NENIC Year in Review

Spring 2017 – Winter 2018

April 27, 2017

Andrew Phillips

NENIC
New England Nursing Informatics Consortium
Nurses Transforming Healthcare Through Informatics

Conflict of Interest

Andrew Phillips

Has no real or apparent conflicts of interest to report.

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Learning Objectives

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

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Methods – Scoping Study

- Arksey and O'Malley[1]
  - 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

[1]Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International journal of social research methodology, 8*(1), 19-32.

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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.

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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

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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

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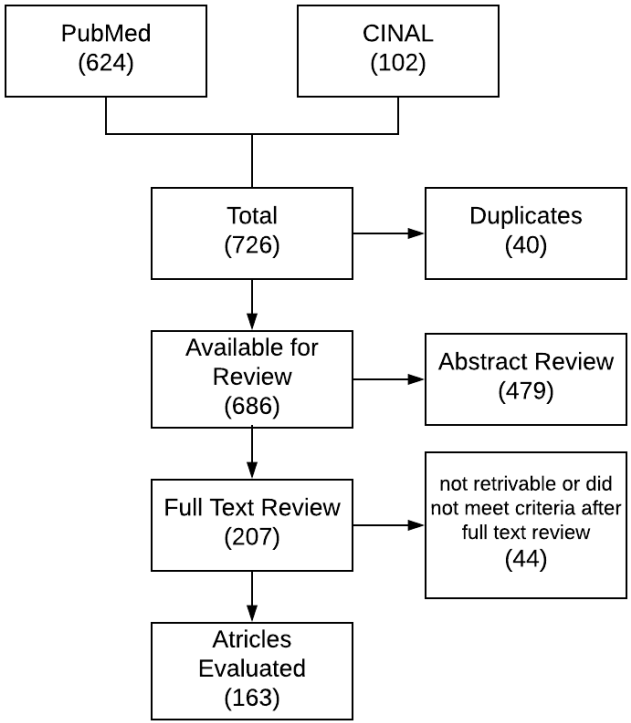
Search Results (flow chart)



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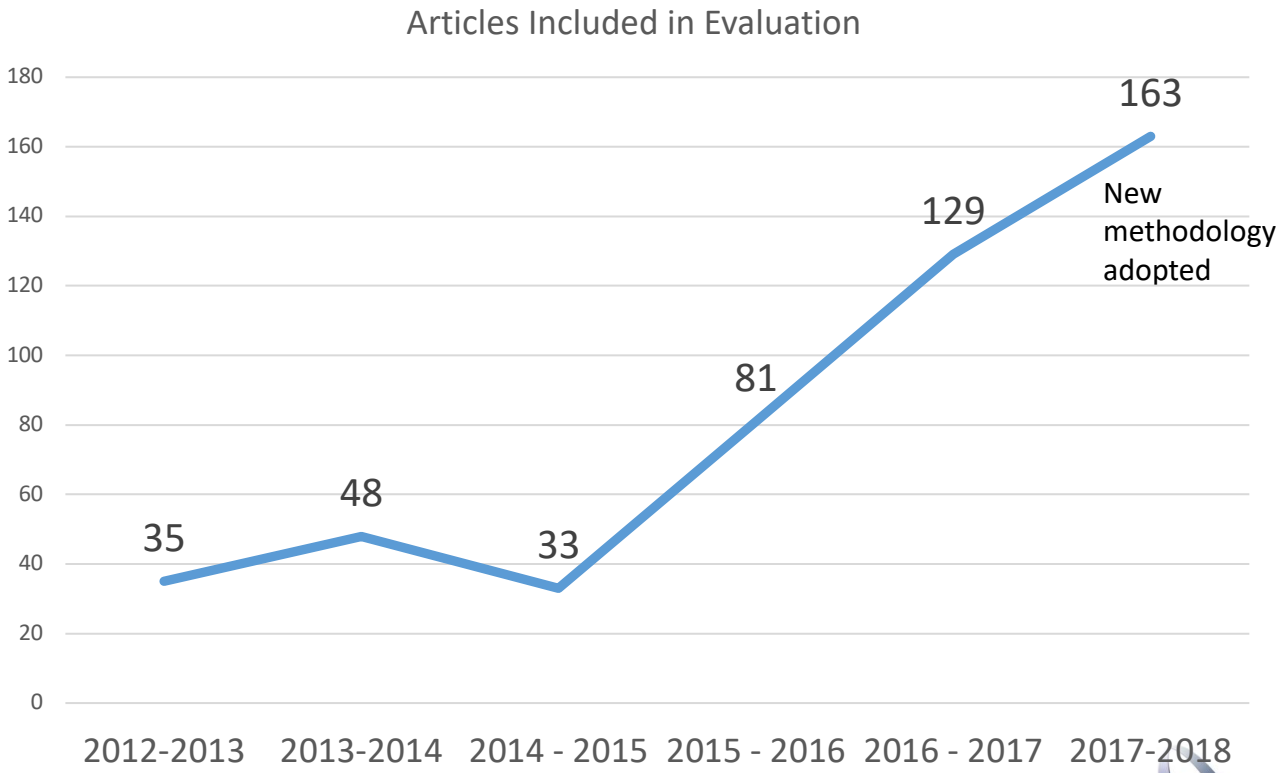

