QUALITY IMPROVEMENT: Optimization and Standardization of the Family Medicine Inpatient Sign-Out for Safer Patient Care

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Aim of project

To review current literature on effective sign out, and to take the opportunity to have our Family Medicine Residents and Attendings reflect upon the current Inpatient Family Medicine Sign Out and Hand Off Report. Our goal is to use the literature, and the feedback from our department to improve the integrity of Sign-Out, which will ultimately result in optimal medical care for the patients that we serve at UNM Hospital.

Background of project

In 2003, the Accreditation Council for Graduate Medical Education (ACGME) set limits for resident duty hours.[1]

With the advent of the 80 hour workweek, much attention has been focused on the benefits of shorter work hours regarding resident fatigue and reduced medical errors. Along with this changes, there has been more reliance on multiple teams of residents who assume the care of inpatients at different times. In this new paradigm, a safe and effective sign out process is needed to ensure a seamless transition of the care from one resident to another.[2]

The safety of the handoff process has been called into question by a number of different sources and studies, which suggest that handoffs are often characterized by communication failures and environmental barriers.[3]

The handoff is also the subject of a Joint Commission on Accreditation of Healthcare Organizations National Safety Goal, which has a written requirement, which requires hospitals to implement a standardized approach to handoff communication and to provide an opportunity for staff to ask and respond to questions about patient's care.[4]

Because medical trainees receive little to no formal training or education in communication or education in communication during handoffs, there is an inherent opportunity to influence the practice of future physicians.[5] (5)

Planned interventions tested

1. **Literature Review**
2. **Meeting to Discuss New Handoff Report**, with Dr. Jacobs (Pediatrics Attending), to obtain information on transitioning to CACHE System for Hand Off Report from the PowerchartAdHoc Handoff Report.
3. **Resident Survey (example shown on next page)**, completed by Melanie Baca, MD, R2
4. **Hospital Attending Feedback Session**, completed by Linda Smoker, MD Inpatient Attending
5. **Implement IPASS method for sign out**

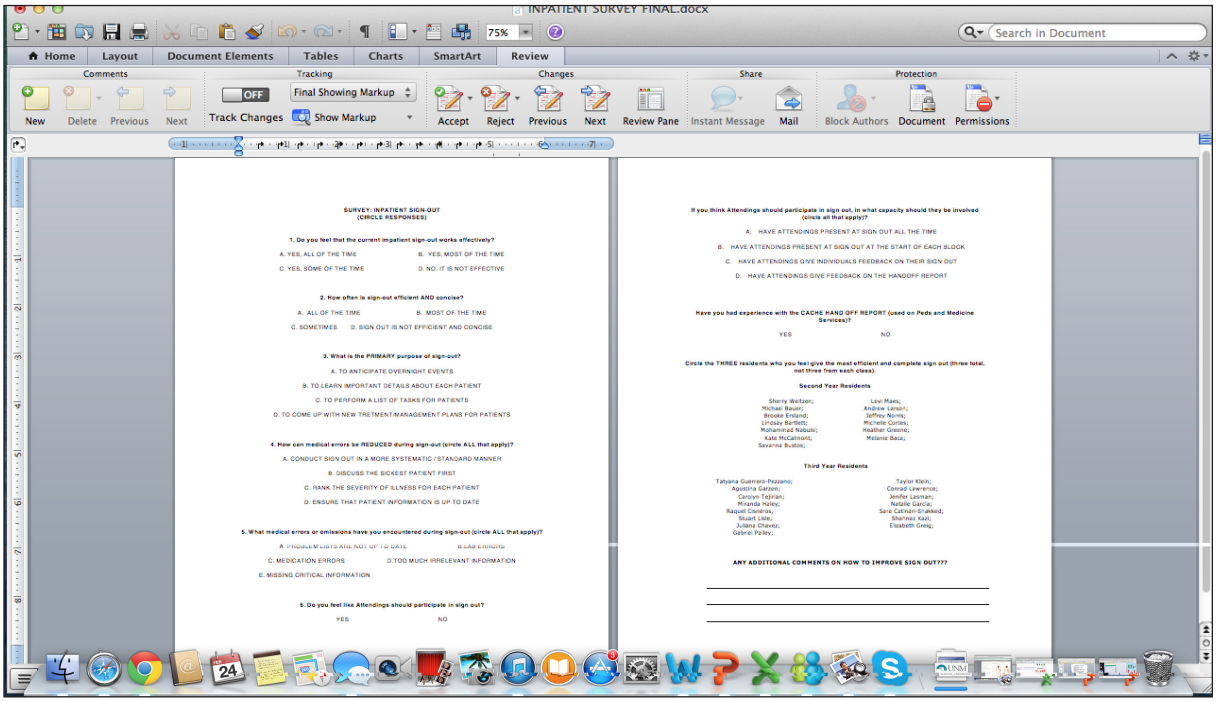
1 Accreditation Council for Graduate Medical Education: Resident Duty Hours and the Working Environment. http://acgme.org/acWebsite/dutyHours/dh_Lang703.pdf.

