- We are not just building an agenda. We must get the nursing profession to articulate what we need to do so that we are ready for the future.
- Hopefully attendees with general backgrounds will meet with informatics leaders at this summit to help realize how to meet the goals of your organizations.
- "I am enormously excited to set in motion something that will make informatics not just for informaticians anymore."



To help us achieve what has been our hoped-for practice, IT is not just an enabler. It's a critical component.



FRAMING FOR THE 2 DAYS

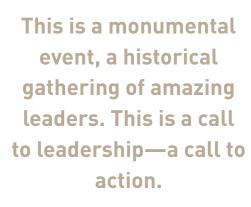
Context, 2-Day Agenda and Outcomes

Vivien Dai

Summit Facilitator Bonfire Communications

- On behalf of Bonfire, it's an honor to have been invited by TIGER to be part of this conversation. We are so inspired by the TIGER team's passion and commitment.
- Our question for this Summit is: How do we better prepare nurses to integrate informatics into daily practice and education and enable them to deliver safer, quality care? In other words, how do we create a better work environment that supports, enhances, and advances the nursing profession and practice? How do we empower nurses to become knowledge workers who use evidence-based decision-making to manage and empower patients?
- The essence of informatics: Managing and organizing information to help nurses make better decisions and enable them to deliver safer, quality care.
- The TIGER team is devoted to outcomes—not just creating a vision and strategy, but moving action forward. Our primary objective is a three-year action plan that you will decide upon and own.
- We want you to be engaged and participate. This is the right vision at the right time, and we have the right people in the room. You are the knowledge experts and you can make a difference—you can transform the future of nursing.







FRAMING FOR THE 2 DAYS (CONT'D)

Vision and Key Pillars

- The TIGER vision will guide our conversations. At the center of it is the nurse providing safe, quality care to the patient, whose practice is supported by information technology. This is our ground and our main focus. Surrounding this goal are interactions with other healthcare professionals—the interdisciplinary teams, and the healthcare system at large.
- We are here to focus on the nursing profession, not change the whole healthcare system. We're not here to "boil the whole ocean," but to focus on transforming nursing practice and education.
- The 7 Key Pillars we have identified will frame our conversation, allowing you to bring your collective intelligence and wisdom to these primary areas that support our vision.
- The first part of the program is intended to begin a process of divergence, to open your mind to the possibilities that exist for the future. Our table discussions will lead to a 10-year vision, then to key actions that will form our three-year action plan, our main objective. On our second day together, we will refine this action plan with audience-response voting, focusing on critical next steps.
- Outcomes of the Summit will include a Summit Report; guidelines for organizations to follow as they integrate informatics knowledge, skills, and abilities into academic and practice setting; and the 3-Year Action Plan, whereby nursing organizations specify their plans to bridge the quality chasm via information technology strategies.
- Collective ground rules: Be present and pay attention; keep cell phones, laptops and PDAs off; raise your hands; focus on additive comments; represent your organization over yourself as an individual; help us stay disciplined and on-time; and most of all, appreciate differing points of view—we are here to harness our collective wisdom.





KEYNOTE ADDRESS (via video conference)

"Nursing 2016: Achievable Steps towards a Bold Vision of Technology Enhanced Practice"

Patricia Brennan, Ph.D. RN, FAAN, FACMI

Lillian L. Moehlman Bascom Professor School of Nursing and College of Engineering University of Wisconsin-Madison

- Imagine how we might use technology in ten years. Picture a plate that can track what's on it, or a bandage that could alert us when an infection starts.
- These and other technologies await, including advances in CPOE and clinical documentation, a coast-to-coast national health information network, genetic analysis, and combining sensors with PHRs.
- A technology-enhanced practice is our desired vision of the future. It will be the bridge between ineffective, potentially unsafe care and care that is safe, effective, patient-centered, timely, efficient and equitable.
- "Nursing is the diagnosis and treatment of human response, and is always a human endeavor. Technologies we envision must use that approach."
- A lack of vision now will lead to an increase in the technology gap later. Spending a lot of money and time doing what we know how to do now will only lead to a lot of money spent and a lot of time passed.
- "It is critical to consider a new way to allow disruptive technologies to be brought into the service of patient care. We can ensure the benefits of disruptive technologies through creative educational environments and deliberate, robust practice environments."

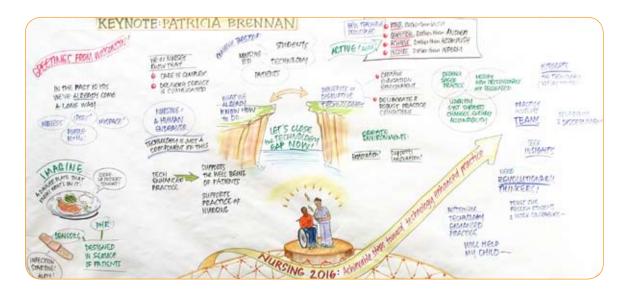




KEYNOTE ADDRESS (CONT'D)

"Nursing 2016: Achievable Steps towards a Bold Vision of Technology Enhanced Practice"

- We must teach for the future. This means teaching to find rather than to know, to question rather than answer, to achieve rather than accomplish, and inspire rather than inform.
- We must redesign professions and the way they work together. This involves stressing evidence-based practice and interdisciplinary learning, modifying the way professionals are regulated, and using the liability system to support changes and ensure accountability.
- Our challenge as leaders is to create an environment that encourages exploration, stimulates imagination and facilitates invention. To do so, we must strengthen the alliance between practice and education.
- Will automation change nurses, nursing, or both? The answer is yes, of course, and why not?
- "It is our job, as leaders and nurses, to envision what might happen if we blend the best
 of nursing education, the best of our students, the best of technology, and the best of our
 patients."



What we need now are revolutionary thinkers.

— Patricia Brennan

Lillian L. Moehlman Bascom Professor School of Nursing and College of Engineering University of Wisconsin-Madison



PRACTICE EXEMPLARS

"Innovative Work in Practice: Seeding the Vision for the Future of Nursing"

Summit Practice Exemplars were selected for their innovative work in nursing practice based on the following criteria:

- Demonstrate the IOM foundational aims for improvement in Crossing the Quality Chasm (2001)
- Support nurses as knowledge workers as described in "Keeping Patients Safe" IOM Report
- Integrate technology within the day-to-day practice of nurses and the interdisciplinary team
- Focus on what is with and beyond technology to prepare for the practice and cultural changes that are needed for today's realities
- Share how technology can be a tool for nurses and other clinicians to practice at the highest level according to their professional scope of practice
- Demonstrate successful outcomes

Prior to the Summit, Exemplars were asked to submit a 2-page Exemplar Report summarizing their innovative work integrating IT into nursing practice, as well as sharing key successes and key learnings.

The exemplars of excellence presented one after the other, preceded by an introduction by Pam Cipriano of the American Academy of Nursing, and followed by a facilitated question and answer session with the participants.

Note: Exemplar Reports and presentations with permission are available on the TIGER web site.





INTRODUCTION

Pam Cipriano, Ph.D., RN, FAAN

Chief Clinical Officer University of Virginia Health System

The American Academy of Nursing (AAN) established a Workforce Commission to address the nursing shortage in this country. As many studies have focused on the nursing supply issue, the Workforce Commission focused on a future state for care delivery that reduced the demand for nurses and identified the need to enhance the work environment with technology, therefore increasing the amount of time nurses can spend providing direct patient care.

In the fall of 2005, with the support of The Robert Wood Johnson Foundation (RWJF), the Commission launched "Technology Targets: A Synthesized Approach for Identifying and Fostering Technological Solutions to Workflow Inefficiencies on Medical/Surgical Units." One major component of this grant is a workflow analysis process named "Technology Drill Down," or TD2. The current grant also provides for synthesis of data from TD2 with two other pioneering projects of the Robert Wood Johnson Foundation: Time and Motion, and Transforming Care at the Bedside (a project in collaboration with the Institute for Healthcare Improvement).

- I am privileged to be here representing the American Academy of Nursing to introduce some ongoing projects with a lot of synergy:
- The Technology Drill Down program has involved bringing together interdisciplinary teams to discuss their ideal work environment. We map the gaps between current and ideal workflow at each site using a real-time whiteboard exercise, followed up by small-group brainstorming sessions on how to close the gaps.
- Transforming Care at the Bedside is a large study focused on changing work environments with an emphasis on safety and reliability. We promote team effectiveness and vitality, making sure all front-line staff are engaged. We involve both patients and their families in the study, attempting to create healing environments and increase the value of care.
- The Time and Motion study employs sophisticated methodologies across several technologies, including PDAs, random signaling, biosensors, and RFID tags. We plan on synthesizing our findings and releasing our analysis by next summer.
- We have over 21,955 hours of data collected!





Our exemplars are individuals who are already starting to shape the future of our profession.





Peggy Esch, MBA, CPHIMS

Department Manger for Healthcare Information Systems Citizen's Memorial Hospital

Citizens Memorial Healthcare (CMH) has implemented a comprehensive healthcare information structure across the continuum of care including the hospital, clinics, long term care facilities, and home health. On CMH's team of twelve information systems analysts, five are nurses. Nurses build the clinical dictionaries, test the systems, troubleshoot, and decide how to adapt information technology in support of clinical processes. Nurses are the SMEs (subject matter experts) in the development and delivery of training. CMH was the 2005 Davies Award winner from HIMSS. The Davies Award recognizes achievement in the implementation of the EMR. CMH was the first non-academic hospital to be named a Davies Award winner.

- CMH has won awards and implementation grants in recent years as the most wired hospital system.
- Every job requires use of a computer. To deal with high turnover rates, we use a lot of online training, deploying courses over a learning management system.
- "The EMR is the deciding factor. Multiple people, actions, and systems all contribute to it (doctors, registration clerks, transcriptionists, care providers, coders)."
- "Rather than a top-down structure, we interact as a network of superusers around the country. The idea is that we have a connected mind outside of our organization."
- As we get new requests from the outside world, including regulatory and technology changes, we coalesce and decide collectively how to respond. This happens best when people are empowered and prepared.
- Our two-minute pain management module, delivered electronically, is one example of a fast method of communicating change across multiple sites.
- Informatics is an intelligent, complex, and adaptive system.



On a normal day, more than 50,000 items are logged into a computer.
Across clinics, long-term care, and hospitals, there are no paper charts.



Elizabeth Herrman, RN, MPS, CAN

Chief Nursing Officer

Holmes Regional Medical Center and Palm Bay Community Hospital

This exemplar represents the collective work of Health First Health system with 3 acute care hospitals and Rush-Copley Hospital who have all implemented computerized clinical documentation across all disciplines in partnership with the CPM Resource Center and the Eclipsys Corporation. The CPM Resource Center began the journey to integrate technology into nursing practice in 1986. The Center's mission is to partner with clinical settings across the continent to create and sustain the best places to practice and the best places to receive care.

The work is driven by a Clinical Practice Model (CPM) that guides transformation of both the culture and practice at the point of care. The CPM framework was used to intentionally design, develop and implement the first automated evidence-based, interdisciplinary documentation system which is now live in 15 acute care settings and being used by thousands of clinicians every day to enhance the delivery of safe, quality care and maintain a healthy culture.

We operated within an international consortium consisting of 190 settings using the CPM Framework to create healthy work places and evidence-based care. Health-First (3 acute care hospitals) and Rush-Copley (1 acute care hospital) shared the successes and outcomes they have had in implementing Knowledge-based Charting with the CPMRC and Eclipsys Corporation.

