**Introduction**

- Interprofessional communication and teamwork in rehabilitation healthcare settings are central to producing better patient outcomes.
- Gleaning discipline-specific information from EHR documentation is difficult and time consuming. To improve interdisciplinary communication by maximizing discussion, rather than reporting, at group meetings, we propose a groupware tool to support information sharing across disciplines.
- Using the Turf framework for usability we propose an app-like groupware software that integrates EMRs and interprofessional communication through improved documentation.

**Design Setting**

- Our project is proposed to be most effective in an inpatient-rehabilitation setting.
- There, weekly interdisciplinary treatment and discharge planning team meetings occur.
- The meeting time constraints allow ~15 min/patient with ~15-20 patients resulting in a ~3-5 h meeting.
- The participants involved represent various departments: Medicine, NeuroPsych, Psychology, Nursing, Respiratory therapy, Physical Therapy, Occupational therapy, Speech therapy, Dietary, Social work, Case management, and others such as billing, management, leaderships.

**Design Principles**

- Proposed implementation includes executive sponsorship for return on investment, cost analysis, ERM vendor support, and user training for top-down success.
- The product will be developed following the TURF framework for usability (right). The evaluation plan includes selecting 10 subjects from each discipline for user testing and risk/benefits analysis of the software.

**Analysis Framework**

- TURF Framework for EHR Usability

**Task, Representation, User**

**References**


**Pilot Groupware Mockup**

**Inpatient Rehabilitation Treatment/Discharge Planning Support Tool**

**Task Survey each discipline and ensure appropriate disciplines are represented**

**Medicine**
- P: Titration up BP; R: better glucose control if IM consult; DVT pain
- C: Impulsivity, potential falls
- D: none
- B: Support and safety at home

**Nursing**
- P: No falls, few acute accidents, no bowel accidents
- C: Impulsivity, L arm abrasion
- D: none
- B: home support/supervision

**Psychology**
- P: More imaging, still impulsive in activity, sleeping well
- C: Depression otherwise-family present
- D: Reorienting family for more support
- B: changing family dynamics
- R: new home/moving?

**Case Management**
- P: DME approved except WC
- C: Home health benefits vs. DME approved except WC
- D: pending additional funding sources
- B: supervision with meals

**User Specific-sponsorship are represented by each app tile**

**Involvement of the key stakeholders in project design from the beginning is key before repeating the process in other units of the organization.**

**Solution Dissemination**

- To raise awareness of the tool during dissemination, the target audience (doctors, nurses, clinicians) will be introduced to a proof of concept describing the user-friendliness of the tool when preparing for the meeting and reduction of documentation time during the meeting.

- Involvement of the key stakeholders in project design from the beginning is key before repeating the process in other units of the organization.

**Alternative Solutions**

- Alternative solutions were analyzed in the investigation process:
  - An inantrar private computer network
  - Internal Shared Document (ISD) program (e.g. Microsoft Office, SharePoint)
  - Speech-To-Text Software system (e.g. Dragon Naturally Speaking)
  - SBAR tool (Situation, Background, Awareness, Recommendation)

- Wikipedia-like collaborative website

**Discussion**

- Each discipline would make available the most pertinent summary of the patient's data.
- Effective communication will decrease duration of meetings and increase time spent on discourse of patient care.
- Ability to view notes from many disciplines at once to minimize miscommunication.
- Reduction of documentation time during and after meeting returns each discipline-specific sponsor to normal workflow.

**References**