Faculty Supervision and Feedback on Resident Sign-out: A Hands-On, How-To Workshop to Improve Sign-out

Society of General Internal Medicine

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Session G

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Introductions

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Outline

1. Discuss sign-out as an error prone process with consequences for patients and physicians.
2. Critique and discuss examples of verbal and written sign-out.
3. Discuss sign-out best practices.
4. Use sign-out evaluation tool to integrate best practices into routine care.
5. Hands-on experience giving sign-out feedback.

Sign-Out

Sign-out is the communication that occurs when one physician hands-off patient care responsibilities to another physician who stays in the hospital overnight for on-going care.

Why is Sign-Out Evaluation Important?

- The Accreditation Council for Graduate Medical Education (ACGME):
  - New regulation:
    - 16 hour shift length for interns
      →increase patient care hand-offs
  - Requirement for GME programs to:
    - "ensure and monitor effective, structured hand-over processes to facilitate both continuity of care and patient safety"

http://acgme-2010standards.org/pdf/Common_Program_Requirements_07012011.pdf

How Will ACGME Recommendations Effect Your Institution?

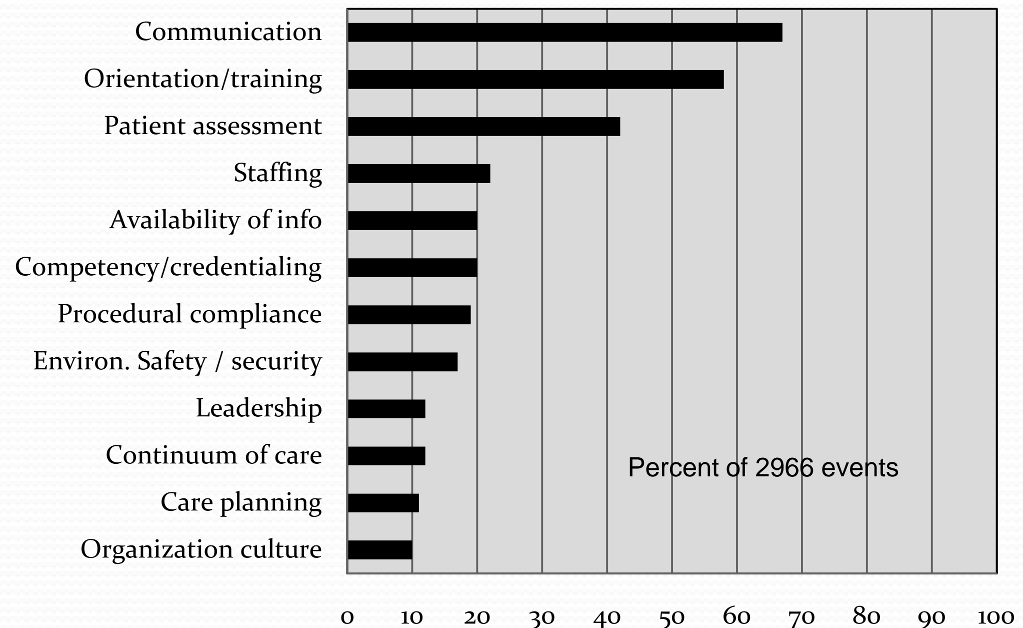
- Does your institution evaluate sign-out?
- Does your institution instruct faculty on how to teach sign-out skills?
  - Evaluating and teaching sign-out is a new skill set for clinician educators.
- The skill set is also integral to hospitalists and internists that are involved in transitions of care.

Sign-Out IS ERROR Prone…

- The handoff and sign-out of hospitalized patients represents ***critical transition points*** in patient care.
- Poor quality sign-out carries the risk of increased adverse events.
- Poor sign-out results in poor outcomes for patients *AND PHYSICIANS!!*

Communication in Healthcare

- Failures in communication are the most common root cause of sentinel events reported to JCAHO



Sentinel Event Statistics. Available at : *http://www.jcaho.org*

Sign-Out Errors Affect Patients and Physicians

- 7.5 sign-out related problems per 100 patient days
- Represents 1 error each day per 13 patients hospitalized
  - 20% Resulted in adverse events to the patient
  - 18% Near miss
  - Inefficient or duplicate care by cross covering physician

Horwitz et al Arch Intern 2008; 168(16):1755-1760

Poor Sign-Out: What's Missing?

- Lets review a few examples of sign-out.
- Video of verbal sign-out first.
- Written sign-out second.
- Ask yourself what are the flaws in these examples.

Poor Sign-Out: What's Missing?

- Clinical condition of patient at the time of sign-out was omitted.
- Recent pertinent clinical events of the patient were omitted.
- No anticipatory guidance for likely overnight clinical events.
- A "To-Do List/Check List" was left out, incomplete or did not provide a rationale.

Horwitz et al Arch Intern 2008; 168(16):1755-1760

Evaluation of Written Sign-Out

- We suggest that written sign-out is more conducive to critique and evaluation.
  - No need to be physically present to assess adequacy.
  - It is less abstract, you can correct written sign-out with clear examples.
  - There are published guidelines of what to include in written sign-out.
  - People can walk away with written “take home points” they can refer to later.
- What are the best practices of sign-out?