- Evidence-based practice combines the best research evidence available, clinical expertise, and patient values.
- Our Professional Practice Framework supports scope of practice, professional workflow, evidence-based practice, standardized language for the nursing profession, interdisciplinary integration, and outcome measurement.
- "We use Intentional Design to address the realities at multiple points of care, not just automating what we have, but bringing an integrated framework into every step of the day."
- "Interdisciplinary partnership structures give our nurses more of a say in their practice and their environment."
- "It is a continuous journey to transform practice at the bedside—and we must ensure sustainability."
- Our goal: Planned care that is interdisciplinary and based in evidence, with standardized processes and procedures across the system.
- "We believe that the CPM practice framework has allowed us to complete our mission: create
 and sustain the best places to receive care. We have realized improvement in thinking,
 practice and relationships at the point of care."



As a result of our standardization efforts, nursing satisfaction has increased. We have also seen tremendous increases in quality.



Oyweda Moorer, MSN, RN, CNA-BC

Program Director for Technology and Health Systems Office of Nursing Service, Department of Veterans Affairs

VHA, a division of Veterans Affairs, has a long history of using informatics to support patient care and safety. The first system was developed in the early eighties and was designed to support the business practice for each service but was not integrated. In the 1990's VA implemented the VistA system containing over 90 business practices that support day-to-day activities of healthcare operations including CPRS, VistA Imaging and Bar Code Medication Administration.

This practice exemplar highlights MyHealtheVet, which was implemented in 2004 on Veterans Day and veteran's usage has steadily increased. MyHealtheVet supports nursing practice in care coordination, performance improvement measures, and patient/family communication. Nurses now monitor patients' health more frequently depending on what they are monitoring. Patients input personal health data based on what they have been instructed by providers. Clinicians are able to use clinical reminders to alert them of the frequency that patients should be monitored. Nurses are able to view information using graphics for comparison over time and create reports.

- Our work supports patient-centered, coordinated care that is safe, effective, efficient, and compassionate.
- VHA, one division of Veterans Affairs, has launched MyHealtheVet, a patient record owned by each veteran. The program enables nurses to extract data on patients and compare them across multiple systems.
- Users of the program have included Vietnam-era vets and their surrogates, vets from Iraq and Afghanistan, and VA employees.
- The program is web-based and can be accessed from any computer. From '03-'06, we've had over 8 million visits.
- The system also allows users to graph health readings; record individual and family medical histories; track blood pressure, cholesterol, and exercise; refill prescriptions; conduct research; and generate summary reports.
- A pilot program is available at the following locations:

https://www.health-evet.va.gov Username: demouserb

Password: password_\$1

http://www.myhealth.va.gov

Username: mhvuser Password: mhvdemo#1





MyHealtheVet empowers patients, because they can make decisions about their own health.



Sheri Matter, RN, BSN, MS

Vice President of Nursing and Chief Nursing Officer Pinnacle Health

Pinnacle Health, a four-hospital health system in Harrisburg, Pa., realized that to truly enable EBP, the relevant evidence needed to be incorporated into the nurses' workflow and care processes. To make this happen, they sought a solution that would manage the vast amount of clinical data, integrate it with a clinical IT system, and provide evidence-based knowledge to nurses at the point of care.

This exemplar shares the processes and outcome of implementing a pilot program to test the impact of an electronic health record populated with nursing knowledge and evidence. Both referential and integrated knowledge were integrated into the approach. A shared decision model was also used to help nurses understand why evidence-based practice is so important.

- Pinnacle Health achieved positive results by embedding an evidence-based information product into their documentation.
- A pilot program was launched to test the impact of an electronic health record populated with nursing knowledge and evidence. Both referential and integrated knowledge were integrated into the approach.
- We used a shared decision-making model: a Nurse Practice Council with representatives from each department. Nurses need to understand why evidence-based practice is important.
- Nurses said that evidence-based research needed to be accessible in their workflows when creating plans of care and reports: new information or information that they knew but forgot which would be useful at rounds and care shifts, and for creating plans of care.
- "We found the biggest positive effects in including automatic practice alerts as reminders within the system."
- "Users don't want just one way to get to evidence. They want to link to it from everywhere throughout their day."



By embedding areas
with evidence, we have
improved outcomes in
smoking cessation, falls,
and documentation of pain
reassessment.



PRACTICE EXEMPLARS / QUESTIONS AND ANSWERS

Q. Are nurse practitioners also involved in using the system at CMH?

Peggy Esch: Yes, NPs use electronic medical records in both the clinic and the hospital.

Q: Is there a correlation between using EMR and high employee turnover?

Peggy Esch: There could be, but we do not have a study to prove it.

Q: Can the EMR system generate reports?

Sheri Matter: Yes, the system can generate snapshot reports covering the length of the patient's stay.

Q: How do changes in policies and procedures interface with your system?

Sheri Matter: When we adjust our plans of care, our council links to that evidence and determines if they should adjust campaigns as a result.

Q: How are changes communicated to staff members?

Sheri Matter: Council members communicate changes to their staffs monthly.

Q: What baseline do you use for measuring medication safety?

Elizabeth Hermann: We have a collaborative practice with pharmacy, and as we reconcile with them we know when errors are made.

Q: How have you involved patients in designing systems?

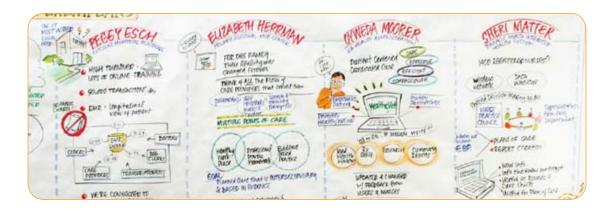
Oyweda Moorer: Our system includes a portal where patients can give feedback and suggestions on changes. We also included committees of patients during the design process.

Q: What data can you pull from MyHealtheVet?

Oyweda Moorer: We can determine the number of patients using the system and the number of sites they have been to. The data itself belongs to the patient, but we can extract information from system-wide data.

Q: How do you measure improvements in patients using the system versus those who do not?

Oyweda Moorer: Users provide fewer complaints, use ERs less, and use the call-in help line less.





EDUCATION EXEMPLARS

"Innovative Work in Education: Seeding the Vision for the Future of Nursing"

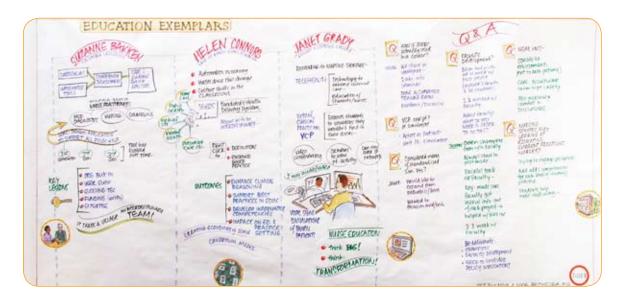
TIGER Summit Education Exemplars were selected for their innovative work in nursing education based on the following criteria:

- Be a transformative nursing education program that teaches students to think in a data-driven mode—based on evidence—and focuses on patient safety
- Demonstrate curriculum reform that incorporates IOM's Health Professions Education Report and that advocates the five core competencies (patient centeredness, evidence-based practice, interdisciplinary collaboration, quality improvement, and informatics)
- The emphasis is on teaching nursing students from the onset of their careers how to practice using technology. This approach integrates the technology so it is ubiquitous and pervasive as a component of nursing practice
- Emphasis of informatics competencies goes beyond traditional computer and informationliteracy skills
- Focus on innovative educational strategies to prepare nurses to practice in an informaticsrich, consumer-centric healthcare delivery system
- Works collaboratively with partners to prepare the next generation of nurses
- Must demonstrate successful outcomes
 - Must support nurses as knowledge workers

Prior to the Summit, Exemplars were asked to submit a 2-page Exemplar Report summarizing their innovative work integrating IT into nursing education, as well as sharing key successes and key learnings.

The exemplars of excellence presented one after the other, followed by a facilitated question and answer session with the participants.

Note: Exemplar Reports and presentations with permission are available on the TIGER web site.





Suzanne Bakken, DNS, RN, FAAN, FACMI

Alumni Professor of Nursing and Professor of Biomedical Informatics Columbia University

Dr. Bakken and her colleagues at School of Nursing have incorporated informatics competencies throughout the nurse practitioner curriculum. In addition to content being included in courses, graduate students are exposed to nursing terminologies and the use of PDAs to access evidence-based practice and document their clinical experiences. Her successful integration has evolved into several different generations of decision support tools for NPs.

- The Informatics for Advanced Practice Nursing (i-APN) program was created to merge curriculum and informatics tools to foster competency development, ultimately resulting in safe, evidence-based APN care.
- The nurse practitioner has multiple roles—medical diagnostics, nursing, counseling.
 Therefore, the goal was to design applications to support all the roles of the nurse practitioner.
- The program's first generation used a PDA-based Student Clinical Log for documentation of clinical encounters.
- The second generation included the integration of decision support for three clinical practice guidelines: depression, obesity, and tobacco cessation.
- The program's third generation included hazard and near-miss reporting within a Patient Safety Resource web site.
- The fourth generation, taking place now, focuses on tobacco cessation. It provides desktop and PDA-based access to NCI Cancer Information Resources, including context-specific links.
- Key lessons learned across these generations have been the importance of organizational buy-in, user support, evolving technologies, funding, and expertise.



Donated knowledge is critical to success. It really does take a village, and we have had a huge interdisciplinary group to help us.



Helen Connors, RN, Ph.D., DrPS (Hon), FAAN

Associate Dean for Academic Affairs and Executive Director for Healthcare Informatics University of Kansas School of Nursing

The University of Kansas School of Nursing in partnership with Cerner Corporation has redesigned their Clinical Information System to match the workflow of a nursing student. This innovative partnership allows students from the start of their nursing program to view informatics tools as an integral and essential component of their clinical practice. Students are provided access starting in Fundamentals and throughout their entire educational experience. This project is interdisciplinary with connections to other health care disciplines and is tied to their Simulation laboratory.

- The SEEDS program (Simulated E-hEalth Delivery System) was designed to provide teaching and learning tools to assist health-professional students to develop competencies to harness the power of information technology, thus improving the quality, efficiency, and effectiveness of healthcare.
- The program enhances the development of critical thinking and problem solving across a range of healthcare environments: home care, public health, medical centers, mental health, and outpatient care centers.
- Electronic forms are organized according to practice techniques, allowing case studies to be assembled in a structured fashion.
- Nurses feed data to the university's Health Information Management students, who provide feedback on the content and quality of the documentation.
- Guidelines can be accessed from within the forms, giving information at the point of learning. Integrated protocols and literature evidence support evidence-based practice.
- Outcomes include: enhanced clinical reasoning, supported best practices in education, developed informatics competencies, impacts on education and practice settings.
- After leading students through these protocols within a case study, the system informs them of the actual diagnosis.
- "We're teaching students that research guides their practice. It brings research closer to the clinical area."
- "We hope to make an impact not only on education, but on practice."
- A consortium model, including an academic and business partnership, helps the program succeed.



"In using a consortium model, we're creating common goals, pulling together and sharing resources."



Janet Grady, DrPH, RN

Associate Academic Dean and Nursing Division Chairperson, Mount Aloysius College Principal Investigator, Nursing Telehealth Application Initiative (Office of Naval Research)

With Dr. Grady's vision and leadership, Mt. Aloysius College is creatively using telehealth tools to extend learning opportunities to their students. Given this rural community, it is sometimes difficult for students to have exposure to many clinical experiences that might occur in a larger tertiary care center. To ameliorate this issue, Dr. Grady is using telehealth technology to bring those clinical cases to her students through the Virtual Clinical Practicum.

