Nursing Informatics at the Forefront of Nursing
April 12, 2015
Pamela Cipriano, PhD, RN, NEA-BC, FAAN
President, American Nurses Association

DISCLAIMER: The views and opinions expressed in this presentation are those of the author and do not necessarily represent official policy or position of HIMSS.
Pamela F. Cipriano, PhD, RN, NEA-BC, FAAN wishes to disclose the following financial relationships of her spouse, Ronald Turner, MD:

Consulting Fees & Contracted Research: Janssen, GlaxoSmithKlein, Pfizer, Dupont
Learning Objectives

By the conclusion of the presentation, attendees will be able to:

1. Discuss the American Nurses Association's new *Nursing Informatics: Scope & Standards of Practice*.

2. Provide comment on ANA’s collaboration with federal agencies to advance health care quality.

3. Describe the opportunities for informatics nurses to transform care through leadership.
My Story

MedStar Washington Hospital Center

Diastolic Augmentation
↑ Coronary Perfusion

Unassisted Systole

Balloon Inflation

Unassisted Aortic Eoc-Diastolic Pressure

Intermountain LDS Hospital

Healing for life

MUSC
Medical University of South Carolina
Distinguished Nurse Scholar at the IOM

- Sponsored by the American Nurses Association, American Academy of Nursing, and the American Nurses Foundation
- 2010-2011
- Office of the National Coordinator for Health IT
  - Meaningful Use
  - Quality Measure Development
  - Nurse involvement
  - Staffed FACA committee work
    - Standards and Vocabulary
    - Quality Measures
The Intersection of Health Information Technology and Quality

Leading Change and Advancing Health
National Quality Agenda

National Quality Strategy (2011)

National Strategy for Quality Improvement in Health Care (HHS)

- **Better Care**: Improve the overall quality—more patient-centered, reliable, accessible, and safe

- **Healthy People/Healthy Communities**: Address behavioral, social and, environmental determinants of health; deliver higher-quality care

- **Affordable Care**: Reduce the cost of quality health care for individuals, families, employers, and government
National Quality Strategy: Tri-Part Aim

Access

Person- & Family-Centeredness

Effective Communication & Coordination

Effective Prevention & Treatment

Better Care
Affordable Care
Healthy People/Communities

Healthy Living

Safety

Affordability

Consumer Incentives & Benefit Designs

Performance-Based Payment

Public Reporting

Accreditation, Certification & Regulation

Infrastructure Supports

Workforce & Capacity Development

Health Information Technology

Innovation & Rapid-Cycle Learning

Performance Measurement

Evaluation & Feedback

Quality Improvement & Technical Assistance
Consent for Care

WARNING: Our physicians and nurses are attempting to use antiquated manual record-keeping systems and their own limited memories in an often futile attempt to deliver a complex set of services without error. The logic of these human beings has been tested incompletely at some point in the past, but we offer no warranty expressed or implied that any individual decision made or action taken will probably be correct. Moreover, we do not know the effect of aging, distractions, overwork, and failure to communicate on the overall care you will receive. Because we do not take a systems approach to health care services, by signing this consent you agree to participate in this admittedly error-prone and potentially life-threatening activity.

__________________________________ Sign at your own risk
Charles Jaffe, MD, PhD, CEO, HL7
In Search of...

**Improved safety and overall quality**
- Adverse event reduction/elimination
- Disease prevention
- Chronic disease management
- Avoidable deaths

**Decreased costs through greater efficiency**
- Fewer hospitalizations
- Shorter LOS
- Decreased administrative time burden
- More efficient care utilization
Evolution of Nursing Informatics—
In the Field and at ANA

- **1992** recognized as specialty
- **1994** *Scope of Practice for Nursing Informatics*
- **1995** *Standards of Practice for Nursing Informatics*
- **2001** *Scope and Standards of Nursing Informatics Practice* (combined both)
- **2008** *Nursing Informatics: Scope and Standards of Practice*
- **2014** *Nursing Informatics: Scope and Standards of Practice 2nd edition*
Nursing Informatics: Scope & Standards of Practice

