The Learning Health System (LHS) and Nursing’s Role/Responsibility

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“ANIA
where caring and technology meet”
”Finding the Heart in Informatics”

Disclosure
• Presentation today reflects my Doctor Of Nursing Practice (DNP) Capstone Project, 2016; and ongoing activity.
• I am not representing Cerner Corporation during this presentation nor during the symposium
Health and Healthcare Report Card

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Learning Health System (LHS)
LHS Core Values

Person-Focused: The LHS will protect and improve the health of individuals by informing choices about health and healthcare.

Privacy: The LHS will protect the privacy, confidentiality, and security of all data to enable responsible sharing of data, information, and knowledge, as well as to build trust among all stakeholders.

Inclusiveness: Every individual and organization committed to improving the health of individuals, communities, and diverse populations, who abide by the governance of the LHS, is invited and encouraged to participate.

Accessibility: The LHS will improve and deepen the trust of all stakeholders in the system, as well as to foster accountability and to build trust among all stakeholders.

Adaptability: The LHS will be designed to be agile in relation to new opportunities, challenges, and incremental evolution to meet current and future needs of stakeholders.

Governing: The LHS will have the governance which is necessary to support its sustainable operation, to set required standards, to build and sustain trust on the part of all stakeholders, and to demonstrate ongoing innovation.

Leadership: The leadership of the LHS will be a multi-stakeholder collaboration across the public and private sectors, including patients, consumers, caregivers, and families, as well as other stakeholders. Diverse communities and populations will be represented. Bold leadership and strong user participation are essential keys to unlocking the potential of the LHS.

Scientific Integrity: The LHS and its participants will share a commitment to the most rigorous application of science to ensure the validity and credibility of findings, and the open sharing and integration of new knowledge in a timely and responsible manner.

Value: The LHS will support learning activities that can serve to optimize both the quality and affordability of healthcare.

Foundational Aspects of the LHS

Virtuous Learning Cycle

A Problem of Interest

Assemble Relevant Data

Decision to Study
Nursing Informatics Framework

Data
Information
Knowledge
Wisdom

Multiple Learning Cycles Simultaneously

Mechanisms for communities of interest to form
Policies governing access to data
Technology for aggregating and analyzing data
Technology and policy for making knowledge persistent and sharable
Mechanisms for tailoring messages to decision makers
Mechanisms for capturing changed practice
Subject Matter Experts

SMEs > Collaborative Intelligence

Nursing Connection

it's not who you are that holds you back, it's who you think you're not.

anon
Nursing Trends

- 2018 > Average age of a nurse is > 50 years of age
- By 2020, anticipated over 80,000 nurses will leave the workforce...every year
- By 2025, anticipated nursing shortage of ~130,000
- By 2028-2030, anticipated over 1 million nurses of retirement age

Nursing Involvement

- Leadership involvement not really voluntary
- Expand thinking beyond “I’ll be a leader in my own <group>” to “I’ll be a formal leader in <area>”

Largest Group Providing Healthcare
We don't have a lot of technology people in Congress, so one of the basic things is to help people be educated on how technology works: what's there, where is it headed, what some of the challenges and opportunities are.

* Suzan DelBene
Wikipedia: The Internet of Things (IoT) is the network of physical objects or "things" embedded with electronics, software, sensors and connectivity to enable it to achieve greater value and service by exchanging data with the manufacturer, operator and/or other connected devices.
Data Handling

- Analytics
  - Descriptive
  - Predictive
  - Prescriptive
- Artificial Intelligence
  - Machine Learning
  - Neural Networks / Deep learning
- Language Recognition

How Might Healthcare Be Different?
Let’s Continue the Conversations:
Dianna_Dodd@yahoo.com

Find a problem where your passions intersect society’s needs.

Matt Might

Find where your passions intersect the Learning Health System, and Lead!