- The Nursing Telehealth Applications Initiative (NTAI) was originally developed as an attempt to ameliorate the nursing shortage. It led to the creation of the Virtual Clinical Practicum (VCP), which integrates telehealth into the curriculum.
- Telehealth technology helps link patients, clinical sites, students, and faculty across a wideranging rural area, exposing students to situations they wouldn't find in their areas.
- We told the students: "With the VCP, we were trying to enhance, not replace or take away your regular clinical experience. We try to give a value-added piece."
- The beta test linked students to a burn unit, where they could speak with the medical team and patients through two-way, split-screen audio/video.
- "They would not get that experience in rural Pennsylvania without this technology."
- Many students found the experience was even better than being there in person, and that they were able to connect with patients in a unique way.
- Because the experience lacked a hands-on perspective, we added a simulation lab component using assigned roles and mannequins.
- Telehealth tools have also been used in the home health environment, combining video conference technology, monitoring equipment, and an Internet patient health site.



Some might see this type of program as a threat to traditional education. But I say it's a chance to think big and investigate new opportunities.



EDUCATION EXEMPLARS / QUESTIONS AND ANSWERS

Q: What is an example of the SEEDS program being used?

Helen Connors: We started with undergrads and did not teach them how to do an electronic health record. We just told them to turn the system on and go. As students began documenting, faculty could see the results on screen, and it started a discussion. Afterward, those students picked up other systems very easily.

Q: Do you use other types of simulated patients?

Helen Connors: We also use actors trained as patients and do virtual cases through human patient simulators.

Q: Have you considered building a menu of simulated patients?

Janet Grady: We would like to expand from burn to pediatrics. We wanted to focus on medical/technology, but sometimes resources get in the way.

Q: How has your system fostered faculty development?

Helen Connors: Our dean had vision about the project. We started with a pilot group of five faculty members, and soon other faculty members were asking how they could become involved.

Suzanne Bakken: We also operated as a pilot at first, with faculty members operating as champions from the beginning. Our key lesson was to make sure faculty got something useful in return. We created benchmark reports to show individual and aggregate performance. When we gave them a product of value for their work, we won them over.

Janet Grady: The same is true in both education and practice—there is an intelligent cadre of young people developing new technologies every day. We have to use them deliberately, making use of champions and pilot programs. Sometimes we are so regulated that it can impede educators from thinking creatively.

Q: Do you pull up and use a near-miss screen for each patient?

Suzanne Bakken: Our students have been taught about patient safety culture, what's a hazard and what's a near-miss. We specifically stayed away from reporting errors and adverse events because those mechanisms already exist. We want to change attitudes about patient safety as well as knowledge and behaviors. It's also about developing comfort with disclosure to peer, supervisor, physician, and patient.

Q: Are the educators making decisions the same ones making practice? How do we bridge that gap?

Suzanne Bakken: The challenges are trying to engage preceptors and getting the right PDA devices.

We have a core set of competencies developed from literature and expert review, and we're just beginning to work with preceptors. We always had buy-in, but it's important that they not just support us, but also help to move staff.





GALLERY WALK

Current and Future Technologies Transforming Nursing Practice and Education

This exciting, experiential learning activity demonstrated in varied and compelling ways the powerful possibilities of information technology to transform healthcare, with a focus on nursing practice and education. Vendor/sponsors partnered with TIGER to present a holistic and non-duplicative view of current and future technologies, although many have a much wider range of products and services than presented.

15 interactive booths were laid out in two rows (booths 1-7 and 8-15) in the lobby, and participants were given 7 minutes per booth to interact with the technology and ask questions over two, 1-hour periods. Participants dined in the cafeteria in between the 2 sessions, enjoying the first opportunity to meet other members of their tables.

A Gallery Walk Guide was provided which included summaries of each of the interactive presentations. These are included in the following pages.

NOTE: Please refer to the Gallery Walk Guide PDF on the TIGER web site.









GALLERY WALK (CONT'D)



Attendees will see the impact of an actual project in curriculum development and nursing pedagogy with healthcare information technology as the enabler. The application promotes a case-based approach to learning and models the manner in which electronic health records can be a teaching platform that proactively delivers relevant data, connects providers to reference information, and develops informatics competencies. This approach minimizes administrative duties and maximizes clinically relevant experience, enabling students to enter the workforce not as executors of tasks, but as strategic knowledge workers.

www.cerner.com/academic



Elsevier, publisher of Mosby and Saunders, provides innovative products in nursing practice and education to support higherquality patient care. Mosby's Nursing Consult™; Mosby's Nursing Skills™ and Mosby's EMCare are innovative solutions that provide reference information and skills assessment for the hospital nurse. The EvolveTM suite of education products creates a blended learning environment that caters to all learning styles and provides comprehensive electronic solutions for your curriculum.

www.elsevier.com



ARS provides interactive wireless response system technology to enhance meeting events. Learn how radio frequency wireless response systems can be used for opinion polls, voting, surveys, market research, training, case study review, game shows, strategic planning, and many other applications.

www.audienceresponse.com

GE Healthcare



Communication among care providers is essential to support a safe childbirth experience for today's expectant families. With the need to share information across the entire perinatal continuum, technology has given clinicians a leg-up regarding the ability to access critical information when needed. From the first prenatal visit to the labor and ultimate delivery of the infant, information is now immediately available to the interdisciplinary team caring for this special patient population.

www.gemedicalsystems.com



In a world that is increasingly digital, NLM plays a pivotal role in enabling biomedical research, supporting healthcare and public health, and promoting healthy behavior. Continuing advances in biology, clinical research, healthcare, computer science, and telecommunications, as well as changes in the way information is produced. stored, and accessed, will combine to change the nature of biological and medical knowledge. Learn about NLM's longrange plan and how it will effect nursing education, research and practice; research, education, and funding opportunities for nursing; and current information collection, design and transmission projects that are affecting changes in practice.

www.nlm.org





This interactive session will focus on the outcomes of using a professional practice framework to design, develop, and implement an automated, evidence-based, interdisciplinary, clinical documentation system to help transform practice at the point of care. Participants will see the integration of the patient's story with an individualized plan of care and robust, evidence-based content that supports living the full scope of practice in use by hundreds of thousands of clinicians across the continent. A real patient story will be used to illustrate the need for practice and content interoperability as we move into the era of the Electronic Health Record (EHR) and Personal Health Record (PHR).

www.cpmrc.com



Eclipsys Sunrise Clinical Manager helps streamline workflows and allows clinicians to focus on providing high-quality, personalized care. This integrated, interdisciplinary solution enhances patient safety and dramatically improves communication and collaboration both within and between patient care teams. Backed by evidence-based knowledge and unified views of clinical data, caregivers can better coordinate the complexities of clinical care and optimize the value they deliver.

www.eclipsys.com

MSKESSON

Empowering Healthcare

McKesson provides a comprehensive medicationsafety offering, which includes the entire drug distribution chain, pharmacy robotics, and integrated clinical software, including barcode medication administration. These solutions help organizations prevent medication errors and improve efficiency across both the supply chain and clinical process. The demonstration will highlight how McKesson's mobile technology devices assist nursing workflow and will include customer testimonials with validated results.

www.mckesson.com



SafeCare® Systems is a web based patient safety reporting and management system that creates data-driven management solutions to improve patient safety in a variety of healthcare settings and organizations. Chosen by the Department of Defense Military Health System, SafeCare® Systems is nationally recognized as the leader for web-based patient safety solutions within the healthcare industry.

www.apptis.com

CliniComp Always On Watch

The CliniComp interactive demonstration will provide clinicians with an overview of Essentris OnWatch. OnWatch, a proactive clinical surveillance tool, displays actionable data in real time, allowing clinicians of all disciplines to quickly assess clinical data from predefined triggers by initiating actionable alerts. OnWatch is designed to enable clinicians to identify patients whose conditions are in danger of deteriorating, or who are in clinical decline.

www.clinicomp.com



When minutes matter most, AHLTA, the interoperable, globally accessible, protected, and always available EHR for Uniformed Services members can mean the difference between life and death. AHLTA leverages advanced technology to its fullest potential, ensuring that healthcare providers have instant access to invaluable patient medical information from care delivered in the same hospital, on a battlefield, or in a clinic halfway around the world. Whether it's on the battlefield or safely back home, this secure, robust, patient-centered data collection system is redefining the healthcare delivery experience for the entire clinical team.

www.ha.osd.mil/ahlta



MITRE

The MITRE Corporation, a non-profit, Federally Funded Research and Development Center (FFRDC), is leading the effort in evaluating and endorsing nursing terminologies, clinical vocabularies, and messaging standards to enable health information interoperability for data exchange. MITRE's interactive demonstration will highlight work with federal and private partners, focusing on interoperability standards harmonization, and on developing and integrating research ontologies into clinical practice to ensure patient safety and quality care. MITRE's expert nurses will discuss the importance of adopting and implementing standards to document nursing care and to provide evidence for best practices.

www.mitre.org



AHIMA's Virtual Lab is a cyberspace lab for Healthcare Information Management (HIM) students at colleges and universities around the U.S. The Lab provides an online resource for HIM education, as well as a training laboratory where students can experience the practical application of health information management theories through hands-on practice with live healthcare information systems. Lessons and training materials are developed collaboratively by instructors, subject matter experts, and Virtual Lab staff, and made available to instructors through a shared course repository.

www.ahima.org



Thomson Micromedex will demonstrate how Info button technology provides nurses with evidence-based information relevant to the clinical situation at hand—all directly within their workflows. Then join Micromedex for a look at innovative ways to combine authoritative clinical knowledge with real-time patient information to measurably improve clinical care and patient outcomes.

www.thomson.com

SIEMENS

Integrated, evidence-based information built into the tools nurses use on a daily basis and information management solutions that streamline nurse workflows are what the 170-plus nurses at Siemens Medical Solutions work on every day. From bedside physiologic monitors to cardiology information systems and from ventilators to disease management systems, Siemens Medical Solutions systems help nurses care for their patients by delivering integrated information, using evidencebased practice as the foundation, when and where they need it. Visit the booth to dialog with Siemens nurses about solutions that support nurses' efforts to provide safer, higher-quality patient care.

www.usa.siemens.com/healthcareit/



A NOTE ABOUT TABLE DISCUSSION DESIGN

To integrate and emphasize the diversity and strengths of our participants, the TIGER Team carefully constructed the teams for the table discussions, using the following guiding principles to determine "table membership":

- Maintain a balance between nursing and informatics representatives
- Capitalize on individual strengths
- Ensure a diverse team in terms of technology exposure, educators, informatics specialists, and clinicians across the spectrum of the care continuum

In addition, we utilized two formats for the table discussions over the two days:

- For the first table discussion, two tables were combined for an in-depth exploration of each pillar (14 tables, 7 Key Pillars). In this case, the design ensured that the strength of professional organizations was a "good fit" with the particular pillar.
- For all table discussions following the first, each table of 6-8 members focused on a key question for all 7 Key Pillars. Each table had this same diverse representation.

To support both individual and group thinking within short periods of time, we employed the following tools: table maps, sticky notes, and pens.







TABLE DISCUSSION #1

Qualities and Capabilities of Key Pillars That Will Most Effectively Drive Us toward Our 10-Year Vision

Following the Gallery Walk, participants returned to the cafeteria and were grouped according to table numbers (1-14) noted by their nametags. For this first small group discussion, two tables were assigned per Key Pillar and each pillar discussion was led by two table facilitators. Ideas were grouped into themes by the table facilitators and the participants.

