Development of an Electronic Handoff Application Tool to Improve Resident Handoffs

Aim of project
To develop an electronic handoff application tool to improve resident handoffs.

Background of project
As duty hour restrictions increase, handoff errors have also. At many hospitals the EMR has been developed without a patient tracking or handoff application so keeping track of patients, their medical information and communicating between and within services has become difficult and dangerous. Some handoff applications exist however they are difficult to tailor to an individual hospital.

Planned interventions tested
Develop a handoff application and determine if it improves communication, handoff errors, time spent mining data and searching for the responsible provider and care team responsible for patients.

Prediction of Results and/or Intended Results
Our hope is to decrease duty hour violations, improve patient safety by reducing handoff errors and patient tracking issues, and establish a ubiquitous communication tool for the hospital.

Results
Still in the early phases of deployment however the pediatric department has been successfully using it for several weeks.

Discussion
So far in a clinical setting our handoff application seems to at the very least be as good as the previous handoff list. With continued trials we hope to expand its use to other departments this spring and ideally start using it hospital wide with the beginning of the new academic year in July. This particular project will not reach its full potential without ubiquitous use.

Conclusions
With successful deployment a custom handoff and sign-out application has been shown at several other university hospitals to improve patient safety, ease of practice for providers, cut down on data mining and "pre-rounding" and therefore reduce work hour violations and time spent on low-yield service. It could also impact length of patient stay and improve patient satisfaction due to the improved interdepartmental communication. This is accomplished by assigning the communication and sign-out responsibilities to the group ultimately responsible for them in the first place: the residents.

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