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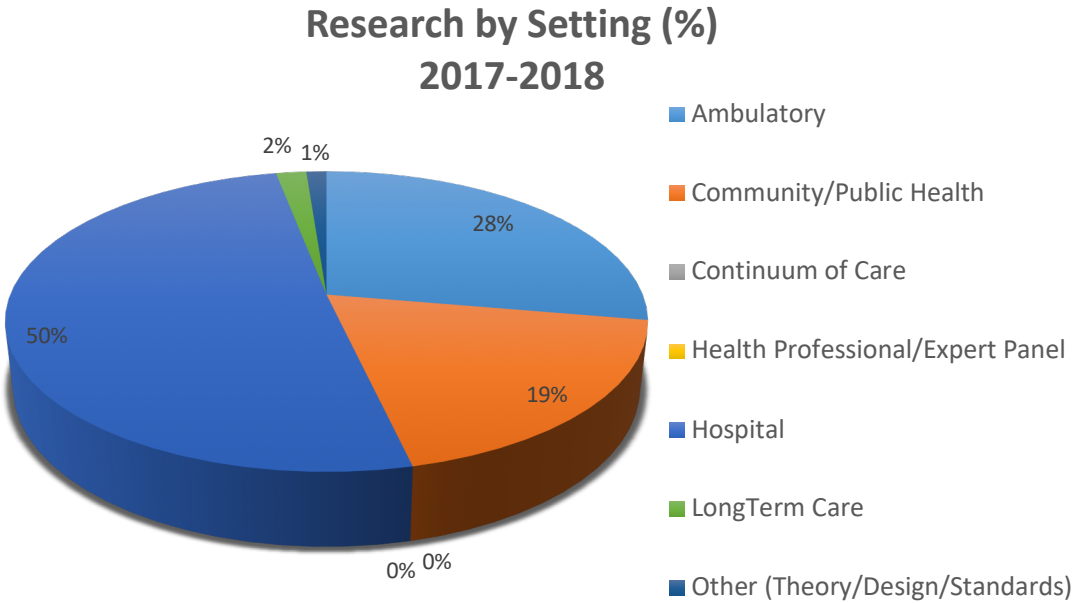