Vivien Dai

Summit Facilitator Bonfire Communications

- You've taken an amazing, mind-opening journey from Patricia Brennan's keynote, to the exemplar presentations, to the Gallery Walk. These experiences have all helped to seed our 10-year vision.
- It's now the year 2016, two years after the EHR has been implemented for all citizens successfully—how have these 7 Key Pillars supported our vision?
- The question: What are the ideal qualities and capabilities of this key pillar that will most effectively drive us toward our 10-year vision?
- Reminders: 1) Open your thinking, and go beyond our silos, our mindsets and individual
 expertise—appreciate the diversity of opinion and harness the collective brilliance, and 2) our
 guiding vision—delivering safer, higher-quality care to patients, using informatics to enable
 our practice.







REPORT OUT TO THE LARGER GROUP

Qualities and Capabilities of Key Pillars That Will Most Effectively Drive Us toward Our 10-Year Vision

Following the table discussion, one person was appointed to represent each pillar and report their themed findings to the larger group for discussion. The larger group asked clarifying questions, shared differing viewpoints, and provided insights and additive comments.

During the break, the Bonfire/TIGER content team incorporated and "themed up" the group's contributions into "vision statements" describing the ideal, future state of the 7 Key Pillars. While the content team was finalizing the statements, the participants were taught how to use the collective intelligence tool sponsored by Audience Response Systems.





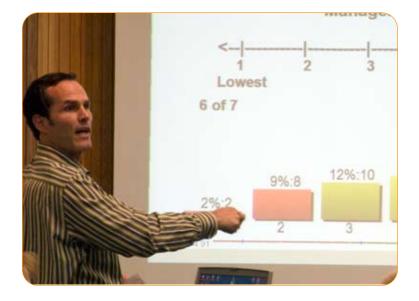




ARS VOTING

The ARS system was introduced as a tool that would help to harness the group's collective wisdom, as well as focus and prioritize our efforts over the two days. Each participant was given a keypad and trained on the voting process. The questions and results were projected on a large screen for all to view.

Our team of experts included Chris Bui from Bonfire and Debbie Minor and Doug Kinsella from ARS, representing over 40 years' collective experience. They guided participants through the voting process on two separate questions. Results were shown and explained immediately afterwards.

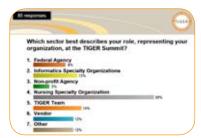






QUESTION #1 Demographics: Which sector best describes your role, representing your organization, at the TIGER Summit?

- 1. Nursing Specialty Organization (35%)
- 2. TIGER Team (14%)
- 3. Informatics Specialty Organizations (13%)
- 4. Other (12%)
- 5. Vendor (12%)
- 6. Federal Agency (9%)
- 7. Non-profit Agency (5%)



QUESTION #2 Pillar Prioritization: Prioritize the importance of each pillar for achieving the 10-year vision.

- 1. Management and Leadership (65%)
- 2. Education (58%)
- 3. Communication and Collaboration (56%)
- 4. Informatics Design (53%)
- 5. Information Technology (46%)
- 6. Policy (37%)
- 7. Culture (33%)



10-YEAR VISION MAP

Collective 10-Year Vision

During the ARS voting, the Bonfire/TIGER content team finished distilling the themes from the Report Out and created "vision statements" for each pillar in the ideal, future state. These themes were presented to the larger group for validation, feedback and adjustments. In addition, the group brought forth key words to incorporate into the 10-year vision.

All verbiage was refined later that evening with the Bonfire/TIGER content team and placed on the 10-Year Vision Map. These are listed below in order of pillar priority per the ARS voting results:

- Management/Leadership: Revolutionary leadership that drives, empowers, and executes the transformation of healthcare.
- Education: Collaborative learning communities that maximize the possibilities of technology toward knowledge development and dissemination, driving rapid deployment and implementation of best practices.
- Communication and Collaboration: Standardized, person-centered, technology-enabled processes to facilitate teamwork and relationships across the continuum of care.
- Informatics Design: Evidence-based, interoperable intelligence systems that support education and practice to foster quality care and safety.
- Information Technology: Smart, people-centered, affordable technologies that are universal, usable, useful, and standards-based.
- Policy: Consistent, incentive-based initiatives (organizational and governmental) that support advocacy and coalition-building, achieving and resourcing an ethical culture of safety.
- Culture: A respectful learning community of diverse stakeholders that embrace shared values to drive innovation and technology.

Key words for the 10-Year Vision included: Technological integration, barrier-free, managing lives, customized around wellness, adaptive, interdisciplinary, safety, standards, interoperability, universally accessible, evidence-based.





TABLE DISCUSSION #2

Key Actions per Pillar for First 3 Years

Unlike the first table discussion, participants were grouped according to their individual table numbers (1-14) with approximately 6-8 table members. The table as a whole focused on one question and considered all 7 Key Pillars. There were no report outs following this discussion. Results were grouped and themed overnight by the Bonfire/TIGER content team for the following day's activities.

Vivien Dai

Summit Facilitator Bonfire Communications

- Congratulations! Together you've just created a compelling 10-year vision for transforming nursing practice and education, bridging the quality chasm with information technology and enabling nurses to provide safer, quality care.
- With the creation of our vision, we have arrived at the pinnacle of divergence. From this point forward, the process becomes divergent, because we are not here to just create a vision—we are here to make action happen.
- In light of our 10-year vision, we are now considering just the first 3 years. The question: What are the most critical actions that we must take in the first 3 years to achieve our 10-year vision?
- Reminders: 1) Our guiding 10-year vision—delivering safer, higher-quality care to patients, using informatics to support, augment and advance our practice.





CLOSING COMMENTS

Summary and Reflections for the Day, Preparation for Tomorrow

At the end of Day One, the group was quite exhausted from the day's activities; however, a great sense of accomplishment reigned. We acknowledged our teamwork, provided a high-level summary of Day Two's activities, and celebrated at a reception back at the Marriott Hotel.

Vivien DaiFacilitator Bonfire Communications

- "We've worked hard and taken an amazing journey today."
- Tonight, the Content Team will be grouping the 3-Year Key Actions per pillar into themes and transforming it into our 3-Year Road Map.
- Tomorrow, we will continue our process of convergence. First thing in the morning, we will validate the 3-year Road Map and vote to prioritize the most important key actions, followed by a panelist discussion with the leaders of our nation's leading nursing organizations, table discussions on success factors, and the determination of our critical next steps.
- "The most important thing we are asking of you tomorrow is for you to look at your organization's strategic plan, align the critical next steps against your plan, and determine what you can own as an organization."



We are looking to you, as leaders, to really own this action plan and drive this transformation.



OVERVIEW OF DAY TWO: WEDNESDAY, NOVEMBER 1ST

After a brief check-in with the participants, the Facilitator acknowledged the great work performed the previous day and the group's accomplishments, orienting them to the emphasis on the Summit's main objective—the 3-Year Action Plan. As explained, the process of "convergence" would continue with feedback and validation of the 3-Year Roadmap, consisting of the themed Key Actions from their previous evening's table discussion. The group would then vote to prioritize these final Key Actions per pillar to move toward creation of the Action Plan.

Leaders from our nation's most prominent nursing organizations discussed the outcomes of the morning vote, as well as shared thinking on the success factors and considerations to achieve these critical next steps. Participants were asked to reflect on the 10-Year Vision and the 3-Year Roadmap, as well as align the prioritized Key Actions against their organizational strategic plan and activities. This was followed by a table discussion and timed report out on the success factors required for each pillar to clear the path of action.

Day Two ended with profound acknowledgement, a passionate "thank you" from the TIGER team, and an enthusiastic commitment from the group to drive the Action Plan forward as the new group of "TIGERs." The final group vote provided feedback and evaluation for the two-day Summit, and participants left exhilarated and motivated, signing a large-scale Action Plan map to acknowledge this historical, collaborative event.







FRAMING FOR THE DAY

Agenda and Objectives; 3-Year Roadmap

The evening before, the Bonfire/TIGER content team worked late into the night to refine the wording on the 10-Year Vision Map, as well as theme the Key Actions for the first 3 years from the table discussions. These were translated onto the final 10-Year Vision Map and the 3-Year Roadmap. Both maps were presented to the participants in the morning.

Vivien DaiFacilitator Bonfire Communications

- Yesterday, we created a compelling 10-Year Vision, prioritized the Key Pillars, listed the Key Actions required in the first 3 years to achieve our vision, and themed them into a 3-Year Roadmap. Today we will validate these actions, then prioritize them per pillar using our collective wisdom tool.
- Day One was about opening our minds and becoming more divergent, but today is about becoming convergent and driving toward our 3-Year Action Plan. We're not leaving until we have an action plan that we can own together!
- We noted a concern from the participants around key words that were "missing" in the pillar
 vision statements, such as "nursing" and "technology." What we're experiencing here is a
 melding of cultures and language from nurses to informaticians. To help us create a shared
 understanding of language, Angela will present some assumptions for our vision and pillars.





We're not here to just create a vision— we are here to make something happen.



FRAMING FOR THE DAY (CONT'D)

Agenda and Objectives; 3-Year Roadmap

Angela McBride

Distinguished Professor and University Dean Emerita Indiana University School of Nursing

- In using the words "technological" and/or "technologies," the full range of emerging and conveying possibilities is included: nano-technologies, biotechnologies, information technologies and cognitive technologies, as defined by the National Science Foundation.
- Any allusions to knowledge development, innovation, and/or evidence-based practice presuppose the full range of foundational research, from basic to translational.
- While many of the statements may have resonance for a range of health professions, the intention of the strategic plan is to move forward the agenda specifically for nurses and the nursing profession.
- "Health" is to be construed broadly, including all aspects of well-being and the full continuum of care.





ARS VOTING

Three-Year Roadmap: Prioritized Key Actions

During the evening's work session with the Bonfire/TIGER content team, we prepared a worksheet to support the intensive voting process to prioritize the Key Actions on the 3-Year Roadmap. A set of 7 worksheets was passed out to each participant, along with an ARS keypad.

For each of the 7 pillars, we validated each of the themed Key Actions, first explaining our methodology for "evidence-based themeing." This was both a spirited and intense group discussion to clarify, strike, rearrange, change and collaboratively approve up to 11 items per pillar.

Once the items were finalized by the group, the ARS team led the participants through a vote on the relative importance of the Key Actions in order of pillar priority. The results were projected and discussed immediately following each vote.





KEY ACTIONS: MANAGEMENT and LEADERSHIP

Vision Statement: Revolutionary leadership that drives, empowers, and executes the transformation of healthcare.

- Publish TIGER outcomes and execute 3-year action plan. (40%)
- Identify strategies for increasing the power, influence and presence of nursing through professional organizations in governmental and legal bodies. (35%)
- Create specific leadership, management, education, and development strategies. (31%)

KEY ACTIONS: EDUCATION

Vision Statement: 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. (65%)
- Seek funding to develop and implement learning innovations, foster faculty development, and ensure necessary infrastructure. (41%)
- Identify, model, and implement collaborative partnerships among public and private academic, service, and industry enterprises. (40%)
- Increase faculty acceptance of technology through education and training, incentives, and necessary supports. (38%)
- Convene a national group to develop strategies for the recruitment, retention, and training of current and future workforces in informatics education, practice, and research. (37%)

KEY ACTIONS: COMMUNICATION and COLLABORATION

Vision Statement: Standardized, person-centered, technology-enabled processes to facilitate teamwork and relationships across the continuum of care.

