Conflict of Interest

Andrew Phillips

Has no real or apparent conflicts of interest to report.
Learning Objectives

- Evaluate themes that impact nursing informatics.
- Identify gaps in nursing informatics research.
- Generate logical next steps in advancing nursing informatics research.
Methods – Scoping Study

• Arksey and O’Malley¹
  • Step 1 – Identify the Research Question
  • Step 2 – Identify Relevant Studies
  • Step 3 – Study Selection (Iterative process which can change over time)
  • Step 4 – Charting the Data
  • Step 5 – Collating, summarizing, and reporting the results
  • Step 6 – Consultation – This is you guys

Step 1: Research Question

- What trends and themes emerge from a survey of the published literature in the area of nursing informatics during the past year

- Make meaning of current and past themes – historical context.
Step 2: Identify Relevant Studies

• **Search Strategy**
  • Databases: PubMed and CINAHL
  • Search terms
    • ("nurse" or "nursing") AND "informatics") OR "nursing informatics"
    • Publication Dates 3/1/2017 – 2/28/2018
Step 3: Study Selection

Inclusion and Exclusion Criteria

- **Inclusion criteria:** Research, contributes to nursing informatics knowledge base, prototype development and testing, clinical care delivery focus; informatics
- **Exclusions:** Articles that focused on informatics education programs, nursing education, nursing students
Search Results (flow chart)

PubMed (624)

CINAL (102)

Total (726)

Duplicates (40)

Available for Review (686)

Abstract Review (479)

Full Text Review (207)

not retrievable or did not meet criteria after full text review (44)

Articles Evaluated (163)
New methodology adopted

Articles Included in Evaluation

- 2012-2013: 35
- 2013-2014: 48
- 2014-2015: 33
- 2015-2016: 81
- 2016-2017: 129
- 2017-2018: 163
Research by Setting (%) 2017-2018

- Ambulatory: 50%
- Community/Public Health: 28%
- Continuum of Care: 2%
- Health Professional/Expert Panel: 1%
- Hospital: 19%
- LongTerm Care: 0%
- Other (Theory/Design/Standards): 0%
By Country (%)  
2017-2018

Note: While first author country is noted here, many of the US authored studies were performed in other countries.
Research Country (%)  
By Year 

<table>
<thead>
<tr>
<th>Year</th>
<th>USA</th>
<th>UK</th>
<th>Sweden</th>
<th>Korea</th>
<th>Iran</th>
<th>Canada</th>
<th>Tiawan</th>
<th>Japan</th>
<th>Other</th>
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<td>2017-2018</td>
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Topic (%) by Year

- Transitions*
- Cards/Terminologies/HIE
- Technology Acceptance
- Patient
- TeleHealth/Mobile
- Social Media
- Implementation/Workflow
- Human Factors
- Patient Empowerment
- Clinical Documentation
- Clinical Decision Support
- Big Data/Data Use
- Public Health
- Hand Offs
- Communication
- Simulation
- Technology Development
- Other

Yearly Distribution:
- 2013-2014
- 2014 - 2015
- 2015 - 2016
- 2016 - 2017
- 2017 - 2018

NENIC
New England Nursing Informatics Consortium
Nurses Transforming Healthcare Through Informatics
Step 5 – Collating, summarizing, and reporting the results
Themes Identified

1. Patient Empowerment/Self-care
2. **Technology Acceptance by Patient** (Portals, Telehealth, Mobile)
3. Telehealth Standards
4. Selection of appropriate mobile and telehealth applications difficult.
5. Social Media
6. Patient Reported Data
7. Patient clearly recognized as stakeholder
8. Collaboration with Nursing key to successful HIT implementation and design
9. Big Data Continues

6. Data Mining and Use Public and Population Health genomic, pharm, other
7. Inter-professional Care, Care Coordination, Shared Decision Making
8. Recognition that HIT can drive change in ways that you may not want. **“ruling practice behavior”**
9. Long term success of HIT patient tools needs more evaluation

Using EHR data to...
- Predict
- Measure Outcomes
- Populate tools (falls, other)
Representative Citations


Step 6 – Consultation

Feedback and Professional Input...