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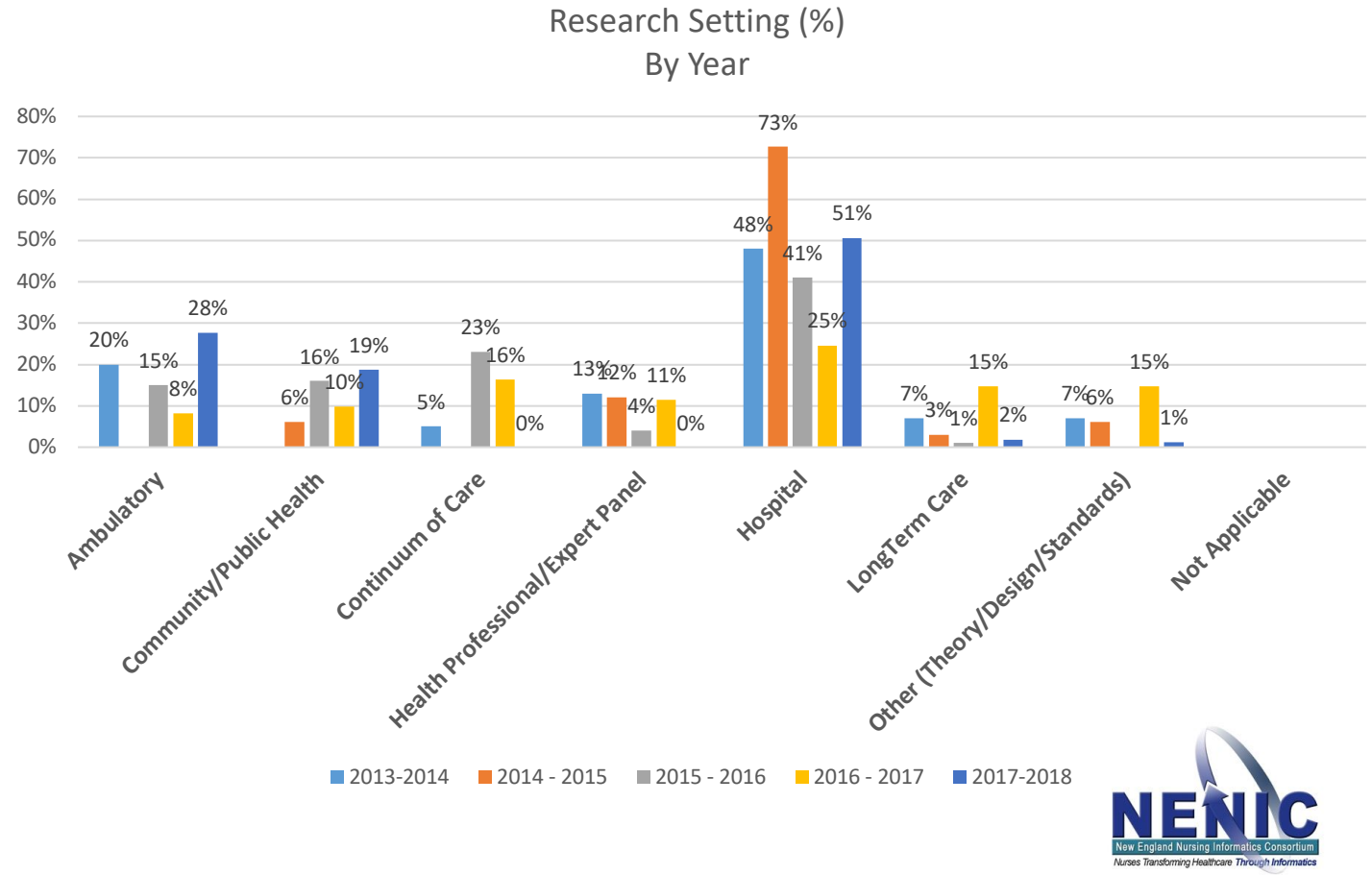
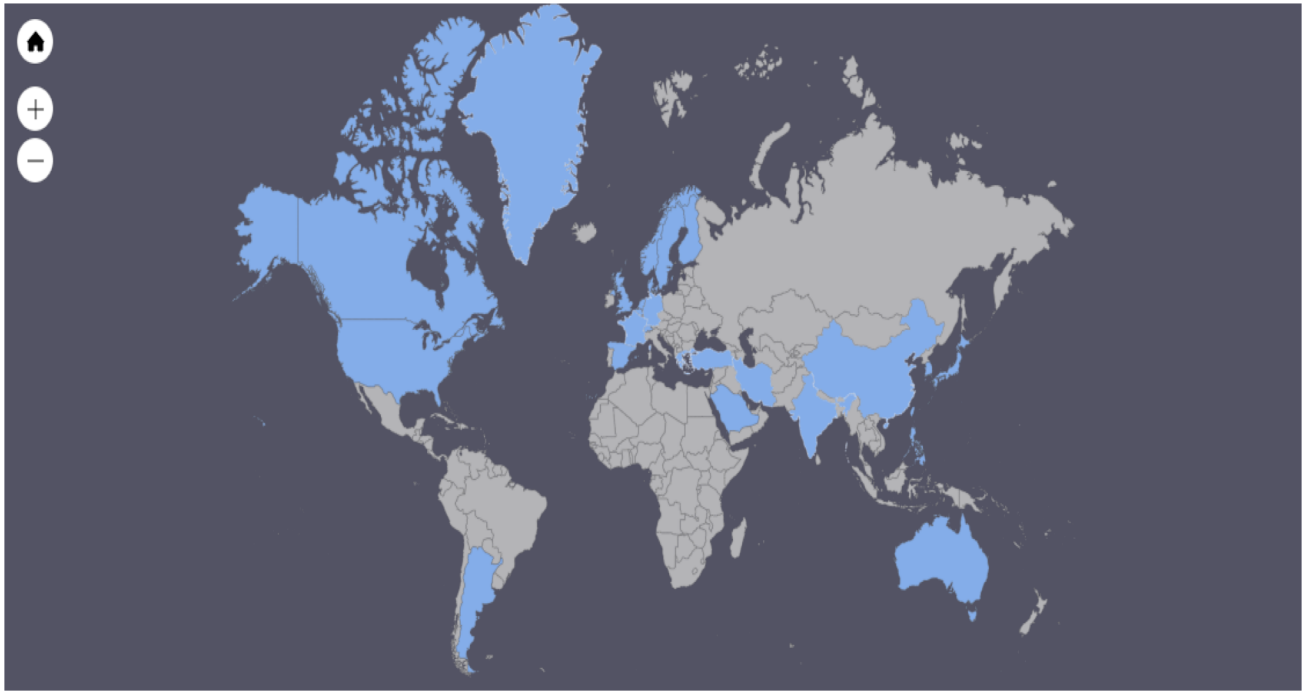