- Convene stakeholders to establish, disseminate, and support the vision, core values, and goals. (46%)
- Benchmark, measure, and report criteria for communication and collaboration achievement. (43%)
- Localize TIGER vision by creating regional sharing (among practice, education, research, and informatics). (36%)
- Establish demonstration projects to model collaborative relationships across the continuum of care. (34%)



KEY ACTIONS: INFORMATICS DESIGN

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

- Include multidisciplinary end-users in the design and integration/incorporation of informatics that is intuitive, affordable, usable, responsive, and evidence-based across the continuum of care. (36%)
- Develop guidelines for integrating informatics infrastructure: intelligence systems, IT hardware architecture, data documentation and warehousing, universal database and portals of knowledge. (24%)
- Design systems that promote the mining and use of data for analysis, clinical decision-making, and measurement to improve the quality of care. (21%)
- Create and implement multidisciplinary, multilingual standards. (20%)

KEY ACTIONS: INFORMATION TECHNOLOGY

Vision Statement: Smart, people-centered, affordable technologies that are universal, usable, useful, and standards-based.

- Integrate interoperability of IT standards and needs with clinical standards (practice and education), (31%)
- Educate practice and education communities on IT standards and establish hard deadlines for adoption. (25%)
- Strive for secure and reliable access to IT based on needs and standards. (21%)

KEY ACTIONS: POLICY

Vision Statement: Consistent, incentive-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 regarding technology that supports ethical, safe patient care. (54%)
- Establish consistent, agreed-upon IT standards. (50%)
- Obtain funding for curriculum expansion, research, and practice in nursing informatics and information technology. (49%)
- Identify incentives that support the adoption of innovative technologies. (35%)
- Support a personal health record (PHR) for every person in the United States. (35%)



KEY ACTIONS: CULTURE

Due to time constraints and the relatively low priority assigned to this pillar by the group the previous day, the Culture pillar Key Actions were not resolved in time for the group vote. Instead, a dedicated table presented the revised statement and key actions later in the day during the last Report Out. The group adopted the below as a whole, but the Key Actions were not prioritized.

Revised Vision Statement (practice, education, research, and administrative setting): A respectful, open system that leverages HIT across multiple disciplines in an environment where all stakeholders trust each other to work together toward the goal of high quality and safety.

Objective: Align nursing education, practice, administration, research and informatics within society's growing commitment to a culture of quality and safety.

- National marketing campaign to promote the value of technology in a multidisciplinary way that supports an accepting culture.
- Include HIT in every strategic plan, mission, and vision statement.
- Evaluate current processes and redesign as needed.
- Use of HIT is embraced (and value is articulated) by executives, deans, all personnel (including point-of-care clinicians), and students with the acknowledged goal of high-quality care and safety (for patients, students, and staff).
- Establish multidisciplinary teams that embrace a shared vision and operate cohesively to push for broad technology integration within/across the Entire organization.
- Develop mutual respect between/among clinicians who may bring different skills/knowledge;
 e.g., create/develop process in which experienced, veteran nurses mentor new nurses and new nurses who know how to use HIT mentor the veteran nurses: "two-way mentoring."
- The culture supports/promotes adoption of HIT and discourages "workarounds" by the users; culture is non-punitive in that when a user is doing their best to use HIT correctly and avoid errors, they are not "shamed" when they make a mistake and the organization can learn from that experience.



PANEL DISCUSSION / QUESTION AND ANSWER

3-Year Success Factors and Considerations

Leaders from our nation's most prominent nursing organizations discussed the outcomes of the morning vote, as well as shared thinking on the success factors and considerations to achieve these critical next steps. They collectively emphasized the importance of collaboration and the ability of all participants to lead this transformation.

Panelists:

Sarah Farrell, Ph.D., APRN, BC, American Association of Colleges of Nursing
Rebecca Patton, MSN, RN, CNOR, President, American Nurses Association
Kathleen D. Sanford, RN, MA, DBA, FACHE, President, American Organization of Nurse Executives
Mary Anne Rizzolo, Ed.D., RN, FAAN, Senior Director, Professional Development, National League for Nursing
Nancy Dickenson-Hazard, MSN, CPNP, FAAN, Chief Executive Officer, Sigma Theta Tau International

- This whole summit has been amazing. The synergy and the leadership needed to make this plan happen are all in this room.
- As we publish results, we will get feedback. Let's engage in that process and share information in a format that can help us.
- Many of our groups have published other items. To publish the TIGER report by itself would be less effective than having us post and tie it in to our organizations.
- Web-based resources are the best way to collaborate because of the linkage. But we need a centralized area to point to each other's resources.
- We must also get on the agendas of each other's conferences to continue spreading the word.
- Nurses tell us they access evidence resources daily, then they tell us they don't know what to
 do with it. If not translated into a usable, portable, actionable form, it's difficult to make the
 lean
- We have to get those definitions out there so that people know what we're talking about. We have to make it easy for leaders to learn, so they don't expose their ignorance.
- This summit has not talked about glorifying nursing. We have talked about good patient care—nurses care about that. That is a strength of this group.



We need to rise above our own agendas and move forward with the TIGER vision. We must let the world know what these organizations are doing, and not operate in a vacuum.



TABLE DISCUSSION #3

Alignment of Key Actions with Organizational Strategic Plan

Participants were given the ARS voting results and the opportunity to align the prioritized Key actions with their organizational strategic plans. The Action Plan Worksheets requested information about alignment with the organization's vision and mission, as well as current and future initiatives or programs. Individuals were asked to set organizational goals for Years 1 through 3, and identify a contact for reporting purposes, as well as potential collaborators.

The TIGER team committed to distributing a contact list to the participants post-Summit and connecting interested parties. In addition, they reminded participants that by accepting the invitation to the Summit, they had committed to achieving 85% of their goals by Year 1, and 100% of their goals by Year 3. TIGER follow-up communications will confirm the reporting process, as well as the approved organizational goals.

During this time, the Bonfire team redesigned the process for the remainder of the day to end the Summit early, so those who had early flights could participate in the finalization and ownership of the Action Plan.







TABLE DISCUSSION #4 & REPORT OUTS

Success Factors

Following lunch, the final table discussion focused on the success factors required for each pillar to make the Key Actions achievable. The table discussion was held in the same format with individual tables led by the table facilitator.

The question: What must we do, or what things must be in place, to clear the path of action so we can achieve our 3-year priorities?

Due to time constraints and the sheer volume of contribution, report outs were timed to 2 minutes and strictly additive in the room. The many sticky notes for each pillar were grouped into themes after the Summit, and are listed in order of pillar priority in the following pages for all to review and own as appropriate.









REPORT OUTS

Themed Success Factors

MANAGEMENT & LEADERSHIP

- EHR is clearly defined
- Nurse execs use data mined from IT systems to evaluate and reward nursing staff
- Minimal IT competency is required for nurse executives
- No shortage exists in the informatics workforce
- Leaders operate under a shared vision and mission statement that includes principles of the TIGER initiative
- All specialty organizations are members of ANI
- A model is created and replicated for mentoring leaders/managers
- Quality nurse executives and leaders are retained
- The best and brightest are encouraged to go into management/leadership
- Evolving technologies receive organizational knowledge and support
- A short sound bite is established so that every nursing leader can remember what to say
- Incentives are in put in place to drive innovation
- TIGER outcomes are accessible to all management stakeholders
- Nursing leaders publish data and give more presentations providing evidence that informatics improves patient safety
- Nurses are empowered in organizations and involved as peers in vendor selection
- Every organization has a strategic plan in place relating to TIGER
- Managers are informed and knowledgeable about current healthcare initiatives
- Leaders tap further into HIMSS, AMIA, and AHIMA
- Nursing executives and managers take ownership of IT implementation
- TIGER action plan is presented to leadership



Themed Success Factors

EDUCATION

- Users believe that IT is truly usable
- Faculty members are educated to teach IT
- Educators receive support from accreditation bodies
- Faculty resources and educational activities are adequately funded
- Nursing organizations achieve a unified consensus on IT, information literacy, and informatics competencies
- IT competencies are established within organization learning models
- Nurse educators are engaged and invited into dialogue with TIGEr
- IT benchmarking is required at all levels
- Practicing nurses are taught core education competencies
- NLN, AACN, and specialties change their accreditation requirements to include IT
- Universities and industry build more extensive partnerships
- Informatics is integrated into specialty organization standards
- The Bachelor's/Master's Nursing Essentials document is updated to incorporate IT/informatics
- A standard vocabulary becomes apparent within nursing education
- All faculty meet minimal competencies for IT/informatics
- More web-based courses are developed
- Ph.D. programs are developed and funded in order to increase the number of nurses at that level to accomplish informatics research
- User-friendly report writing is emphasized as needed
- Standardized nursing language is mandated in all nursing criteria
- The nursing faculty shortage is resolved through technological systems linking clinical experts to schools
- More collaborations are forged between nursing school and organizations to teach and incorporate IT in the workplace
- Teachers operate with a shared vision for the future



Themed Success Factors

COMMUNICATION & COLLABORATION

- All nursing professional organizations express the same vision and message
- All stakeholders commit to the actualization of the TIGER plan
- Various media (TV, newspapers, any electronic) are utilized to inform all stakeholders of the TIGER action plan
- TIGER participants deploy information rapidly to keep the initiative moving
- Stakeholders are identified and provided consistent sound bites/talking points
- Communication and collaboration benchmarks/metrics are established and tracked
- TIGER work is published in clinical nursing journals, leadership publications, and nursing organization journals and web sites
- Nursing organizations consult with specialty organizations prior to taking a position that could affect the specialty
- Everyone knows what TIGER is
- A library of best practices for nursing informatics is established
- Real-time e-health capability for all disciplines is available in at least 25% of all facilities
- TIGER outcomes are communicated in annual reports
- The TIGER vision statement reaches consumers
- A list of national allied health organizations is compiled and its members are engaged
- An overall communication plan is crafted and executed for TIGER
- National allied health organizations meet with each nursing organization
- Best practices are embedded into all relevant NSG courses (AND, BSN, MSN, doctorate)



Themed Success Factors

INFORMATICS DESIGN

- A standardized nursing language is implemented within systems
- Nurses are engaged in every step of automation
- Systems are intuitive and require little education
- Nursing stakeholders agree on priorities and direction for vendors
- Nursing has a presence at the table during informatics design
- Standard requirements are developed for designing technologies
- Systems foster a collaborative care model across all disciplines
- A collaborative effort across organizations ensures that patient information is communicated to all entities
- More learning is available from those who have successfully implemented informatics systems
- Workgroups of stakeholders from all areas (IT, vendor, clinic) are convened to develop quidelines
- More nurses are involved on committees and hot initiatives
- Nursing stakeholders have feedback mechanisms to vendors/industry
- All clinical documentation systems use provider-neutral language (rather than physiciancentric language)
- Informatics products support the continuity of care
- The same IT systems support both practice and education
- NPs can use IT in their practice to surveillance practice and do QI/PI
- All nurses (including NPs, CNM, CRNA, CNS) have access to IT systems within their practice settings
- Nurses collaborate across health systems in informatics system design, independent of vendor
- Systems are designed to have little to no downtime
- Systems are designed with ergonomics and accessibility in mind
- A central repository connects links to all standards
- Systems employ voice-recognition and biorecognition technology
- Before designing technology, stakeholders are clear about the scope of practice for nursing and if it impacts or overlaps with other disciplines
- Standards and evidence are embedded into systems
- Practice dictates technological functionality, not vice versa
- Information hierarchies are built using pedagogical design
- Systems yield improved patient and consumer outcomes
- Informatics activities are sufficiently funded