2 Kemp CD, Bath JM, Berger J, et al. The top 10 list for a safe and effective sign-out. Arch Surg. 2008;143(10):1008-1010.

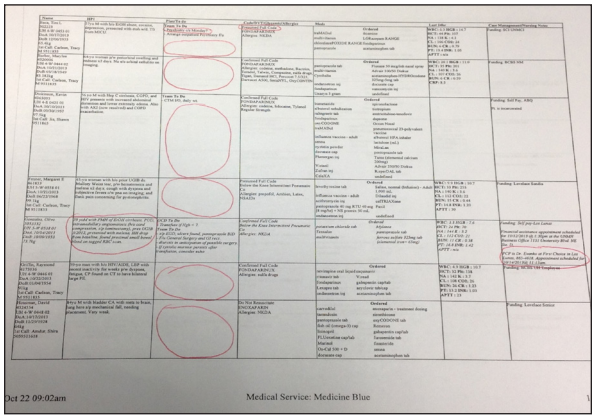
3 Arora V., et al: Communication Failures in patient signout and suggestions for improvement: a critical incident analysis. QualSaf Health Care 14:401-407, Dec. 2005.

4 Solet DJ. et al: Lost in translation: Challenges and opportunities in physician-to-physician communication during patient handoffs. Acad Med 80:1094-1099, Dec. 2005.

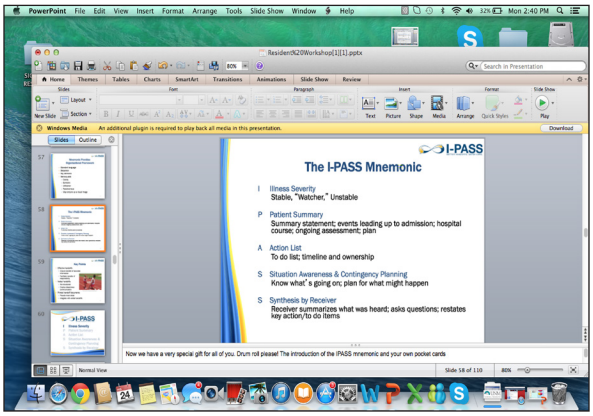
5 Horwitz LI, et al: Transfer of patient care between house staff on internal medicine wards: a national survey. Arch Intern Med 166:1173-1177, Jun 12, 2006.



Hand Off Report – *BEFORE* (previous with PowerchartAdHoc System)

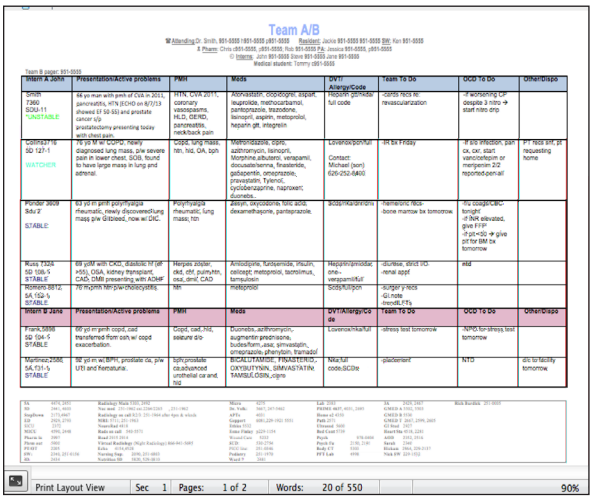


Implement Mnemonic for standardization



Hand Off Report – *AFTER* (updated with Cache System)