• Second edition
• Released December 2014
• Available at NursesBooks.org or at the HIMSS conference bookstore
Nursing Informatics Competencies
Scope of Practice Statement Addresses Who, What, When, Where, How, Why, and Functional Roles

- Clinical nurse – Need for informatics competencies addressed
- Informatics Nurse (IN) – Experience based
- Informatics Nurse Specialist (INS) – Graduate-level preparation
- Brief descriptions of diverse functional roles
- Enumeration of NI competencies resources
- Discussion of the nine Code of Ethics provisions
Nursing Informatics Certification

• 1995 American Nurses Credentialing Center (ANCC) first generalist-level nursing informatics certification examination

• First computer-based examination for ANCC

• 1,326 nurses certified (12/30/13)
ANA: Leading the Way on Quality

ANA leaders with Veterans Affairs Secretary Robert McDonald & Chief Nursing Officer Donna Gage at the 2015 ANA Quality Conference
Nurses Leading Improvement for Quality and Safety

- Patient-Centered Outcomes
- Healthy Work Environment
- Ethical Practice
- Teamwork and Collaboration
- Evidence-Based Practice
- Safe Staffing
- Healthy Nurse

Nurse Satisfaction

Patient Satisfaction
National Progress on Quality

Between 2011 and 2012, quality improvements:

- Saved $4 billion in national health spending
- Significantly decreased the rate of hospital-acquired conditions and hospital readmissions
- Saved 15,000 lives & prevented 560,000 patient injuries

Source: U.S. Dept. of Health & Human Services
ANA: Monitoring & Shaping Quality-Related Regulations

ANA leaders meet with representatives from the U.S. Office of the National Coordinator for Health Information Technology
ANA: Partnering with Federal Agencies to Promote Nursing-Sensitive Quality Measures

ANA advances nursing-sensitive quality measures throughout the National Quality Enterprise (NQF, CMS, AHRQ)

• Care Coordination
• Pressure ulcers
• Safety
• Patient & family engagement
• Nurse staffing
• Skill mix
• Falls
• Falls with injuries
• And more....
Electronic Quality Management Life Cycle
ANA: Ensuring Nurses are “At the Table”
## ONC Committees, Workgroups & Task Forces: Nurses Appointed

<table>
<thead>
<tr>
<th>ONC GROUP NAME</th>
<th>NURSES APPOINTED</th>
<th>ORGANIZATION REPRESENTED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STANDARDS COMMITTEE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elizabeth Johnson, MS, FCHIME, FHIMSS, CPHIMS, RN-BC</td>
<td>Tenet Healthcare Corporation</td>
<td></td>
</tr>
<tr>
<td><strong>POLICY COMMITTEE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Troy Seagondollar, MSN-I, RN-BC</td>
<td>United Nurses Association of California</td>
<td></td>
</tr>
<tr>
<td><strong>STANDARDS WORKGROUPS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semantic Standards</td>
<td>Rosemary Kennedy, PhD</td>
<td>Thomas Jefferson University</td>
</tr>
<tr>
<td>Content Standards</td>
<td>Joyce Sensemeier RN-BC, MS, CPHIMS, FHIMSS, FAAN</td>
<td>HITSP</td>
</tr>
<tr>
<td></td>
<td>Kelly Aldrich, DNP, RN</td>
<td>HCA Healthcare</td>
</tr>
<tr>
<td></td>
<td>Susan Hull, MSN, RN</td>
<td>Wellspring Consulting</td>
</tr>
<tr>
<td>Implementation, Certification &amp; Testing</td>
<td>Elizabeth Johnson, MS, FCHIME, FHIMSS, CPHIMS, RN-BC</td>
<td>Tenet Healthcare Corporation</td>
</tr>
<tr>
<td><strong>POLICY WORKGROUPS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Health Models and Meaningful Use</td>
<td>Ginny Meadows, RN</td>
<td>McKesson Corporation</td>
</tr>
<tr>
<td></td>
<td>Norma M. Lang, PhD, RN, FAAN, FRCN</td>
<td>University of Wisconsin</td>
</tr>
<tr>
<td>HIT Implementation, Usability &amp; Safety</td>
<td>Bernadette Capili PhD, NP-C</td>
<td>New York University</td>
</tr>
<tr>
<td>Interoperability &amp; Health Information Exchange</td>
<td>Troy Seagondollar, MSN-I, RN-BC</td>
<td>United Nurses Association of California</td>
</tr>
<tr>
<td>Privacy and Security</td>
<td>Mark Sugrue, RN-BC, FHIMSS, CPHIMS</td>
<td>Lahey Hospital &amp; Medical Center</td>
</tr>
<tr>
<td>Consumer Perspective and Engagement</td>
<td>Dana Alexander, RN MSN MBA FHIMSS FAAN</td>
<td>Caradigm</td>
</tr>
<tr>
<td>JASON Task Force</td>
<td>Troy Seagondollar, MSN-I, RN-BC</td>
<td>United Nurses Association of California</td>
</tr>
</tbody>
</table>
What have you been able to accomplish or contribute towards improvements in HIT standards or policy through your participation in an ONC workgroup?