Themed Success Factors

INFORMATION TECHNOLOGY

- Innovative hardware supports nursing IT
- IT is totally integrated into nursing practice, education, and research
- Nurses participate on institutional and healthcare IT committees for the design and purchase
 of IT
- Online education tools are developed to better inform faculty
- JACHO and other requirements are adapted to make sure RNs are involved in the strategic planning and design of IT systems
- Just-in-time decision-support structures are in place
- Sufficient funding is available for IT activities
- IT and clinical standards are cross-mapped
- Information is integrated and shared across systems
- Available technology is affordable and stable
- Universal job descriptions are created for nursing IT positions
- Resources are posted on TIGER web site after summit
- More IT articles are written for nursing organizations' publications
- TIGER web site is added to organizations' web sites
- · Organization memberships are surveyed for interest in integrating informatics into practice
- IT research is published in trade journals
- Non-informatics specialties are involved in technology design
- An informatics task force is created within all specialty organizations
- A TIGER entry is added to Wikipedia
- A TIGER wiki or blog is launched



Themed Success Factors

POLICY

- Nurses undertake constant surveillance of the regulatory environment
- Public, legislative, and state boards of nursing are better informed about nursing information and IT issues and concerns
- Lobbying and advocacy efforts are sufficiently funded
- Nursing stakeholders identify gaps in standards and develop standards to fill the gaps
- Policies are established to ensure the privacy, confidentiality and security of data
- A clearinghouse for policy matters is created
- Key nursing policymakers are identified to move a practical agenda forward
- A list is identified and published of all nurses involved in policy groups
- Lobbying efforts seek funding to assist with IT implementation in rural areas
- NINR/HRSA funding for informatics is increased
- Nursing is included in "pay for performance" programs
- 25% of all persons in U.S. have a PHR
- Nurses are encouraged to become more knowledgeable about public policy
- The nursing representative at the national level is moved to a paid position, not a volunteer
- All nursing professional organizations are linked together
- More nurses are on committees that report to Congress
- Nursing stakeholders align with AHIMA and AMIA on PHR definition and models
- A joint endorsement of IT standards is published from all nursing organizations
- · A body is created to report core concepts and definitions regarding nursing informatics
- · Grassroots efforts educate regulators and legislators on technology and capability
- The value of nursing and informatics is expressed to every state legislator
- Nurses leverage their 3-million-member impact to gain a political champion



Themed Success Factors

CULTURE

- Key community leaders are identified in each area, and each designates a person to push for reform
- A culture of safety is created across healthcare
- All players are on an equal playing field, speaking with an equal voice
- · Nurses are clear about the fundamental elements that are present in a healthy culture
- Hierarchy is balanced with partnership in all roles across the continuum of care
- Nurses believe their input is valued
- Principles of organizational structures that support partnership are established
- The culture emphasizes the patient over individual disciplines
- Nurses in all associations and institutions are apprised of national quality and safety initiatives
- Examples are publicized describing leadership of nurses in maximizing technologies to achieve quality and safety
- 75% of bedside nurses willingly use electronic information tools daily with positive satisfaction



CLOSING COMMENTS

Insights from the Summit and TIGER Thank You

The group spent a quiet moment reflecting and appreciating the group's accomplishments from the past two days: a compelling 10-year Vision, a 3-Year Roadmap, a an Action Plan that they created and owned together. Participants were asked to share their thoughts, insights and reflections:

- There's significant power within our collectiveness!
- I like that we invited Deans to meet with leaders of informatics and professional nursing organizations—this is the first time they've been together—ever. This is a historic event.
- For those of us who are informatics-focused, we can see the tremendous vision that organizations have had going for years. Let's leverage what we have and ask for collaboration.
- I feel there is hope. I feel rejuvenated—we can make this happen!
- I feel deep gratitude for the work that was done, and hope that our collective work here will impact the safety of patients and our colleagues.
- Let's acknowledge that there has been boundary-spanning and an enormous amount of good faith. There is power in a story that says something positive.
- We should be proud of our accomplishments—this is very exciting!
- We got together because we were outraged that the nurse's voice was not at the table. So now, don't lose your enthusiasm. Come sit with us at the table.





EVALUATION AND FEEDBACK

At the summit's end, participants were asked to vote on 22 questions to evaluate their experience. Votes were cast using a scale of 1 to 5, with 1 considered "poor" and 5 considered "excellent."

Please evaluate to what extent you achieved each of the objectives.

Created a 3-year action plan for transforming nursing practice and education to prepare nurses to practice in an increasingly automated, informatics-rich health care environment.

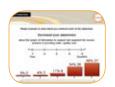
1. 1%: 1 2. 1%: 1 3. 11%: 8 4. 37%: 26

5. 49%: 34



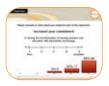
Increased your awareness about the power of informatics to support and augment the nurse's practice in providing safer, quality care.

1. 3%: 2 2. 4%: 3 3. 11%: 8 4. 34%: 26 5. 49%: 37



Increased your commitment to driving the transformation of nursing practice and education with information technology.

1. 0 2. 0 3. 8%: 6 4. 24%: 17 5. 68%: 48



Please evaluate each facilitator based on his or her ability to promote learning, as well as utilize facilitation skills and expertise.

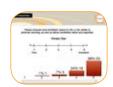
Vivien Dai

1. 0

2. 1%: 1

3. 7%: 5 4. 24%: 18

5. 68%: 50



Your Table Facilitator

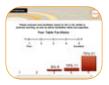
1. 0

2.0

3. 9%: 6

4. 16%: 11

5. 75%: 51



Graphic Recording

1. 0

2. 0

3.0

4. 1%: 1

5. 99%: 69





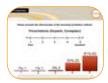
Please evaluate the effectiveness of the following facilitation method.

Presentations (Keynote, Exemplars)

1. 1%: 1 2. 1%: 1

3.3%:2 4. 33%: 23

5. 61%: 43



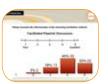
Facilitated Panelist Discussion

1.0

2. 3%: 2 3. 19%: 13

4. 46%: 32

5. 32%: 22



Small/Large Group Discussions

1.0

2.0

3. 11%: 8

4. 44%: 31

5.44%:31



Gallery Walk

1. 3%: 2 2. 11%: 7

3. 17%: 11

4. 32%: 21

5. 37%: 24



Audience Response System

1.0

2. 1%: 1

3. 1%: 1

4. 12%: 9

5.85%:62



Worksheets

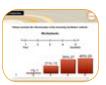
1.0

2. 1%: 1

3. 21%: 15

4. 38%: 27

5. 40%: 29





Please evaluate the appropriateness Of the facility.

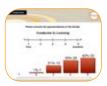
Conducive to Learning

1.0 2. 1%: 1

3. 21%: 15

4. 35%: 25

5. 42%: 30



Adequate Space

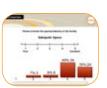
1.0

2. 7%: 5

3. 9%: 6

4. 49%: 34

5. 35%: 24



Ability to See

1.0

2.0

3. 15%: 11

4. 45%: 33

5. 41%: 30



Ability to Hear

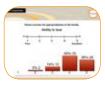
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2.3%:2

3. 14%: 10

4. 48%: 35

5. 36%: 26



To what extent did the stated purpose of the activity meet the objectives?

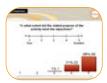
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2.0

3. 1%: 1

4. 31%: 22

5. 68%: 49



To what extent was the content presented at the appropriate level?

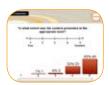
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2. 1%: 1

3. 4%: 3

4. 32%: 23

5. 63%: 45



To what extent was the content accurate and current?

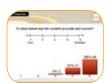
1.0

2.0

3.3%:2

4. 30%: 21

5. 68%: 48



To what extent did the activity deal with issues relevant to the topic?

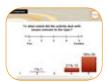
1.0

2. 1%: 1

3:0

4: 21%: 15

5. 78%: 56





Qualitative Comments

Along with the ARS evaluation, participants had the opportunity to provide written feedback on the event. (Note: the comments listed below are a representative sample, not an exhaustive list.)

Many submitted positive comments about the event facilitation and the outcomes achieved:

- "Vivien's facilitation of the summit pushed us to achieve."
- "The facilitators were friendly, energetic, and knowledgeable."
- "The facilitation really helped tap into diverse opinions and keep the meeting moving along."

The graphic recording received rave reviews:

- "Emily's graphics were phenomenal."
- "The graphics were 6 on a scale of 5."

ARS voting was another top-ranked feature of the event:

- "The ARS system allowed everyone to have input through voting."
- "It helped to see the results of our votes in real time."

Participants responded well to the event's overall approach:

- "The approach was effective, from divergence to convergence, leading to vision, goals and action."
- "A very structured methodology/design drove us to positive outcomes/results."
- "The approach worked well for putting a really big task into a two-day meeting."

Responses were positive on the diversity and level of attendees:

- "The various backgrounds and experience increased the depth and value."
- "Networking is always valuable. I will look forward to continuing relationships/contacts begun here."
- "The amount of consensus that was reached—given the group's diversity—was quite impressive."

Many suggestions for improvement focused on recommending more time and attendees for the ambitious agenda:

- "It would have been better if we had had three days to work on this."
- "I wanted more time for front-line practitioner input and perspectives."
- "I would like to continue expanding the people invited to participate, such as including legislators."
- "I recommend more vendor demonstrations and more time for demonstrations."
- "More senior nursing students should be invited."

Some additional comments were offered on the event's space and logistics:

- "The gallery walk was a great idea, but the noise level was high and sponsors/vendors didn't all show futuristic ideas."
- "A technology conference should be a highly wired site."
- "Breaks should be paced more evenly to keep the energy level even."
- "I would not hold an event in such a locked-down facility."



Participants offered several suggestions about the end of Day One:

- "The reporting out process needed more guidelines and definition."
- "Reporting back was not helpful, but the recap by Bonfire was great."
- "We should have adjourned an hour earlier on Day One; people may have been less effective and creative during the late hour."
- "I would have had the Gallery Walk at the end of the day so that workgroup activities done earlier might have had more energy."

Many requested more information:

- "I would like more information on what is being done by different organizations."
- "I want more info on DOD involvement in the National HIT agenda."
- "Information on informatics groups and list-serves should be posted on the website."
- "I would like to see a standard basic informatics curriculum."
 "A concise list of resources should be available on the web."
- "I want to see guidelines for careers in informatics."
- "I will be watching the TIGER website for educational offerings."



ACTION PLAN

Participants ended the Summit exhilarated and energized by their collective accomplishments. As they left the meeting room, they signed a large Action Plan Map representing their commitment as an organization and as a leader to the TIGER vision and Action Plan to transform nursing practice and education with information technology.







THANK YOU FROM TIGER

The TIGER Team would like to thank all Summit participants for playing such a significant role in the TIGER (Technology Informatics Guiding Education Reform) Invitational Summit, held October 30-November 1, 2006 at the Uniformed Services University of the Heath Sciences (USUHS) in Bethesda, MD.

The success of the Summit was directly related to the contributions made by all participants in creating a 10-Year Vision and 3-Year Action Plan to prepare nurses for practice in an increasingly automated health care environment. This vision and plan were derived from a diverse but collaborative team of professionals, and have set the stage to empower nurses to deliver evidence-based care and use clinical practice data to generate new evidence and knowledge, benefiting both education and practice environments.

As you are aware, the Summit was a major step toward transforming nursing via evidence and informatics. The support of our national leaders, the insight of national practice and education exemplars, the efforts of our sponsors, and, most importantly, the wisdom of our invited participants are what will help us meet the TIGER objectives.