Research Setting (%)
By Year
80%
70%
60%
50%
40%
30%
20%
10%
0%
20%
15%
8%
28%
6%
16%
10%
19%
5%
23%
16%
0%
13%
12%
4%
11%
0%
48%
73%
41%
25%
51%
7%
3%
1%
15%
2%
7%
6%
15%
1%
Ambulatory
Community/Public Health
Continuum of Care
Health Professional/Expert Panel
Hospital
LongTerm Care
Other (Theory/Design/Standards)
Not Applicable
2013-2014
2014 - 2015
2015 - 2016
2016 - 2017
2017-2018



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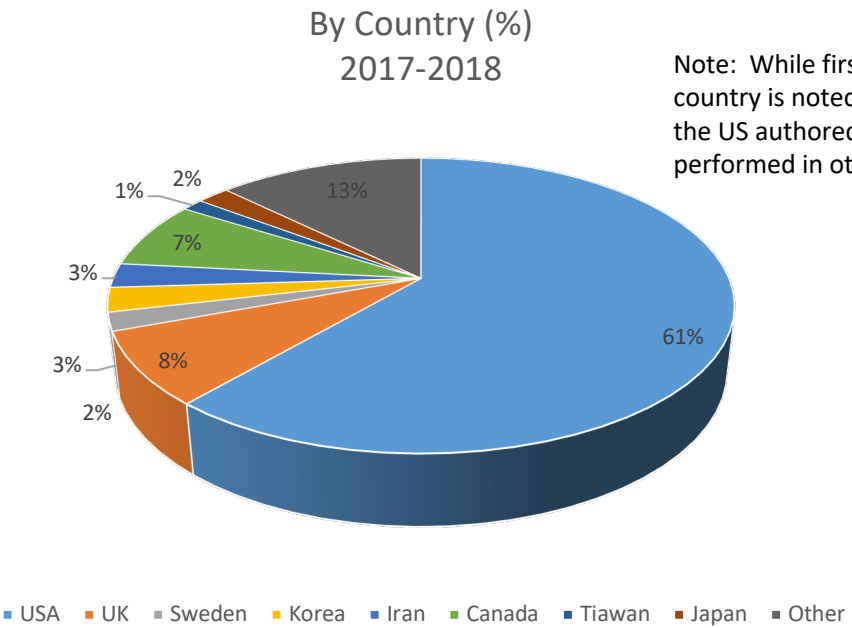

Note: While first author country is noted here, many of the US authored studies were performed in other countries.

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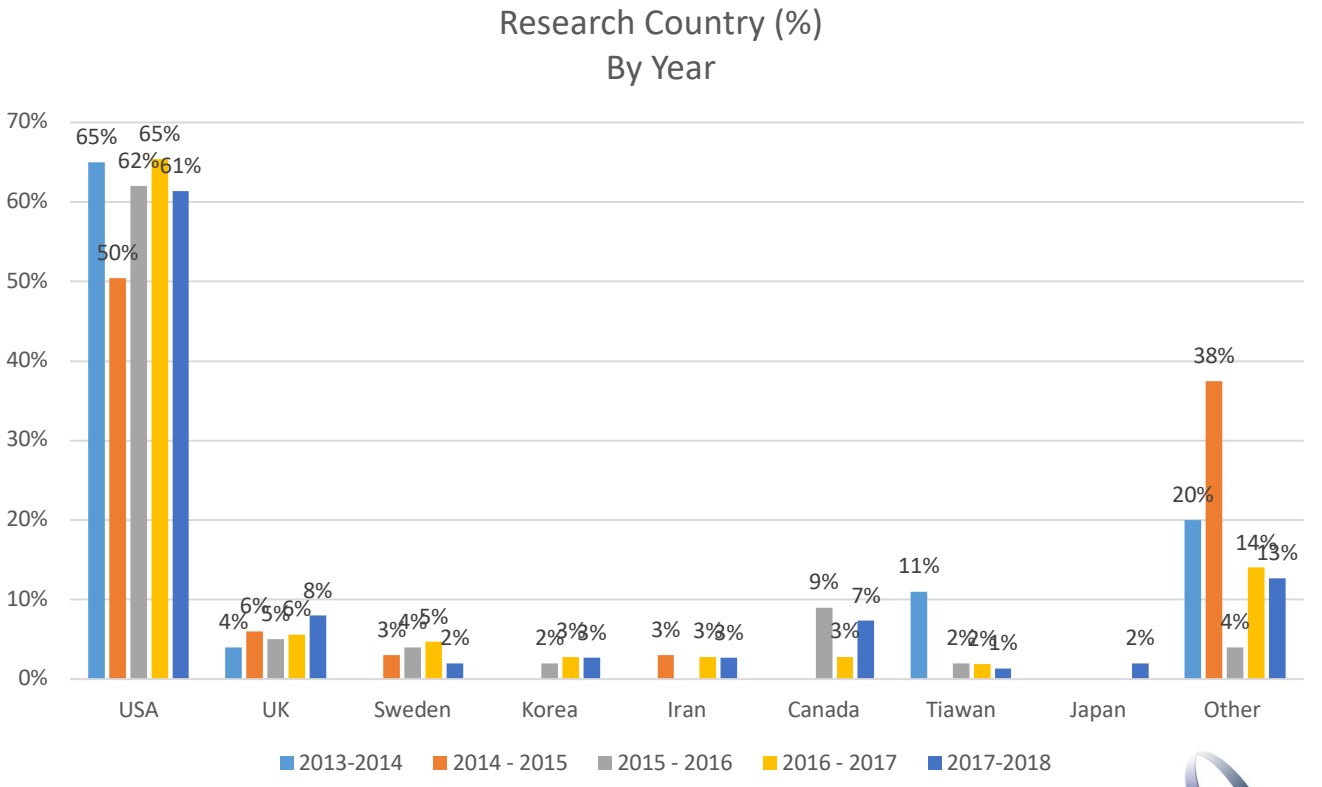

