TRANSITIONS OF CARE:
HOSPITAL HANDOFFS

Intern Orientation
Avoiding the Overnight Handover Fumble
Objectives

- After today, you will be able to:
  - Understand the importance of communication around care transitions
  - Identify what patient information should be communicated at handover
  - Know what to include in the “sign-out” sheet
  - Communicate the essential elements of a nightly handover using a standardized format
Outline

- 9:00-9:45 Presentation
  - Define care transitions and handovers
  - Overnight handovers
- 10:00 Break into small groups
- 10:00-11:30 Transitions Workshops
Defining the Problem: Patient Handovers

1. **Transitions of Care**
   - Change in patient location, or provider, or both
   - ER, ICU, discharge, shift change, service change

2. **Handovers or Handoff**
   - The exchange of information and transfer of responsibility that occurs during a transition of care

Question

How many times is an average inpatient transitioned during a 5 day hospitalization?

A. 5
B. 10
C. 15
D. 25
E. None of the above
Question

- How many times is an average inpatient transitioned during a 5 day hospitalization?

A. 5
B. 10
C. 15
D. 25
E. None of the above
What the patient experiences

- Average inpatient is transitioned 15 times in a 5 day hospital stay
- Patients can be seen by three different physicians in the first 24 hours of care
- All of this equates to discontinuity and opportunities for medical errors to occur

Vidyarthi et al. JHM. 2006
Philibert I. QualSaf Health Care. 2009
Before 7PM: 
1) Handover written signouts 
2) Verbal on sick pts

Available by pager until 8PM 
Written handover before 7PM

At 7PM: 
1) Handover Written signouts (interns 1-6) 
2) Verbal signout (supervised by resident)

7PM-8PM: 
Telephone verbal signout
Frightening Handover Facts

**60-80%** of sentinel events reported to the Joint Commission had communication errors as a contributing factor.

**30%** of residents report adverse events related to poor handovers; 15% of these were life threatening.

**$17 billion** is the cost of preventable medical errors.
The Uncertain Clinician

- A study of the sign-out process noted that “the most important information about a patient was not successfully communicated 60% of the time”
- 73% of pediatrics residents surveyed noted uncertainty regarding care plans due to incomplete verbal hand-offs
- Only 19% of written sign-outs were accurate with respect to patient information and care plans

Worried Patients

- Fletcher et al cited that 28% of patients reported concerns about how often hand offs of care occurred.
- In this same study patients’ “worries about “fatigue/discontinuity” were significantly associated with trust in and satisfaction with the health care provider.

Question

- When extrapolated to all US hospitals approximately how many deaths are attributable to medical error?
  A. 10,000-40,000
  B. 40,000-90,000
  C. 90,000-130,000
  D. 130,000-170,000
  E. None of the above
Question

When extrapolated to all US hospitals approximately how many deaths are attributable to medical error?

A. 10,000-40,000
B. 40,000-90,000
C. 90,000-130,000
D. 130,000-170,000
E. None of the above
Institute of Medicine
“To Err is Human”

- ~55% of adverse events in hospitalized patients can be attributed to errors.

- When extrapolated to all US hospitals, this represents 44,000 – 98,000 deaths/year caused by medical errors – exceeding deaths by motor vehicle accidents or breast cancer. Medical errors are the 8th leading cause of death.

- Total national costs are estimated between $17 and $29 billion (1996 dollars)

http://books.nap.edu/openbook.php?record_id=9728
Ramping up the Research...

**Date of publication of included articles (n=60)**

- 2012*: 10 publications
- 2011: 12 publications
- 2010: 10 publications
- 2009: 11 publications
- 2008: 8 publications
- 2007: 2 publications
- 2006: 1 publication
- 2005: 3 publications
- 2004: 1 publication
- 2001: 1 publication
- 2000: 1 publication

*: from January 2012 to May 2012

Flemming et al., Int J Med Inf, 2013; http://dx.doi.org/10.1016/j.ijmedinf.2013.03.004
The Goal of the Handover

- Provide information about patient’s current condition, care, and treatment
- Anticipate changes in current health status
- Provide rationale for interventions
- “Information presented during hand-off must be accurate in order to meet patient safety goals.”

