The importance of nursing to eHealth: a selective history

Nick Hardiker, RN PhD
Professor of Nursing and Health Informatics, University of Salford, UK
Director, ICN eHealth Programme, Geneva, Switzerland
The importance of eHealth to nursing: a selective future
Overview

• The nursing response to challenges in today’s health systems
The International Council of Nurses (ICN)

- A federation of more than 130 national nurses associations representing more than 16 million nurses worldwide
- Operated by nurses and leading nursing internationally since 1899
- Its purpose is to represent nursing worldwide, advancing the profession and influencing health policy
• «...die Arbeiter von Salford in Wohnungen leben, in denen Reinlichkeit und Bequemlichkeit unmöglich sind»

• ‘...the workers of Salford live in dwellings in which cleanliness and comfort are impossible’

Engels F (1845) Die Lage der arbeitenden Klasse in England
• 'Today, the nursing shortage being what it is, every effort should be made to utilize our nurses to the utmost and not take their time with clerical work of no immediate value'
'Today, the nursing shortage being what it is, every effort should be made to utilize our nurses to the utmost and not take their time with clerical work of no immediate value'

“Weekend effect”

• Do differences in nurse:bed ratios affect mortality in stroke units?


56 666 patients
• 3 nurses per 10 beds
  • 11.2% mortality risk

• 1.5 nurses per 10 beds
  • 15.2% mortality risk
  • 1 excess death per 25 admissions
Do differences in nurse:patient ratios and nurses' educational qualifications affect mortality after common surgical procedures?


422 730 patients
• An increase in a nurses' workload by one patient increased the likelihood of an inpatient dying within 30 days of admission by 7%

• Every 10% increase in bachelor's degree nurses was associated with a decrease in this likelihood by 7%
• 60% of nurses hold bachelor's degrees
• Care for an average of six patients

• 30% of nurses hold bachelor’s degrees
• Care for an average of eight patients

• 30% higher mortality
There are not enough nurses

- The supply of nurses in both low-income and high-income countries is not keeping pace with demand
- Nurse:Population ratios worldwide vary from = 1:58 (Switzerland in 2011) to 1:9346 (Haiti in 1998)
- Sub-Saharan African countries have a shortfall of more than half a million nurses - out-migration exacerbates the problem
The world by land area
The world as proportion of tuberculosis cases
The world as proportion of nurses
What would you do?

- Task-shifting
- Lobby for more qualified nurses
- Provide money for more qualified nurses
- eHealth
ICN eHealth Programme

• Transforming nursing through the visionary application of information and communication technology
• Over 20 years in the making
• Announced at the ICN Conference 2011 in Malta

http://www.icn.ch/pillarsprograms/ehealth/
Hospital statistics

• ‘In attempting to arrive at the truth, I have applied everywhere for information, but in scarcely an instance have I been able to obtain hospital records fit for any purposes of comparison’ (p 176)

Better information
=
Better health care
Hospital statistics

• Tables to provide ‘an uniform record of facts’
  – Total sick population
  – Number of cases
  – Average duration
  – Mortality
  – Annual proportion of recoveries

History

• Around half a century of research and development in Nursing Informatics
The nursing process was formally introduced to the UK in 1977.
IBM launched its first personal computer (i.e. the PC) in 1981
‘eLife’

• The use of information and communication technology in:
  – Banking
  – Retail
  – Travel
  – Entertainment
  – Social engagement
Unrealistic expectations

• Cash machines (ATMs) have not improved my financial status…
• …on demand TV has not made me like soap operas any more…
…SatNavs (GPS) have not made my journeys safer…
• …and online travel has not made the sun shine on holiday…
• …but I could not live without them
A personal vision

- eHealth systems are in routine use to parallel other aspects of contemporary life
- Data is available and routinely used/exploited for the benefit of patients and those caring for them
- People are actively working on continually improving how things are i.e. advancing together the art/science of nursing informatics
eHealth
Why ICN eHealth?

