Nursing 2020: Towards defining NI’s future

Med-e-Tel 2008
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Topics

• Overview of some future studies’ themes
• Historical context of specific ‘future’ effort
  – NI2006 post-conference
• Findings / results of the post-conference
• Implications for nursing & healthcare in both near and far ‘future’
Background

• How I got interested
  – NI2003 meeting
  – 2005 article
    • “View from the Future”
      – Simon Eastel & Pythia Demosthenes
    • Set in 2053
    • Described future by looking into the past
    • Retrieved from Bio-IT World
Non-healthcare future books

• Broad focus, not exclusively health care
• Examples:
  – Ray Kurzweil “The Age of Spiritual Machines”
  – Michio Kaku “Visions”
  – Bart Kasko “Heaven in a Chip”
Context of books

Some common themes of non-healthcare focused future studies include

– Education
– Prediction
– Preparation
Health care futures book

• Health & Health Care 2010, 2nd Ed.
• Institute for the Future
  – Robert Wood Johnson support
• Published 2003
• US focus
Health care future - 2010

• General focus
  – Includes legislation
  – Demographics (patient, populations)
  – Monies (payers, costs)
  – Health Plans and insurers
  – Hospitals & physicians
  – Medical and information technologies
  – Care processes & medical management
  – Public health
Health care future - 2010

Of interest is information technologies
Key points:

1. Understand leading-edge technologies, both hard- & software, most likely to impact society

2. Be aware of those areas of healthcare most likely impacted by these technology developments
Health care future - 2010

11 key information technologies:

- CPUs
- Storage
- Wireless
- Bandwidth / compression
- Appliances
- IA’s
- Security & encryption
- ‘Net & WWW
- Visualization
- DB’s
- Sensors
Health care future - 2010

4 major areas of impact:
• Process-management systems
• Clinical information interfaces
• Data analysis
• Telehealth and remote monitoring
Future impact areas

• Process-management systems
  – Financial focus
  – Payors, providers and patients all impacted
  – Claims, eligibility verification, EDI

• Clinical information interfaces
  – Interface ubiquity; ease of use
  – Clinician behavior change
  – Integrate into workflow
  – EMR adoption
Future impact areas

• Data analysis
  – Increasingly complex data manipulations
    • “Data jockeys” & data mining
    • Lead to understanding patient future illness likelihood, greater in-depth analysis, more efficient ‘risk adjustment’
  – More real-time patient data codified, meaning increased analysis, outcomes & performances of patients & providers
Future impact areas

• Telehealth & remote monitoring
• Identify 3 convergent concepts
  – Case management
    • Automated
  – Patient information systems
    • Patient use of IT
  – Remote monitoring
    • Clinical assessment, real-time, of patients
Future impact areas

• Closing thoughts
  – EMR implementation in US 3-5 years
  – Due to little economic advantage of IT in managing chronic populations, minimal incentive to implement IT solutions versus current low-tech practices
Nursing historical context of the future

Efforts towards recognizing the future

– Nursing
– Future of nursing informatics
Nursing future context

Journal articles
• Not easily located
• Topics include populations, work force, education, policy development, and research

Nursing informatics – textbooks:
– Saba & McCormick (2006)
– Weaver, Delaney, Weber & Carr (2007)
Nursing future context

• Englebardt & Nelson:
  – Editors look at possible directions of future in health care; no time line
  – Forecasting important to managing future
    • Different ways to do this
  – Some directions:
    • Job skill shift related to health care changes
    • Education = power shift
    • Increased public health focus
Nursing future context

• Saba & McCormick:
  – Primarily US-based perspective
  – IT drivers range from bar coding to computational mobility to POC to ‘Net accessibility
  – Health issues and IT range from population aging to ID to genetics
  – Bottom line: IT increasingly important for quality care provision
Nursing future context

• Weaver, Delaney, Weber & Carr
  – HIMSS publication
  – Case study approach
  – Future deals with ‘near’ future
  – Topics range from NI and the US National Institutes of Health Roadmap to biomedical influence on CIS’s to patient and family-centered partnerships
  – Also explore nursing and informatics’ opportunities
NI’06 post-conference context

- Origination - NI2003
- Persons of origination - myself & Dr. Peter Murray
- Development time
  - About 1 1/2 year
    - Discussed via multiple emails and or direct conversations
    - Shared documents over time
- Dr. Murray negotiated with IMIA, NI-SIG, a post-conference to address the future
- The post-conference supported IMIA NI-SIG strategic plans
NI’06 post-conference context

• Logistical information
  – Followed NI2006 (Seoul, S. Korea)
  – Location: a serene and relatively secluded resort area in the hills northeast of Seoul
NI’06 post-conference context

• Logistic information
  – Participants
    • Strove for diversity
      – Countries represented included Australia, S. Korea, Japan, United Kingdom, Germany, Taiwan, USA
      – 41 participants
    • Experts with backgrounds as diverse as nurse leaders, nurse educators, nurse clinicians, engineers and policy-makers
NI’06 post-conference context

• Major theme:
  – NI needs to be proactive, not reactive, to the (or its) future
NI’06 post-conference context

• 5 sub-themes or tracks
  – Technology developments applied to healthcare / nursing
  – Changes in society at national and international levels
  – Healthcare in the year 2020 - practice & policy
  – Theoretical and philosophical issues which might help
  – IT evolution to 2020: the potential in healthcare and informatics
NI’06 post-conference context

• Scenario format used
• Participants self-selected to a sub-theme of interest
• Shared documents distributed by track leaders prior to convening the post-conference
NI’06 post-conference context

- Intense meetings for all tracks over the next 1½ days
- Each morning began with sharing by the groups
- Closing session provided interesting discussions among all attendees
- Outcome – published compilation
  - “Nursing Informatics 2020: Towards Defining Our Own Future”
NI’06 post-conference

• Results
  – Technology impact
    • Care
    • Patients
    • Providers
  – Role change
    • Patients
    • Providers
  – Health care change(s)
NI’06 post-conference

• Results
  – Educational changes
    • Providers
    • Modalities of education

• Additional thoughts
Summation

• Nursing, and others, constantly prepare today for tomorrow
• Planning requires effort
• IT is here to stay; no going back
• ‘We’, as nurses, control our destiny
Questions?

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