Joint Commission 2009.
Optimal Handovers – Society of Hospital Medicine

- Decide on a handoff plan
- Train new users on the plan
- Include verbal exchange of information
- Include a “handoff tool”

Arora et al., JHM 2009; 4: 443-440
Handovers in the Hospital

http://vimeo.com/12349347
Barriers to Effective Communication during Patient Handovers

- Interruptions
- Erroneous information becomes “fact”
- Omission of information
- Human Element
- Technology
- Time constraints
- Lack of training

Philibert I. QualSaf Health Care. 2009
Patterson ES. J Qual Healthcare 2004
Don’t Forget the Big Stuff…

Table 2. Content Omissions During Sign-out With Clinical Consequences

<table>
<thead>
<tr>
<th>Type of Content Omitted</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical condition of patient</td>
<td>Patient’s recent health state, including vital signs, symptoms, physical examination findings, and laboratory values; also stability and trajectory of health state</td>
</tr>
<tr>
<td>Recent or scheduled events</td>
<td>Events occurring during hospitalization or scheduled to occur overnight</td>
</tr>
<tr>
<td>Task</td>
<td>An assignment to be completed by the covering health care provider overnight</td>
</tr>
<tr>
<td>Plan</td>
<td>Instructions on how to complete an assigned task</td>
</tr>
<tr>
<td>Rationale</td>
<td>Explanation for an assigned task or plan</td>
</tr>
<tr>
<td>Anticipatory guidance</td>
<td>Guidance for events that might reasonably be expected to occur overnight</td>
</tr>
</tbody>
</table>

doi:10.1001/archinte.168.16.1755
Components of a Strong Handover

1. Structured Communication
   - $S_2$AIF-IR
   - Both users know what to expect
2. Dialogue not Monologue
3. Close the Loop

Chu et al., JHM 2010; 5: 344-348.

"Hold on -- I'll remember what the knee bone is connected to if I start at the beginning of the song ..."
S: SICKEST FIRST

“This is my sickest patient. This is Mr. C, he is a 70 year-old male located in 5J step-down unit. He was admitted today through the Emergency Room for decompensated heart failure. He has been evaluated by the MICU resident and they are aware of him.”
He has an EF of 10% and presents with respiratory distress and confusion. He required BiPAP in the Emergency Department and is now on a dobutamine drip through a central line that we put in. Cardiology is on board.

Basics:
1. 1-3 sentences
2. Why is he here and what do you think is going on?
A: ACTIVE ISSUES

- “He’s doing a little better, with improved respiratory status and urine output. He’s currently on 5L of O2 through a nasal cannula and is breathing in the low 20s.

Basics:
What happened today that I should be aware of?

- “Also, just a heads up that this patient is still a bit confused although that’s improving too. He knows where he is but is not sure why he’s here.”
SAIF-IR

Basics:
1. Are there any lab or radiology findings that I should be aware of?
2. What do I need to do overnight? If-Then Scenarios!

- If he has chest pain, cardiology needs to be notified as well as the CCU.”
I: IF-THEN CONTINGENCY PLANNING

F: FOLLOW UP ACTIVITIES

“He’s still confused but re-directable and has a sitter in the room. If he gets worse, I’d check a blood gas and another EKG. If those look OK, you can try low-dose Haldol.”

“He is full code so if his respiratory status worsens and doesn’t improve with BiPAP, he can be intubated.”
**SAIF-IR**

- **I: INTERACTIVE QUESTIONING**
  - Correct or clarify any information given by the off-going provider

- **R: READ BACKS**
  - Confirm follow-up activity or contingency plans
What about the Sign-Out Receiver?

- Now is NOT the time to multi-task
- Active Listening!
- Clarify tasks
- Ask questions
- Close the loop in the morning
To Recap…

- **SAIF-IR**
- **Sickest first, Summary statement**
- **Active issues**
- **If-then contingency planning**
- **Follow up activities**
- **Interactive questioning**
- **Read-back**
Handovers in the Hospital

https://vimeo.com/99182377
Final Nightly Handover Thoughts

✓ Anticipation is Key!
  o Figure out which patients deserve a more thorough verbal signout
  o Anticipate possible overnight scenarios or recurring problems

✓ Avoid general tasks such as “Check CBC”
  o Give specific task and complete with an if-then statement

✓ Keep the dialogue open
✓ Avoid a multi-tasking scenario
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Transitions of Care Committee

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And Finally...

☐ Questions?