The Joint Commission and Society of Hospital Medicine Take Action to Improve Hand-offs

Joint Commission: National Patient Safety Goals (2E) to Improve the Effectiveness of Communication Among Caregivers <u>from 2006 till the present</u>

Hospitalist Handoffs: A Systematic Review and Task Force Recommendations

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Joint Commission "Best Practices" National Patient Safety Goal 2E

Process for effective handoff communication includes:

1. A method to verify received information: repeat-back or read-back
2. Opportunity for receiving provider to review relevant patient data
3. Limit **interruptions:** ↓ the risk of poor handoff
4. Notify nurses of the handoff times "7AM and 7PM" to minimize interruptions.
5. Invite the nurses to handoff with you and provide them a copy of your handoff.

Joint Commission & Society of Hospital Medicine "Best Practices"

Verbal interactive communication is required between off-going and on-coming provider:

- Ideally face-to-face
- Inflections in voice to emphasize/de-emphasize important info
- Opportunities for questions

Up-dated information regarding condition, care, treatment, medications, services, and recent or anticipated changes:

- What is the plan/working diagnosis?
  - "We think sepsis is from UTI given chronic Foley- however, the CVP line cannot be excluded"

www.jointcommission.org
www.hospitalmedicine.org

Joint Commission & Society of Hospital Medicine "Best Practices"

Up to date information with **focus** on current clinical condition

"At 5PM she was comfortable on 2L NC getting breathing treatments every 4 hours, all cultures (-) x 48hrs. On day 3 of 8 of Cefipime & Vanco"

Use Written dates for clinical events

	Instead of	**Better**
Past Events	Went to OR 2 days ago	Went to OR 5/5
Future Events	Going to OR in AM for Appy	Going to OR 5/8 for Appy

Joint Commission & Society of Hospital Medicine “Best Practices”

Up to date information continued

- **Focus on baseline and changes from this**:
  - Lab values: “Baseline Creatinine is 1.0, now 1.8”
  - Mental status “Baseline L Hemiplegia is mild 4+”
  - Radiographic findings “Has a chronic L Pleural Effusion”
- **Other things to consider:**
  - Code Status
  - Family contact info
  - Referring MD/ PCP
- IV Access: Needs it? Being discharged in AM with PO?
- Which consultants on case AND what is their opinion.

Joint Commission & Society of Hospital Medicine "Best Practices"

Sickest patients are given priority

1. "Let me start with my sickest patient, Mr. Martinez who is really short of breath and full code…"
2. Spend more time going over details of their care
3. Sickest Patient label on the handoff document

Anticipatory Guidance- "If/Then"

1. Guidance is given to covering physician on what to expect or do in case complications develop.

   ex. Respiratory status "**If** the patient develops SOB, **then** increase frequency of breathing treatments from Q4 hrs. to Q3 hrs. and reassess a few hours later"

Joint Commission & Society of Hospital Medicine "Best Practices"

- Action Items highlighted (i.e. To-DoList/Checklist)
  - "Check CBC at midnight. Last Hb 9"
  - Tell covering MD what to do about it!!
    - "Transfuse 2 U PRBC if falls below 8"
- Checklists document closing the loop

Joint Commission & Society of Hospital Medicine "Best Practices"

- A formally recognized handoff policy should be instituted with a set time at the end of a shift change.
- Train new users on the proper way to perform a handoff.

Translating Guidelines Into Practice

- Recommendations for sign-out best practice are available.
- How do clinician educators translate these guidelines into evaluative tools of sign-out?
- Sign-out curricula and tools available.

Example of Sign-Out Curriculum

- Several mnemonics are available to instruct on sign-out content.

- One example follows though other mnemonics have been reviewed in a systematic review.

  - Systematic Review of Handoff Mnemonics Literature. Risenberg LA et al. American Journal of Medical Quality 24 (3) 2009, 196-204.

Sign-out curriculum:

Background: Patient hand-offs are common on general medicine. The most common hand-off is sign-out, when a departing intern goes home and transitions patient care to the night-float intern. Developing a well structured sign-out is central to delivering high-quality care overnight. We are actively trying to improve the sign-out process and need your help.

We are asking you to review this information, which we hope will guide you in generating excellent sign-out.

What should be included in an excellent sign-out?

An excellent sign-out should include the following information.

Identifying patient information: patient name, MR #, date of birth. This information is pulled into sign-out electronically.

The *general hospital course* (aka general comments) is a key component of sign-out. The general hospital course summarizes why the patient was admitted, the major patient problems, work-up that has been done, and whether the patient is getting better or not (i.e. sick vs. not sick). The general hospital course should be updated on a daily basis to include *new events* of the day. Incorporating *up-coming possibilities* along with clear directions for care is also helpful (so called if/then statements). As an example, "if the patient starts bleeding again, then call GI; and they will move to ICU and do emergent EGD."