- Worldwide proliferation of ICT
- ICN informs, supports and advocates for nursing and its members
- eHealth threads through ICN processes and products
- ICT in health care provides new opportunities, not least equity and improved access
ICN eHealth workstreams

- Connecting Nurses
- ICN Telenursing Network
- International Classification for Nursing Practice (ICNP®)
Connecting nurses

• A forum for expert healthcare professionals from around the world to share their ideas, advice and innovations
Information Shareapy

- A patient education service for nurses and midwives to share, via a dedicated and moderated social network, links to high quality, reputable health resources with their patients, families, friends or colleagues
Pain Management

Activity

Posted 17 days ago by Robert Fraser:

**Opioid Overdose Toolkit**

Facts for community members, first responders, prescribers, patient and family members.

Flag as inappropriate

Comment (0)  Repost (0)  Like (2)  Share

Posted 6 months ago by Adrienne Huston:

**The British Pain Society - Pain scales in multiple languages**

Flag as inappropriate

Comment (0)  Repost (0)  Like (0)  Share

Posted 6 months ago by Robert Fraser:

**Opioid Pain Medicines**

Great information on pain medications for patients

Flag as inappropriate

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Most Active Members

SIDIIEF - Secrétariat International Des Infirmières Et Infirmiers De L'espace
Francophone
4 Resources
Robert Fraser
2 Resources
Scott Emory Moore
2 Resources
Care Challenge

• A contest that highlights nursing innovations and helps to put them into practice
• There have been two winning entries this year. The authors have chosen a professionally produced video displaying their project as means of support from Connecting Nurses
Reducing Social Isolation for Our Residents in Long Term Care via Skype, a Best Practice

by Lorraine B. - La France | Ste. Anne de Bellevue, Canada

Goal: Reduce social isolation and promote intergenerational communication through the use of technology.
ICN Telenursing Network

- Global resource for sharing knowledge and expertise around telehealth and telecare
- Launched in 2009
- 296 members in 65 countries
- Membership open to all
International Classification for Nursing Practice (ICNP®)

- ICN has supported ICNP since 1989
- A standardised terminology used to represent nursing diagnoses, interventions and outcomes

http://www.icn.ch/pillarsprograms/international-classification-for-nursing-practice-icnpr/
International Council of Nurses

ICNP® 25th Anniversary

1989-2014
ICNP Characteristics

• Reliable
  • Compliance with international standards
  • Quality improvement process
  • A formal infrastructure that facilitates cross-mapping and allows output in multiple formats
ICNP Characteristics

- Easy to understand
- Ongoing focus on pre-formed (pre-coordinated) statements
- Increasing numbers of catalogues (subsets tailored for specific purposes)
- Available in 15 different languages
ICNP Characteristics

• Internationally-recognised
  • A related classification in the WHO-FIC
    • ICHI
  • Recognised by a number of National Nurses Associations
  • Harmonisation/collaboration agreements with the International Health Terminology Standards Development Organisation and Sabacare
    • SNOMED CT
A wealth of data

- Top 5 nursing interventions delivered in hospitals in Matosinhos, Portugal, Sept 2012 – Aug 2013 (total = 6,838,355)
  - Monitoring heart rate (4.0% of total)
  - Monitoring blood pressure (3.8%)
  - Environmental safety management (3.7%)
  - Assessing pain (3.7%)
  - Monitoring body temperature (3.6%)
Evidence-based practice

- Guidelines
- Standardised care plans
Pain

Pain management
Practice-based evidence?

- EHR
- Standardised languages
- Linkages
Pain

Pain management

No pain
Pain
No intervention
No pain
Risk for pain

Pain management

No pain
Risk for pain

No intervention

Pain
‘Technological progress is like an axe in the hands of a pathological criminal’

Albert Einstein
• Imagination is more important than knowledge