In the very near future, we will make more information available to you on outcomes of the Summit and organization-specific action plans. With your help, we will continue to work towards meeting the objectives of the TIGER Initiative.

Sincerely,

The TIGER Team Executive Committee **Contact Us:** mail@TigerSummit.com





NEXT STEPS

Within weeks of the TIGER Summit, each participant will receive a copy of the TIGER Summit Report, summarizing the results of the two-day meeting. The participants will also be given access to the press release, a two-page summary of actionable plans, a slide show presentation, slides from the Summit, and materials noted in this report such as the Gallery Walk Guide, Exemplars Reports, and their respective descriptions and participant listings.

Within two weeks of receiving the final report, a phone conference call will be placed with each participant and the executive director/chair/president of their organization. At that time, we will review the organization's projected goals, potential partnerships, and evaluation plan. We will also obtain a timeline for the organization's approval of their actionable plans.



- Diane Skiba

Professor and Option Coordinator, Healthcare Informatics University of Colorado at Denver and Health Sciences Center School of Nursing



EVALUATION & REPORTING

A variety of evaluation techniques will be used to monitor progress and evaluate Summit and organizational outcomes. At the conclusion of the Summit, an overall evaluation of the Summit activities and facilitation was conducted. There will also be continuous monitoring of goals and their attainment.

Each organization will be asked to develop a Goal Attainment Scale to assess their progress with organizational goals. Upon completion of the Summit, each organization will receive a Goal Attainment Scale (GAS) table to complete. The GAS Table will contain a list of the goals established by the individual organization and then outcomes of those goals according to a specified timeline. Goals will be decided by each organization and will work with a TIGER representative to refine long and short-term measures of those goals.

The short- and long-term measures will constitute the outcomes projected by the organization as part of their actionable plans. Each organization will indicate their attainment of goals on a regular basis. Attainment of goals will be measured six months post Summit and at yearly intervals for a total of three years post Summit. GAS measures will be solicited via e-mail to the designated point person at each organization. The GAS forms will be available for submission on a designated web page.

In addition, we will distribute an open-ended survey for each of the organizations to describe what they believe has been the impact on their organization, their membership and nursing as a result of the Summit. The open-ended survey would be part of the overall reporting mechanism required of all organizations. The reporting mechanism will be based on a Diffusion Index in which each organization provides the following information on a yearly basis: publication dissemination, number of organizations and their current membership, organizational impacts.



BONFIRE COMMUNICATIONS

Process Design, Facilitation, Graphic Recording, Reporting, Event Production

TIGER Summit Team:

Vivien Dai, Summit Facilitator Matt Herlihy, Content Lead Kate Helber, Logistics Lead Emily Shepard, Graphic Recorder Chris Bui, ARS Expert

Bonfire's world-class programs and high-impact designs have been executed for audiences of five to 5,000 around the world. Leveraging our expertise in learning and process design, branding and media development, we design facilitations, workshops, and meetings of all kinds.

Underpinning all our work is a unique expertise in designing and facilitating events for organizations of all sizes. We offer a multi-sensory approach to discussion, using such tools as real-time graphic recording and interactive technology to build an experience rich with intensity, engagement, and outcomes. As a result, our programs bring organizations new ways of generating alignment, developing strategies, creating new ideas, and driving product and process innovations.

Contact Us:

Bonfire Communications 577 Second Street, Suite #200 San Francisco, CA 94107 P: 415.597.9930 F: 415.597.9931

www.BonfireCommunications.com





SUMMIT PARTICIPANT LIST (BY ORGANIZATION)

Kathleen Reeves

Academy of Medical-Surgical Nurses

http://www.medsurgnurse.org

Jodie Hignite

Air and Surface Transport Nurses Association

http://www.astna.org

Jacqueline Moss

Alabama Society for Clinical Informatics

http://asci.bravehost.com

Connie Delaney, Joyce Sensmeier

Alliance for Nursing Informatics

http://www.allianceni.org

Mary Jo Goolsby

American Academy of Nurse Practitioners

http://www.aanp.org

Margaret McClure

American Academy of Nursing

http://www.aannet.org

Sarah Farrell

American Association of Colleges of Nursing

http://www.aacn.nche.edu

Nancy Blake, Lori Hendricks

American Association of Critical-Care Nurses http://www.aacn.org

Kathy Baker

American Association of Neuroscience Nurses

http://www.aann.org

John O'Donnell

American Association of Nurse Anesthetists

http://www.aana.com

Tamara Blow

American Association of Occupational Health Nurses

http://www.aaohn.org

Julie Stanik-Hutt

American College of Nurse Practitioners

http://www.acnpweb.org

Pam Charney

American Dietetic Association

http://www.eatright.org

Mervat Abdelhak, Linda Kloss, Claire Dixon-Lee

American Health Information
Management Association

http://www.ahima.org

Karen Greenwood, Kathleen McCormick

American Medical Informatics Association – Nursing Informatics Working Group

http://www.amia.org/mbrcenter/wg/ni

Melinda Jenkins

American Medical Informatics Association – Primary Care Informatics Working Group

http://pciwg.amia.org

Linda Stierle, Rebecca Patton, Carol Bickford

American Nurses Association

http://www.nursingworld.org

Denise Tyler

American Nursing Informatics Association

http://www.ania.org

Ida Androwich

American Organization of Nurse Executives

http://www.aone.org

Melissa Finnegan

American Radiology Nurses Association

http://www.arna.net

Nancy McKelvey

American Red Cross

http://www.redcross.org

Dina Krenzischek

American Society of PeriAnesthesia Nurses

http://www.aspan.org

Debbie McKay, Mary Walker

Apptis

http://www.apptis.com



Bonnita D. Wilson

Army Nurse Corps

http://www.us.army.mil

Carol Peterson

Association of

Peri-Operative Registered Nurses

http://www.aorn.org

Karen Peddicord

Association of Women's Health – Obstetric and Neonatal Nurses

http://www.awhonn.org

Denise Goldsmith

Boston Area Nursing Informatics Consortium

http://www.baniconline.org

Sue Newbold

Capital Area Roundtable on Informatics in Nursing

http://www.caringonline.org

Robert Campbell, Charlotte Weaver

Cerner Corporation

http://www.cerner.com

Major Kellie Johnson, Patrick Shannon

Clinical Information Technology Program Office

http://citpo.ha.osd.mil

Ann O'Neill

CliniComp Intl.

http://www.clinicomp.com

Bonnie Wesorick, Michelle Troseth

CPM Resource Center

http://www.cpmrc.com

Rosemary Kennedy

Delaware Valley Nursing Computer Network

http://www.dvncn.com

Cathy Rick

Department of Veterans Affairs

http://www.va.gov

Jim Cato

Eclipsys

http://www.eclipsys.com

Louis Pilla

Elsevier Health Sciences

http://www.elsevier.com

Victoria Bradley

Emergency Nurses Association

http://www.ena.org

Dana Alexander

GE Healthcare Systems

http://www.gehealthcare.com

Jovce Sensmeier

Healthcare Information and Management Systems

http://www.himss.org

Kathy Rogers

IBM

http://www.ibm.com

Nancy Rothman

Independence Foundation

http://www.independencefoundation.org

Cindy Struk

Informatics Nurses from Ohio

http://www.informaticsnursesohio.info

Lynn Czaplewski

Infusion Nurses Society

http://www.informaticsnursesohio.info

Kim Dav

International Association of Forensic Nurses

http://www.amrn.com

Michele Norton, Teresa McCasky

McKesson

http://www.mckesson.com

Tess Settergren

Minnesota Nursing Informatics Group

http://www.miningonline.org

Elizabeth Halley, Carolyn Padovano

MITRE Corporation

http://www.mitre.org



T. Heather Herdman

NANDA Intl.

http://www.nanda.org

Patricia Ebright

National Association of Clinical Nurse Specialists

http://www.nacns.org

Nancy Robinson

National Association of Directors of Nursing Administration in Long-term Care

http://www.nadona.org

Maryann Alexander

National Council of State Boards of Nursing

http://www.ncsbn.org

Mary Ann Rizzolo

National League for Nursing

http://www.nln.org

Milton Corn

National Library of Medicine

http://www.nlm.nih.gov

Susan Jacobs, Pam Sherwill

National Library of Medicine

http://www.nlm.nih.gov

Joanne Pohl, Melinda Jenkins

National Organization of Nurse Practitioner Faculties

http://www.nonpf.com

Ellie Hunt

North Carolina State

Nurses Association Council on NI

http://www.unc.edu/~dbailey1/CONI

Winifred Carson-Smith

Nurse Insurers Association of America

Deborah Braccia

Oncology Nursing Society

http://www.ons.org

Sheryl Taylor

QuadraMed

http://www.quadramed.com

Pam Cipriano, Denise Davis, Maryjoan Ladden

Robert Wood Johnson Foundation

http://www.rwjf.org

Rosemary Kennedy, Brian Gugerty

Siemens

http://www.siemens.com

Nancy Dickenson-Hazard, Karen Grigsby

Sigma Theta Tau Intl.

http://www.nursingsociety.org

Rita Clark

Society for Vascular Nursing

http://www.svnet.org

Liz Johnson

Tenet Healthcare

http://www.tenethealth.com

Penni Hernandez

Thomson Healthcare

http://www.micromedex.com

Patricia Hinton Walker

Uniformed Services University

of Health Sciences

http://www.usuhs.mil

Irene Sandevol

U.S. Dept of Health & Human Services – Health Resources and Service Administration

http://www.hrsa.gov

Carole Gassert

Utah Nursing Informatics Network

http://www.utahnursinginformatics.org

Elizabeth Linouze Enriquez

The Wound, Ostomy and Continence

Nurses Society

http://www.wocn.org



ABOUT TIGER

The Technology Informatics Guiding Educational Reform (TIGER) Initiative aims to enable practicing nurses and nursing students to fully engage in the unfolding digital electronic era in healthcare. The purpose of the initiative is to identify information/knowledge management best practices and effective technology capabilities for nurses. TIGER's goal is to create and disseminate local and global action plans that can be duplicated within nursing and other multidisciplinary healthcare training and workplace settings.

The TIGER Initiative is working to catalyze a dynamic, sustainable, and productive relationship between the Alliance for Nursing Informatics (ANI), with its **20 nursing informatics professional societies** and the **major nursing organizations** including the American Nurses Association (ANA), the Association of Nurse Executives (AONE), the American Association of Colleges of Nursing (AACN), and others **which collectively represent over 2,000,000 nurses.**

Nursing informatics leaders from across the profession are committing their energies to this Initiative, bringing depth and breadth in support of its goals. Together they planned, organized, and facilitated an invitational summit that brought together major nursing organizations and ANI to address informatics education and practice reform for nursing students and practicing nurses. TIGER is seeking partnership with a leading publisher in order to communicate summit findings broadly to the entire nursing community.

The Summit, titled *Evidence and Informatics Transforming Nursing*, comes at a time when the nation is working full-speed to realize the 10-year goal of electronic health records for its citizens. This is a critical juncture for the nurses, who comprise 55% of the healthcare workforce. They must become more involved at every level or the Informatics Revolution will pass the nursing profession by, to the detriment of healthcare consumers.

The Summit was by invitation only in order to insure representation from all nursing sectors and because participants were required to work on Summit business before, during, and after the Summit.

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.