“Emphasize the patient as central to policy”

“Reduce the burden imposed on clinicians”

“Greater exposure of the expertise non-physicians bring to the table in regards to improving health care”
What can frontline nurses do to realize HIT's full potential?

“Engage in technology and workflow designs”

“Ensure that workflow drives design—not the technology”

“Push new and innovative ideas as to how technology can support workflows”

“Understand and embrace technology”

“Offer input to Health IT projects in your organization”

“Communicate to hospital management the gaps/shortfalls in current EHR software”
Challenges = Opportunities for Nursing Informatics Leaders

Unintended Consequences of HIT

- Adverse and Beneficial consequences (Ash & colleagues 2007)
  - More work/new work
  - Workflow
  - System demands
  - Communication
  - Emotions
  - New kinds of errors
  - Power shifts
  - Dependency on technology
Challenges = Opportunities for Nursing Informatics Leaders

Addressing Unintended Consequences

- Be a supportive skeptic
- Alarm fatigue
- Alert fatigue
- Proliferation of applications
- Confusing EHR implementation/formats
- Errors in data entry
- Human factors—user interface
- Deploy risk-mitigation strategies
Leader Responsibilities

• Establish and maintain a culture of safety
• Invest in systems and technologies as well as ongoing optimization
• Create partnerships to have connectivity across the continuum of care
  – Home, primary, hospital, long-term/post-acute care
  – Identify and address gaps
  – Support health information exchange
• Engage patients, families, and caregivers to increase safety
Leader Responsibilities (continued)

• Plan extensively for implementation to avoid common pitfalls that threaten safety
  – HIT processes must match or enhance clinician workflow
  – Workflow needs to be perfected for desired future state prior to automation
  – Hard wire successful workflow processes into permanent system
  – Electronic systems do not replace critical thinking
  – Devices and EHRs should avoid unnecessary complexity
  – Adopt common approaches to reduce variation
Leader Responsibilities (continued)

• Assess safety before, during, and after implementation
  – People
  – Interactions
  – Outcomes
  – Unintended consequences

• Engage in reporting of real or potential threats/events
• Take corrective action
• Celebrate success
Call to Action!

“Just as ripples spread out when a single pebble is dropped into water, the actions of individuals can have far-reaching effects.”

—Dalai Lama
“Unless someone like you cares a whole awful lot, nothing is going to get better. It's not.” ~Dr. Seuss

- Talk to colleagues beyond those in nursing informatics
- Bring your expertise to other organizational leaders
- Don’t settle for the status quo
NURSES creating a
HEALTHY NATION,
a world of POSSIBILITIES
Questions

Thank you!

Pam.Cipriano@ana.org
@ANAPresident
NursingWorld.org