Patient Safety Tip of the Week

January 29, 2013

A Flurry of Activity on Handoffs

Recently we've seen a flurry of scholarly and practical activity on handoffs. BMJ Quality & Safety did a whole supplement on handoffs (or handovers as they are called in most countries outside the US) based on the European Handover Research Collaborative (BMJ Quality & Safety 2012). We'll get to some of those articles shortly.

But first we want to come back to an important concept in handoffs: while structured handoffs are valuable in almost all settings, one structure does not fit all handoffs. In our February 14, 2012 Patient Safety Tip of the Week "Handoffs – More Than Battle of the Mnemonics" we emphasized the need to tailor the structure and content of the handoff to the particular setting and the context. Organizations collaborating in the I-PASS project found the commonly used SBAR format did not meet their needs for resident-to-resident handoffs so they developed their own tool (Starmer 2012).

A new study (Hilligoss and Cohen 2013) addresses **the between-unit handoff** and highlights the many ways that such handoffs differ from within-unit handoffs and the challenges and barriers raised by such handoffs. In within-unit handoffs (eg. change of shift, change of coverage, etc.) the timing of the handoff and the participants are usually well-defined. On the other hand, between-unit handoffs (as exemplified by the ED-to-inpatient handoff) take place all times of the day in an unscheduled manner and often involve parties who may have never even met before. The between-unit handoff is triggered by issues related to the patient whereas the within-unit handoff is triggered by changes in the personnel.

But the between-unit handoff also is subject to some contextual issues not typically seen in within-unit handoffs. Two key areas identified by Hilligoss and Cohen are **negotiation** and **coordination**. There are often differences in the orientations of the professionals on each side of the between-unit handoff. They note that the emergency physician is often focused on triaging and stabilizing patients and is more comfortable with dealing with uncertainties and ambiguities. Inpatient physicians tend to be more focused on honing in on a definitive diagnosis and developing a treatment plan.

On the "negotiation" front there are several factors that come into play. The degree of familiarity of the involved parties is important. A negotiation between two parties who

have not previously met is much more difficult that one in which the parties have long-standing relationships. Liken that to the recent political crisis where Vice President Biden was able to call upon his long-standing relationships with members of both parties of Congress to broker a deal that otherwise would have been very difficult to achieve. Parties in the within-unit handoffs are much more likely to have established relationships with each other than those in between-unit handoffs.

A lack of familiarity with the services themselves also becomes an issue. An emergency physician typically does not know much about the census on the inpatient service, any urgent or emergent crises on that service, pending transfers, etc. Similarly, the inpatient service often has no idea about the patient backlog in the emergency department.

Sometimes the handoff in the between-unit circumstance is not even face-to-face. We have long stressed the importance of the face-to-face meeting where adequate time is allotted for the handoff and the receiving party has ample opportunity to ask questions and get clarification of issues. Hearback is an important part of a handoff that helps ensure that the receiving party has a good understanding of the patient's condition and needs (see below). But sometimes between-unit handoffs do not even occur face-to-face. The inpatient service representative may be on rounds and talks to the emergency physician (who may be at end of his/her shift) by phone. That is almost always suboptimal but has become a fact-of-life in many institutions.

In the last few years differences of opinion about level of care needed have become magnified. After CMS began doing its RAC audits we've seen a 10-20% increase in the number of patients going on **observation** status rather than **inpatient** status. We now find emergency physicians and hospitalists (or other inpatient physicians) at odds over where the patient should go and whose service he/she should be on. Also negotiation often has to take place with multiple physicians. For example, does that patient with abdominal pain and possible partial bowel obstruction go the medical or surgical service? Hilligoss and Cohen note that the culture of the hospital and the informal hierarchy come into play as well. They note at one hospital the general medical service had earned the nickname "dumping ground" because the hospital culture was such that surgery and specialty services could refuse admissions but the general medical service could not. So emergency physicians often find themselves having to "sell" admissions to various services. Not mentioned in their article but a problem we often see in academic hospitals is that of disparities in "rank" between the parties who are negotiating. Many ED's are staffed by full-time attending physicians and the party representing the inpatient service may be a senior resident or even a more junior resident.

The handoff involves 2 key components: (1) **transfer of information** and (2) **transfer of responsibility**. Hilligoss and Cohen note that the latter is often incomplete in between-unit transfers. For instance, sometimes the decision to admit a patient to the inpatient service is made and the transfer of information takes place at a handoff and the inpatient service may write orders on the patient but there may be a delay in physically moving the patient to the inpatient unit. That may create issues and ambiguities as to responsibility for the patient until that physical transfer takes place. Sometimes the inpatient service

might want more diagnostic studies (eg. imaging studies) to be done before the patient gets physically moved to the inpatient floor. In other cases it needs to be made clear who will deliver certain critical interventions while such transfers are pending. Back in the 90's we realized that patients with community-acquired pneumonia at some renowned organizations were not getting their first dose of antibiotics for up to 18 hours. That, of course, was related to bottlenecks in moving patients from the ED to the floor. Fortunately, we had performance improvement projects that focused on ensuring timely administration of the antibiotics regardless of physical location of the patient. But undoubtedly we still see ambiguities of coordination and responsibility that occur in between-unit transfers that need to be resolved in the handoff.