TIGER Expected Outcomes

- Publish a Summit report, including Summit findings and exemplars of excellence.
- Establish guidelines for organizations to follow as they integrate informatics knowledge, skills, and abilities into academic and practice settings.
- Set an agenda whereby the nursing organizations specify what they plan to do to bridge the quality chasm via information technology strategies.



A Brief History

In July of 2004, the first major IT meeting headed by Dr. David Brailer, the newly appointed "czar" of health informatics for the United States, took place in Washington, DC. The summary of this seminal meeting is for your review upon request. Several of us were not only disappointed but appalled at the lack of importance shown the nursing profession in this major transformation that was to take place to transform healthcare for the 21st century.

Several of us got together immediately after the meeting and shared a meal at The Cosmos Club in Washington, resolving to do something about the fact that the three million nurses in this country, who comprise over 50% of all healthcare delivery, must have a strong voice in how this transformation can be put into practice. We resolved at that time to have a meeting in January 2005 at Johns Hopkins School of Nursing, hosted by our dean, Dr. Martha Hill, to address what steps we should take to educate and, indeed, transform the nursing profession to ready itself for the healthcare transformation for the 21st century that was presented to us by the National Office of the Coordinator for Health IT in July 2005.

Those in attendance included: Marion Ball, Angela McBride, Diane Skiba, Patricia Abbott, Charlotte Weaver, Joyce Sensmeier, Veronica Feeg, Holly Farish-Hunt, Patrick Shannon, Melinda Jenkins, Connie Delaney, Helen Connors, Brian Gugerty, Judy Douglas, Carole Gassert, Krysia Hudson, Ann Myers, Matt Haag, Lynda Joseph, Sheryl Taylor, Gail Latiimer, Rita Zielstorff, Teresa McCasky, Donna Dulong, Jim Cato, Denise Metzger, Emily Barey, and Michelle Troseth.

Thus, TIGER was born. TIGER stands for Technology Informatics Guiding Education Reform.

An outstanding representation from academia, government, and industry came to Johns Hopkins in January 2005, and the attendees shown below have been kept informed as to the almost two-year journey that some very active TIGERs have embarked on, and who, indeed, are known at the TIGER Team, whose names and positions are also represented elsewhere in this document. The culmination of our efforts to prepare a road map for the future to transform the nursing curriculum on all levels, with a special emphasis on nursing at the bedside, came to fruition at this conference, held at the Uniformed Health University of the Health Sciences (UHUHS) in Bethesda, Maryland from October 30 to November 1, 2006. The vision, the goals, and eventual outcomes to be accomplished are detailed for you in this report.

After November 1, 2006, the real work really begins. But, due to the diligence, interest, and devotion of all of the volunteers who have truly dedicated almost two years of their lives to the nursing profession will begin to be seeded and to grow into a transformed care-giving community. With all the efforts of all of the individuals below, and particularly the chairs of the various committees and their committee members, everyone will be proud of what they have done to contribute to their profession.



Executive Committee

Marion Ball, Ed.D. (Co-Chair, Executive Committee)

Fellow, IBM Global Leadership Initiative Professor, Johns Hopkins University School of Nursing

Diane J. Skiba, Ph.D., FAAN, FACMI (Co-Chair, Executive Committee)

Professor and Option Coordinator, Healthcare Informatics

University of Colorado at Denver School of Nursing and Health Sciences Center

Connie Delaney, Ph.D., RN, FAAN, FACMI

Dean and Professor School of Nursing University of Minnesota

Donna DuLong, RN, BSN

Independent Consultant

Karen Greenwood

Executive Vice President

American Medical Informatics Association

Brian Gugerty, DNS, RN

Clinical Informatician Siemens Medical Solutions

Patricia Hinton Walker, Ph.D., RN, FAAN

Vice President for Nursing Policy & Professor of Nursing Uniformed Services University of the Health Sciences

Angela Barron McBride, PhD., RN, FAAN

Distinguished Professor and University Dean Emerita

Indiana University School of Nursing

Joyce Sensmeier MS, RN, BC, CPHIMS, FHIMSS

Vice President, Informatics
Healthcare Information and Management
Systems Society

Patrick Shannon, RN, MS

Lieutenant Colonel, U.S. Army Chief, Clinical Information Systems Office of The Surgeon General- Information Management Directorate

Michelle Troseth, RN, MSN

Vice President
Chief Professional Practice Officer
CPM Resource Center and Eclipsys Corporation

Charlotte Weaver, Ph.D.

Vice President and Chief Nursing Officer Cerner Corporation



Program Planning Committee

Michelle Troseth, RN, MSN (Chair, Program Committee)

Vice President
Chief Professional Practice Officer
CPM Resource Center and Eclipsys Corporation

Carol J. Bickford, Ph.D., RN, BC

Senior Policy Fellow American Nurses Association

Connie Delaney, Ph.D., RN, FAAN, FACMI

Dean and Professor University of Minnesota School of Nursing

Angela Barron McBride, PhD., RN, FAAS

Distinguished Professor and University Dean Emerita

Indiana University School of Nursing

Brian Gugerty, DNS, RN

Clinical Informatician Siemens Medical Solutions

Helen R. Connors, RN, Ph.D., Dr.PS (Hon), FAAN

Associate Dean for Academic Affairs, School of Nursing

Executive Director, KU Center for Healthcare Informatics

University of Kansas

Teresa McCasky, RN, MBA

Director, Nursing Strategic Product Management McKesson, Inc.

Virginia K. Saba, Ed.D., RN, FAAN, FACMI

Distinguished Scholar, Adjunct, Nursing Informatics Center, School of Nursing and Health Studies, Georgetown University; Professor (Adjunct) Advisor, Educational Technologies and Distant Learning, Research Department, Graduate School of Nursing, Uniformed Services University of the Health Sciences, Bethesda, MD; Informatics, Educational Technologies, and Home Health System Consultant

Joyce Sensmeier MS, RN, BC, CPHIMS, FHIMSS (Co-Chair, ANI)

Vice President, Informatics Healthcare Information and Management Systems Society

Charlotte Weaver, Ph.D.

Vice President and Chief Nursing Officer Cerner Corporation

Bonnie Wesorick, RN, MSN

Founder and President CPM Resource Center



Fundraising Committee

Brian Gugerty, DNS, RN (Chair, Funding Committee)

Clinical Informatician Siemens Medical Solutions

Judith V. Douglas, MA, MHS

Adjunct Faculty, Johns Hopkins University School of Nursing Independent Consultant

Donna DuLong, RN, BSN

Independent Consultant

Carolyn A. Padovano, Ph.D., RN

Public Health Strategy and Informatics MITRE Corporation

Joyce Sensmeier MS, RN, BC, CPHIMS, FHIMSS (Co-Chair, ANI)

Vice President, Informatics Healthcare Information and Management Systems Society Diane J. Skiba, Ph.D., FAAN, FACMI

Professor and Option Coordinator, Healthcare Informatics University of Colorado at Denver and Health Sciences Center School of Nursing

Bonnie Wesorick, RN, MSN

Founder and President CPM Resource Center

Charlotte Weaver, Ph.D.

Vice President and Chief Nursing Officer Cerner Corporation



Logistics Committee

Donna DuLong, RN, BSN (Co-Chair, Logistics Committee) Independent Consultant

Patrick Shannon, RN, MS (Co-Chair, Logistics Committee)

Lieutenant Colonel, U.S. ArmyChief, Clinical Information Systems Office of The Surgeon General – Information Management Directorate

Christel Anderson

Manager, Informatics Healthcare Information and Management Systems Society

Patricia Hinton Walker, Ph.D., RN, FAAN

Vice President for Nursing Policy & Professor of Nursing Uniformed Services University of the Health Sciences

Melinda Jenkins, PhD, FNP

AMIA-PCI-WG, NAPCI, NONPF, ANA, NNCC Seton Hall University

Debby McKay

Chief Nursing Officer Apptis

Virginia K. Saba, Ed.D., RN, FAAN, FACMI

Distinguished Scholar, Adjunct, Nursing
Informatics Center, School of Nursing and
Health Studies, Georgetown University;
Professor (Adjunct) Advisor, Educational
Technologies and Distant Learning, Research
Department, Graduate School of Nursing,
Uniformed Services University of the Health
Sciences, Bethesda, MD; Informatics,
Educational Technologies and Home Health
System Consultant

Joyce Sensmeier, MS, RN, BC, CPHIMS, FHIMSS

Vice President, InformaticsHealthcare Information and Management Systems Society

Sheryl Taylor, BSN, RN

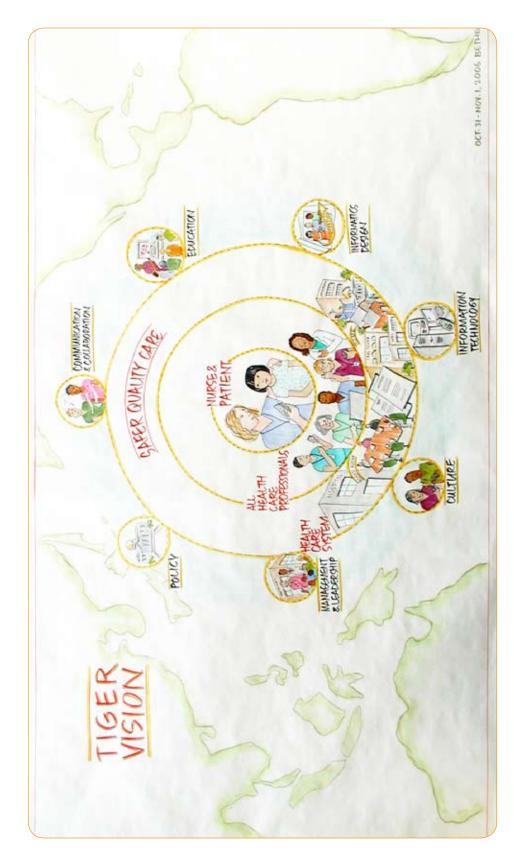
Nursing Informatics Advisor & Consultant QuadraMed

Mary L. Walker

Vice President and HHS Account Manager Apptis

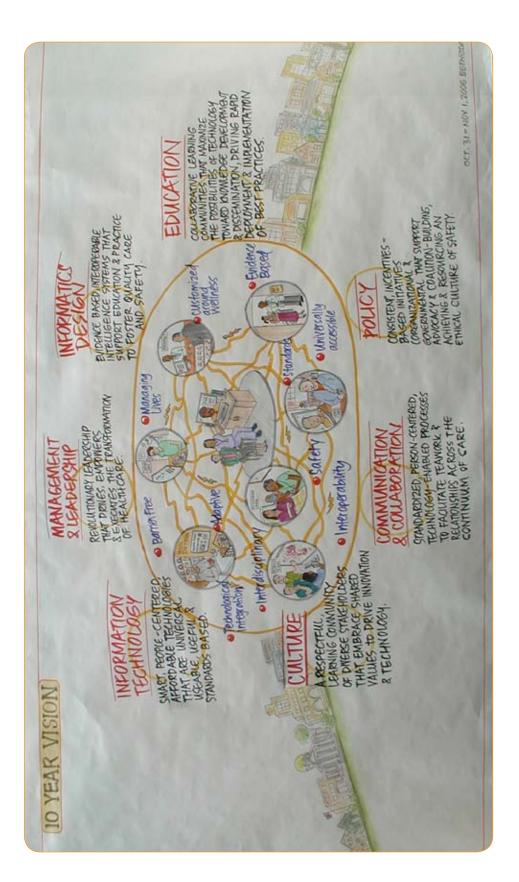


TIGER VISION





10-YEAR VISION





3-YEAR ROADMAP

