Nursing Informatics 101

Melissa F. Barthold, MSN, RN, BC, CPHIMS, FHIMSS
Tammy Duecker, RN
Patty Guinn, BS, RN, CPHIMS
Ruth MacCallum, BS, RN-BC

Presented today by
Melissa Barthold, MSN, RN-BC, CPHIMS, FHIMSS
Ruth MacCallum, BS, RN-BC

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Author Contact Information

Tammy Duecker, RN

Melissa F. Barthold, MSN, RN-BC, CPHIMS, FHIMSS
Baptist Health South Florida
Corporate Manager, Nursing Informatics
MelissaFo@baptisthealth.net

Patty Guinn, BS, RN, CPHIMS
Director of Nursing Informatics
PGuinn@dearbornadvisors.com

Ruth MacCallum, BS RN-BC
Manager
Ingenix Consulting
ruth.maccallum@ingenixconsulting.com
HIMSS Nursing Informatics Community

• The first “official community” within HIMSS for Nursing Informatics formed in 2004 – now represents 2,000 individuals

• Community Framework:
  – Clinical Informatics
  – Leadership
  – National Initiatives

• www.himss.org/ni
WARNING!

This presentation is not intended for education of nurses already “seasoned” in the informatics field!
NI 101 OBJECTIVES

• Define nursing informatics
• Demonstrate how NI supports nursing process
• Explain value of NI to nursing practice and healthcare
• Identify roles for NI practice
• Identify practice areas and settings
• Identify education paths and certifications
Nursing Informatics Defined

Nursing informatics is the integration of nursing, its information, and information management with information processing and communication technology, to support the health of people worldwide.

International Medical Informatics Association – Nursing Informatics Special Interest Group (IMIA-NI), adopted August 1998, Seoul, Korea
Nursing Informatics Defined

Nursing informatics is a specialty that integrates nursing science, computer science and information science to manage and communicate data, information, knowledge and wisdom in nursing practice. NI supports patients, nurses and other providers in their decision-making in all roles and settings. This support is accomplished through the use of information technology and information structures, which organize data, information and knowledge for processing by computers.

The Benefits of Nursing Informatics

- In the practice of professional nursing
- In the delivery of patient care in the healthcare continuum
Nursing Practice

- Nursing Process is the cornerstone of Professional Nursing Practice
  - Defines the “What” and “How” of professional practice
  - The steps of the process are measurable
  - The process steps can also be used by other clinical disciplines
Nursing Process

• Each step supports
  – Actual Delivery of patient care
  – Management of each patient’s care
  – Is patient centered
Nursing Process

Enables the professional nurse to be the “Coordinator” of each patient’s care

- Communicate & coordinates care with ALL other clinical disciplines
- Coordinate discharge planning, education & teaching, transition of care
- Manages ALL information related to the nursing process and patient care
Because information management is integrated into the Nursing Process and Practice, some Nursing Communities identify a 5th step in Nursing Process:

Ø DOCUMENTATION
Nursing Process

Well-documented information provides:

- What care has been provided and what is outstanding
- Outcomes of care provided and responses to the plan of care
- Current patient status & assessments
- Support decisions based on assessments to drive new plans of care
Nursing Process

- As the 5th step of nursing process, Documentation becomes the core of Nursing Process along with the patient
Automation of Documentation

Why automate documentation – not only for nursing but for all of patient care?

Up-to-date, accurate information of each step of the Nursing Process is the *Power* behind safe, high quality patient-centered care!
Successful Automation

Successful implementation of Information Systems requires

- Well designed systems that support Nursing Process within the culture of an organization and/or specific care providers
- Acceptance & integration of information systems into the regular workflow of nursing process & patient care
- Resources that can support the above
One of the BEST resources to drive a successful implementation is a Nurse Informaticist!
Nurse Informaticists

• Are expert clinicians with extensive clinical practice background
  – Experience in utilizing and implementing the nursing process

• Are expert nursing clinicians in utilizing the Nursing Process
  – Expert analytical & critical thinking skills
  – Understand patient care delivery workflow & integration points for automated documentation

• Have additional education & experience with Information Systems
  – Are excellent Project Managers because of the similarity between the Project Management Process & the Nursing Process
The Value of Nurse Informaticists

Nurse Informaticists are bi-lingual!

HIMSS NURSING INFORMATICS
Empowered Care Through Leadership and Technology
The Value of Nurse Informaticists

Support nursing work processes using technology

– Design systems to match clinical workflows
  - Telehealth
  - Home health
  - Ambulatory care
  - Long-term care
  - Acute care – all specialties
  - Outpatient settings
  - Software development
  - Redesign work flows
The Value of Nurse Informaticists

• Increase the accuracy and completeness of nursing documentation

• Improve the nurse’s workflow
  – Eliminate redundant documentation

• Automate the collection and reuse of nursing data

• Facilitate analysis of clinical data
  – JCAHO indicators, Core Measures, federal or state mandated data and facility specific data
The Value of Nurse Informaticists

Provide nursing content to standardized languages

- NIC/NOC, NANDA
- SNOMED
- Linkage to other nomenclatures
  - ICD-9’s
  - CPT’s
The Benefits of Nurse Informaticists

Nurse Informaticists promote and facilitate

- Access to resources and references
  - for nurses and the entire interdisciplinary team
  - in both clinical and administrative settings
  - Change
The Benefits of Nurse Informaticists

Benefits for nurses and the interdisciplinary team:

- Support for their mission to deliver high quality, evidence-based care
- Support for better service by facilitating true interdisciplinary care
- Promotes improvement in key relationships with
  - physicians
  - peers
  - interdisciplinary care team members
  - patients
  - families
The Benefits of Nurse Informaticists

Benefits in the administrative setting

– Support for cost savings and productivity goals

– Facilitate change management
The Many Roles of a Nurse Informaticist

- Vendors
- Acute care - Hospital Systems
- Consultant
- Education/Research
- Long-term care
- Ambulatory
- Home care
The Many Roles of a Nurse Informaticist

Vendors:
- Sales
- Software development
- Implementation
- Education to train clients/users
The Many Roles of a Nurse Informaticist

Hospital Systems

- Staff Nurse Super User
- Analyst – Support/Implement Systems
- Directors/Managers of Nursing Informatics
- Project Managers
- CIO (Chief Information Officer)
The Many Roles of a Nurse Informaticist

Consultant

– Software Implementation
– Software/System Solution Selection
– Process Improvement
– Project Management
The Many Roles of a Nurse Informaticist

Other roles

- Education/Research
  - Compilation/Analysis of Data
- Public Policy
  - Government HealthCare IT initiative
- Insurance organizations
The Road to NI.....

OJT (on the job training)

Being in the right place

at the right time!
The Road to NI.....

Education

Sources for educational programs:

AMIA http://www.amia.org/mbrcenter/wg/ni/resources/academic.asp

University of North Carolina http://ils.unc.edu/informatics_programs/

HIMSS www.himss.org/ni
The Road to NI…..

Certifications

American Nurses’ Association Credentialing Center
Board Certification in Nursing Informatics

http://nursingworld.org/ancc/certification/cert/certs/informatics.html

HIMSS - Certified Professional in Healthcare Information and
Management Systems (CPHIMS)

http://himss.org/ASP/certificationHome.asp
The Road to NI.....

Professional Organizations

The Alliance for Nursing Informatics is a collaboration of over 25 organizations, representing a unified voice for nursing informatics. Join one today!

www.allianceni.org
References

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Questions?