The *task list* (or "To-Do list") should include all tasks to be completed overnight. The task list should include a rationale as well. Covering physicians agree that "to-do" statements such as "call radiology for the MRI read" are less helpful than "to-do" statements with a well described plan of care. As an example, "call radiology for the MRI read; if the MRI shows osteomyelitis, please start vancomcyin."

All sign-outs should include code status clearly.

A useful mnemonic to remember these criteria are:

- **S**ick or not sick, do not resuscitate orders?
- **I**dentifying patient information (name, MR #)
- **G**eneral hospital course (reason for admission)
- **N**ew events of the day
- **O**verall health status–getting better or worse
- **U**p-coming possibilities with a plan, rationale
- **T**asks to complete overnight

Adapted from: Horwitz LI, Moin T, Green ML. Development and implementation of an oral sign-out skills curriculum. *J Gen Intern Med.* Oct 2007;22(10):1470-1474.

Bump GM, Jacob J, Abisse SS, Bost JE, Elnicki DM. Implementing faculty oversight of intern written sign-out. (In submission).

Examples of Evaluative Tools for Sign-Out

- Faculty Feedback Form for Sign-out Evaluation
- Sign-out CEX for Internal Medicine
  - Developed at University of Pittsburgh Medical Center
  - Conducive to evaluating written sign-out
  - 2 versions: 5- Point Likert scale vs. checklist

- Hand-off CEX instrument—
  - Farnan JM et al. JGIM 2009; 25(2): 129-34
  - Conducive to evaluating combined oral and written sign-out

Faculty Feedback Form for Sign-out Evaluation.

Directions: We are asking you to fill out an evaluation of written sign-out for your interns. Please critique your interns sign-out and provide them direct feedback on how to improve their sign-out. The goal of sign-out is provide guidance for effective and efficient overnight care by cross-covering intern physicians.

Intern name: ____

How often is code status present in the correct location?

Less than 10% 25% 50% 75% Greater than 90%

How effectively does the general comments section summarize the reason for admission and relevant medical information?

Less than 10% 25% 50% 75% Greater than 90%

How often is the general comments section typed in brief paragraphs, bulleted or numbered so that it is easy to distinguish between separate thoughts/issues/ideas?

Less than 10% 25% 50% 75% Greater than 90%

How often are specific dates used to describe patient events preferentially than ambiguous time frames?

Less than 10% 25% 50% 75% Greater than 90%

How easy is the document to read quickly for pertinent information?

1 2 3 4 5

Difficult to read Easy to read Very easy to read

How often is the sign-out information adequate for overnight patient care? *(Consider from the perspective of a covering MD.)*

Less than 10% 25% 50% 75% Greater than 90%

What percentage of the sign-out is current? Are there important up-dates to patient care that are not reflected in the document?

Less than 10% 25% 50% 75% Greater than 90%

Does the sign-out include anticipatory guidance for predicted patient events with a suggested plan of care? These are also called "If/Then" statements. As an example, "If patient GI bleeds again, then call GI; and they will transfer to ICU for emergent EGD."

1	2	3	4	5
No predictions/ No Plan		**Has predictions/ No Plan**		**Has predictions/ Has Plans**

Overall how would you rate the quality of this sign-out for providing overnight care?

1	2	3	4	5
Poor quality		**Good quality**		**Excellent quality**

Sign-Out CEX for Internal Medicine
Date: ____
Intern Name: ____
Attending Name: ____

Please evaluate your intern's sign-out. Please check off whether the following parameters are present.	**Patient Initials**				
Code status is present in the correct location?					
The sign-out includes a brief summary statement that reflects the reason for admission and relevant care to date?					
Major patient problems are identified in the sign-out?					
Information in sign-out is up to date?					
The sign-out is well formatted so distinct issues are clearly separated, bulleted, and/or numbered?					
Specific dates are used to report events rather than ambiguous time frames?					
The sign-out is easy to read?					
The sign-out includes anticipatory guidance for predicted patient events? These are often called if/then statements. (Example: If patient gets short of breath, then give lasix.)					
Tasks in the To-Do List are appropriate?					

Summary Score Guidelines
Superior Rating = All Items Checked for Each Patient
Satisfactory Rating = 1-2 items not Checked for 2-3 Patients
Unsatisfactory Rating = 3 or more items not Checked for Most Patients

Summary Score: 1 2 3 4 5 6 7 8 9

Unsatisfactory Satisfactory Superior

Please use the back for comments on areas for improvement

Hands-On Experience Using Faculty Feedback Form

- Small group exercise to evaluate written sign-out using the sign-out CEX for internal medicine.
  - Provide feedback on written sign-out examples.
- Does the form facilitate your ability to give feedback on sign-out content, organization and quality?
- Are there important items missing from the tool that would be useful to your program to add?

Conclusions

- GME work-hour regulations will continue to increase the frequency of hand-offs.
- Hand-offs are error prone.
- GME programs must ensure and monitor effective, structured hand-over processes.
- Guidelines on hand-off 'best practices' are available.
- Sign-out evaluation tools help programs directors and faculty translate guidelines into practice.
- Evaluating sign-out is a new skill set that clinician educators need to master.

Questions/Comments