Symposium Abstract Submission:

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Title:

Social Network Analysis: Data Collection App Development

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Disclosure:
This presentation reports on the development of a novel web based system, application, and procedures for collecting social network analysis (SNA) data in the health care environment. This application was developed for SNA data collection for the Measuring Network Stability and Fit* (NetFit) longitudinal study.

Previous Presentations:

Publications:
Social Network Analysis: Data Collection App Development

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Background: Patient safety and quality initiatives have emphasized the importance of health information technology (HIT) design that supports communication and collaboration between providers across the continuum of care. This has led to an interest in Social Network Analysis (SNA) research methods. Nonetheless, designing and implementing a methodologically sound data collection process in the healthcare environment has proven to be challenging for both new and experienced researchers.

Aims: This presentation will provide an overview of the development of a combination of web-based tools and an Android tablet application for Social Network Analysis (SNA) data collection for the Measuring Network Stability and Fit* (NetFit) longitudinal study. The purpose of the NetFit study is to enhance the scientific application of SNA to health care through comparing the information sharing and decision making networks in hospital nursing units and identifying a robust, but parsimonious set of network properties that are associated with patient safety and quality outcomes.

Results: The combination of web-based tools and the Android application supported collection of 100 hospital unit information sharing and decision making networks, each unit participated 4 times during the 7 month data collection time period. These tools also supported last minute staffing changes, minimized human data input error, and allowed the survey results to be downloaded directly into the network analysis software program. Analysis of the network and descriptive data is in progress.

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