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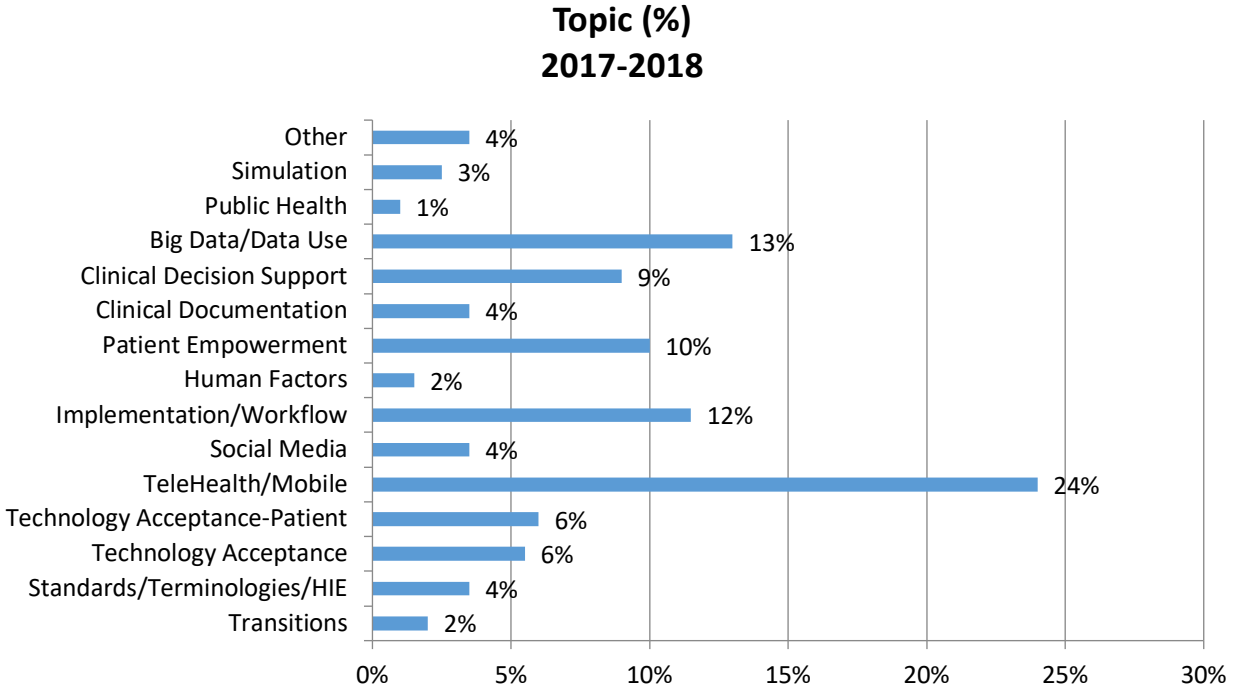