Coordination is also often problematic in just setting up and handoff. Whereas the within-unit handoff usually occurs at a specified time and between specified parties, the between-unit handoff is often more difficult to set up. For example, the emergency physician may have to make multiple phone calls or pages just to find out who the responsible party on the inpatient service will be.

Hilligoss and Cohen point out that there has been very little research to date on the between-unit handoff. They note that structured formats like the SBAR format, used extensively for many within-unit handoffs, are not well-suited for between-unit transfers. Their paper is a good start on identifying the unique aspects of this type of handoff and hopefully will stimulate interest in developing tools and interventions that will improve handoffs between units.

We have previously discussed one type of between-unit handoff, the perioperative handoff, in several columns (see our What's New in the Patient Safety World columns for December 2011 "AORN Perioperative Handoff Toolkit", March 2012 "More on Perioperative Handoffs" and August 2012 "Review of Postoperative Handoffs").

We mentioned above the importance of "hearback' or "readback" and other techniques to ensure the recipient understands the information being conveyed during a handoff. Another new study (Greenstein 2012) using the Handoff Evaluation Assessing Receivers (HEAR) checklist assessed listening behaviors during handoffs between hospitalists. The authors found that **"active" listening occurs infrequently** in such handoffs. Active listening behaviors include things like note taking, reading back, and repeating. Though the handoffs typically did include the recipient asking clarifying questions, the active listening techniques only were seen in about 20% of handoffs. Nevertheless, they did note evidence of "passive" listening (head nodding, eye contact, affirmatory statements) in the majority of handoffs. (The latter emphasizes a point we often make: one of the advantages of face-to-face handoffs is that so much of what we convey is in body language.) In addition, **interruptions** were extremely common, occurring in 98% of handoffs. These included side conversations, pagers going off, and other clinicians arriving.

The European Handover Research Collaborative (BMJ Quality & Safety 2012) had numerous interesting findings. That collaborative looked at handoff (handover) practices

in 9 health systems in Spain, Poland, Italy, Sweden, and the Netherlands and involved a population of patients with chronic diseases who were discharged to home following hospitalizations or ED visits. One of the primary foci was on the **role of the patient** in the handoff (Flink 2012a, Flink 2012b). As you'd expect, some patients wanted to be the "**key actor**" in such handoffs, others wanted the healthcare providers to be the key actors, and yet others wanted shared roles. When patients served as the key actor, they were responsible for collecting and conveying to the next caregiver discharge notes, medication lists, etc. Typically, such patients realized from prior experiences that transfer of information was poor or perceived their providers expected them to be the key actor. Health literacy, personal resources, family and other factors were important in determining who might be capable of being a key actor. One interesting feature is that many patients assumed that electronic medical records would ensure proper transfer of information, often an erroneous assumption. That supplement of the BMJ Quality and Safety has several other articles on handoffs/handovers that are worth reading and all are open-access.

Yet another interesting handoff study (Cohen 2012) showed that in intensive care unit attending-to-attending handoffs at the end of the week, patients discussed earlier had a disproportionate amount of time allocated. This finding was irrespective of the severity or complexity of the patient's case. Cases earliest in the handoff sessions had about 50% more time in discussion that those discussed toward the end of the handoff. These findings have implications both for prioritizing patients to be discussed and for ensuring adequate discussion for all patients.

Read about many other handoff issues (in both healthcare and other industries) in some of our previous columns:

May 15, 2007	"Communication, Hearback and Other Lessons from Aviation"
May 22, 2007	"More on TeamSTEPPS™"
August 28, 2007	"Lessons Learned from Transportation Accidents"
December 11, 2007	"Communication…Communication…Communication"
February 26, 2008	"Nightmares….The Hospital at Night"
September 30, 2008	"Hot Topic: Handoffs"
November 18, 2008	"Ticket to Ride: Checklist, Form, or Decision Scorecard?"
December 2008	"Another Good Paper on Handoffs".
June 30, 2009	"iSoBAR: Australian Clinical Handoffs/Handovers"
April 25, 2009	"Interruptions, Distractions, Inattention…Oops!"
April 13, 2010	"Update on Handoffs"
July 12, 2011	"Psst! Pass it on…How a kid's game can mold good handoffs"
July 19, 2011	"Communication Across Professions"
November 2011	"Restricted Housestaff Work Hours and Patient Handoffs"
December 2011	"AORN Perioperative Handoff Toolkit"
February 14, 2012	"Handoffs – More Than Battle of the Mnemonics"
March 2012	"More on Perioperative Handoffs"
June 2012	"I-PASS Results and Resources Now Available"

August 2012 "New Joint Commission Tools for Improving Handoffs"
August 2012 "Review of Postoperative Handoffs"

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