Update: Clinical Communication in General Internal Medicine

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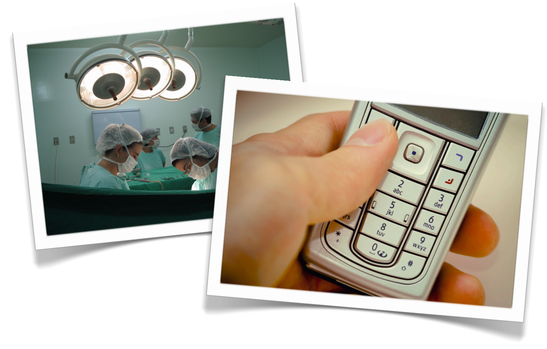
Introduction

St. Michael's Hospital will be moving to a new web-based application to enable text paging to smartphones. This will provide a unique opportunity to evaluate communication efficiency wtih the new system.



Research Questions

1. What are the most frequent themes prompting communication between nurses and physicians?
2. What are the most frequent themes prompting communicaiton between different physicians?
3. Are there frequent and systematic 'pressure points' that can be identified to help reduce the volume of clinical messages?
   (i) Do these occur at predictable time points in the day or night?
   (ii) How can they be reduced?
4. Do physicians and nurses assign similar priority levels to a page?

Methodology

In order to properly evaluate the impact of the paging intervention, we will collect data through direct observation of nursing stations, surveys & interviews with various clinician roles (allied health, nurses, pharmacy, physicians), work shadowing of particular physicians and paging records (frequency, wrong destination, origin of page, & time to respond)

Baseline Data:
Nurse station: 20 hrs completed
Work shadowing: 14 hrs completed
Survey: in progress
Paging records: in progress

After Implementation:
Surveys: 40 nurses, 10 physicians, 10 allied health
Interviews: 6-8 resident physicians, 6-8 nurses, 4-6 med students, 4-6 allied health & pharmacy (total: 20-28)
Work shadowing: 8-10 residents for 2-3 hours (total: 16-30 hrs)
Paging: Page logs will be categorised, analysed and summarised.

Analysis

Qualitative data will be transcribed and inductive thematic analysis will be undertaken (NVivo). Validation of the analysis will be undertaken by feeding back emergent themes to participants during subsequent observations for consensus of meaning. Triangulation with quantitative and qualitative data will also occur

Relevance & Summary

This study will evaluate the implementation of a new web-based application for enabling text paging to smartphones. The results will inform general research on clinical practice as well as lead to development of a tailored solution for use in St. Michael's GIM for text paging.