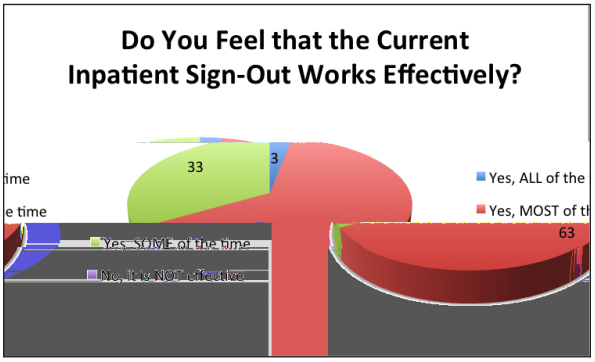
- Has BRIEF presentation
- Has BRIEF problem list and only pertinent PMHx
- Ranks Severity of Illness for each patient
- Provides Team Provider Contact Information and other hospital personnel for easier navigation
- Contains pertinent lab data only
- Specific section for anticipated overnight events
- Code status/allergies/IV access, are easy to find

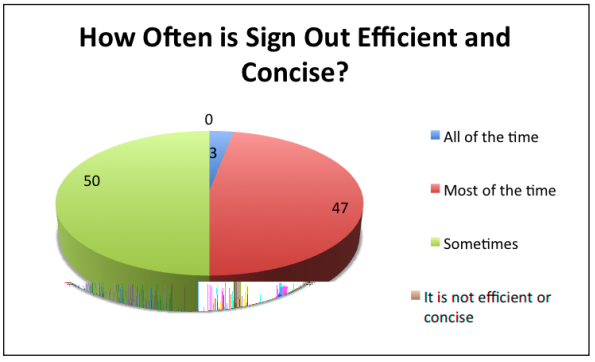


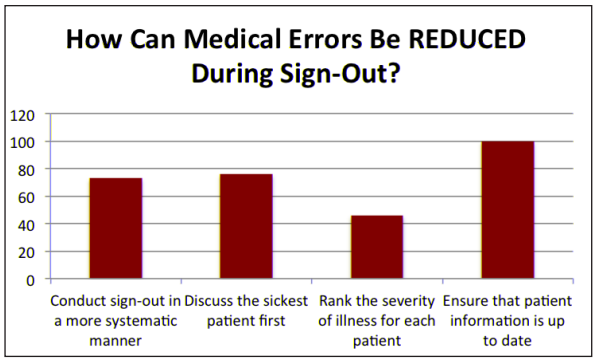
Prediction of Results and/or Intended Results

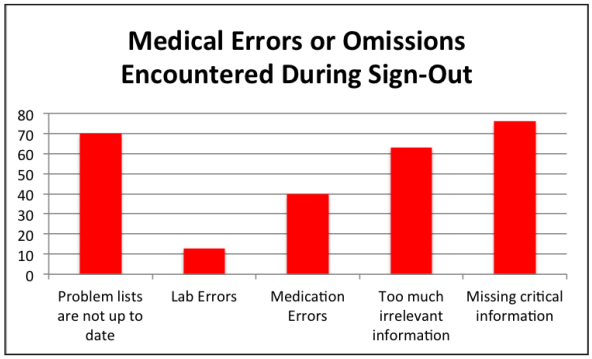
NA

Results of Resident Survey









Summary of results

N/A

Discussion

- The majority of our residents agreed that medical errors could be reduced by ensuring that patient information on the handoff report is up to date, and by conducting sign-out in a more systematic manner.
- Utilizing the IPASS system for sign-out, will allow patient information to be updated more efficiently.
- Initiating an educational curriculum for sign-out is critical for establishing a standardized process for sign-out.
- Further monitoring and evaluation of the sign-out changes implemented are likely to result in improved individual handoff skills, as well as improved patient outcomes on the Family Medicine Inpatient Service.

Future Steps

- **Appreciative-Inquiry Approach**, with Focus Group of exemplar residents (3 residents selected as giving the most efficient sign-out)
- **Pilot implementation of the CACHE Hand Off Report March 17th**
- Complete **Post-Implementation Survey** of Senior Residents for 6 months. Come up with additional strategies as issues are identified.
- **Train incoming Interns/upcoming Senior Residents** on New System June 2014
- Incorporate **Attending Physicians** into sign-out Process