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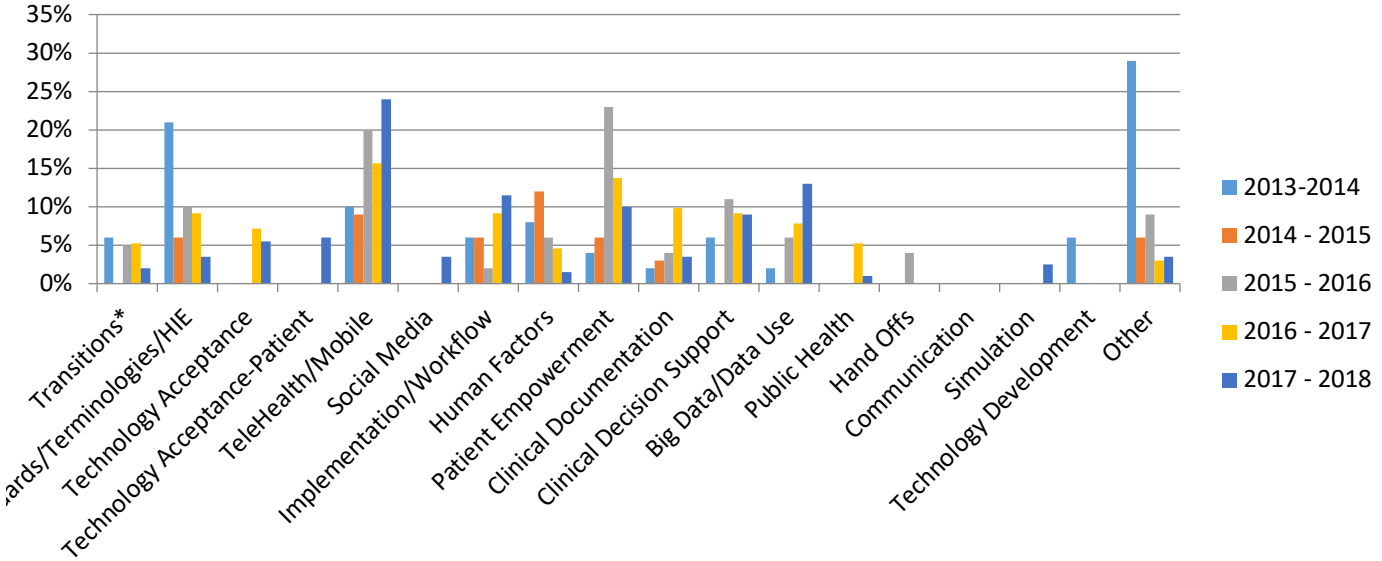
Topic (%) by Year



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Step 5 – Collating, summarizing, and reporting the results

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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
   Data Mining and Use
   Public and Population Health
   genomic, pharm, other
6. Inter-professional Care, Care Coordination, Shared Decision Making
7. Recognition that HIT can drive change in ways that you may not want. *"ruling practice behavior"*
8. Long term success of HIT patient tools needs more evaluation
9. Using EHR data to…
   Predict
   Measure Outcomes
   Populate tools (falls, other)

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Representative Citations

Jackson, G. P., Robinson, J. R., Ingram, E., Masterman, M., Ivory, C., Holloway, D., ... & Cronin, R. M. (2017). A technology-based patient and family engagement consult service for the pediatric hospital setting. *Journal of the American Medical Informatics Association*.

Campbell, M. L., & Rankin, J. M. (2017). Nurses and electronic health records in a Canadian hospital: examining the social organisation and programmed use of digitised nursing knowledge. *Sociology of health & illness*, *39*(3), 365-379.

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Valdez, R. S., Guterbock, T. M., Fitzgibbon, K., Williams, I. C., Wellbeloved-Stone, C. A., Bears, J. E., & Menefee, H. K. (2017). From loquacious to reticent: understanding patient health information communication to guide consumer health IT design. *Journal of the American Medical Informatics Association*, *24*(4), 680-696.

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Step 6 – Consultation

Feedback and Professional Input…

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