Resident Communication and the Handover Process

By
Carol A. Burkhart, RN, MS, ARNP, CPHRM, CHC
Senior Vice President, Marsh Risk Consulting

The communication of relevant patient data among members of the healthcare team has been long recognized as a factor in ensuring quality of care and patient safety.[1] In 2009, The Joint Commission Center for Transforming Healthcare targeted handoff through improving the quality of hand-off communications. Ten leading hospitals and health systems worked with TJC to identify solutions. As defined, a hand-off is the transfer and acceptance of patient care responsibilities achieved through effective communication. The hand-off process involves "senders," the caregivers transmitting patient information and releasing the care of the patient to the next clinician, and "receivers," the caregivers who accept patient information and care of the patient. The participating hospitals found that, on average, more than 37 percent of the time hand-offs were defective and did not allow caregivers receiving responsibility to safely care for the patient. Additionally, 21 percent of the time those initiating the care transition were dissatisfied with the quality of the hand-off. By using solutions targeted to the specific causes of an inadequate hand-off, participating organizations that had fully implemented solutions achieved an average 52 percent reduction in defective hand-offs.[2]

The training of hand-over communication should begin in medical school

Changes in the duty hours of resident physicians and recent changes in the communication processes have been set forth by the Common Program Requirements for graduate medical education programs by the Accreditation Council for Graduate Medical Education (ACGME) (effective July 1, 2011). These changes require that graduate medical education programs ensure that there is a consistent and reliable process for handover communication, and that residents be competent in conducting appropriate hand-offs.[3] Changes in duty hours will now necessitate an increase in frequency of handovers, and this may increase the potential for error. The training of hand-over communication should begin in medical school, and several programs have participated in The Handoff Selective project which is aimed at teaching a structured process which use written and verbal templates, formal training, and direct attending supervision to medical students who are transitioning from their third to fourth year. The Handoff Selective emphasizes that communicators should focus on the active issues, as well the "if-then" situations and follow-up needed. It also emphasizes the use of SAIF-IR, a verbal structure mnemonic device which includes: Off-going provider performs the following:

- Summary statement(s)
- Active issues
- If-then contingency planning
- Follow-up activities

On-coming provider performs the following:

- Interactive questioning
- Read-backs[4]

Failed hand-overs are also a significant factor in malpractice claims. Singh et al (2007) analyzed over 900 malpractice claims and found 240 in which residents played a significant role in errors which resulted in harm to patients.[5] These breakdowns included the following categories (more than one factor could be involved in a claim):

Judgment errors - 72%

Teamwork breakdowns – 70%

Memory or vigilance error - 57%

Lack of technical competence or knowledge - 58%

Lack of supervision - 54%

Handoff problems - 19%

Excessive workload - 19%

The Common Program Requirements (Section VI.B) stipulate that to manage the transitions of care, the GME program and sponsoring institutions must first design clinical assignment to minimize the number of transitions in patient care. The program and sponsoring organizations must also:

- Ensure that there is a structured hand-over process to facilitate both continuity of care and patient safety
- Monitor the effectiveness of the process
- Ensure that residents are competent in communicating with team members in the hand-over process
- Ensure the availability of schedules that inform all members of the health care team of attending physicians and residents currently responsible for each patient's care

Additionally, the supervisory requirements in Section VI.D.5 require programs to set guidelines for circumstances and events in which residents must communicate with appropriate supervising faculty members, such as the transfer of a patient to an intensive care unit, or end-of-life decisions. Programs and sponsoring institutions should take several steps to improve their hand-over processes.

Review the data. To begin, programs and sponsoring institutions should review significant adverse event data (including all apparent and root cause analyses) to determine whether flawed hand-over systems may have been a factor in any significant adverse or near miss events. Determination of proximate causation often finds that "communication-related" failures are sometimes related to failed or flawed hand-overs (resident-resident, resident-faculty, multiple services, across disciplines, etc.). A review of safety culture survey data can also be helpful to determine hand-over issues and cross-over issues (e.g., inadequate faculty supervision).

Review the success stories of other programs and innovations. As previously noted, The Joint Commission Center has resources regarding its transformation process. The Alliance of Independent Academic Medical centers and many other quality organizations (e.g., Institute for Healthcare Improvement (www.ihi.org), Agency for Healthcare Research and Quality (www.ahrq.gov) have resources related to resident hand-over communication.[6] While there is no "one size fits all" approach for the structure of handover communication processes, there is benefit in reviewing success stories and innovations of others.

Consider the use of lean-methodology to review/re-engineer the process of hand-over communication. Rather than the implementation of quick-fix solutions which merely revise resident program manuals or "massage policies," it is strongly recommended that organizations consider the use of lean methodologies such as Six Sigma to truly re-engineer them when defective. The Institute for Healthcare Improvement holds that the use of lean methodologies can be highly effective when applied to healthcare process improvement.[7] One of the core concepts of lean process re-engineering is the determination of the value of any given step or process, the distinguishing of the value-added steps from the non-valued added steps, and the elimination of waste such that ultimately every step in a process adds value. A well-designed lean project to re-engineer the hand-over process is far more likely to result in substantive and sustainable change than changes made which are solely intuitive or opinion-based.

The use of lean methodology can also detect changes quickly during pilot testing (allowing for any necessary revision before any new process is finally adopted). Additionally, the use of lean methodology is a people-driven process which requires the input of multiple stakeholders. Hand-over communication is not a resident-resident or resident-faculty issue operating in a vacuum; it requires consideration of and input from multiple stakeholders involved in the communication of patient information. At a minimum, the goals for re-design of any hand-over process should be to:

- Define the appropriate personnel to personnel hand-overs required to effectively and safely communicate patient information
- Create a standardized process for hand-overs and information flow
- Identify evidence-based tools to ensure consistent practice and limit variability
- Monitor the effectiveness of the process

Ensure the competency of residents in hand-over communication. Competency is not the same as the completion of a didactic education module, the dissemination of program manuals, or instruction in the use of newly designed hand-over template forms. Competency assures that the individual is actually able to perform a skill in question. Ensuring competency in communication is best accomplished vis-à-vis simulation-based training (e.g., Crew Resource Management, TeamSTEPPS, etc.) as early as possible during the medical education process.[8] While there is greater emphasis on simulation-based communication training in medical schools, it is recommended that each program have a defined methodology for evaluating competency in communication. Further, when individual opportunities for improvement in performance are identified (lack of compliance with hand-over communication policies, staff complaints, adverse events, etc.) action must be taken to promptly address and remediate when indicated.

In summary, hand-over communications must be structured in such a way that the process ensures communication of relevant patient data in a timely and concise manner. Residents and those who supervise them must be skilled in the hand-over process to ensure effective transitions in care and to reduce the potential for medical error and patient harm.

[1] Committee on the Quality of Health Care in America , Institute of Medicine (2001). Crossing the Quality Chasm. Washington , DC : National Academy Press, 2001.

[2] The Joint Commission Center for Transforming Healthcare. Handoff communications. Accessed online June 15, 2011 at http://www.centerfortransforminghealthcare.org/projects/display.aspx?projectid=1.

[3] American Council for Graduate Medical Education (2011). Common program requirements. Accessed online June 15, 2011 at http://www.acgme.org/acWebsite/dutyHours/dh_dutyhoursCommonPR07012007.pdf.

[4] Chu, E. S., Reid, M., Burden, M., Mancini, D., Schulz, T., Keniston, A., Sarcone, E. and Albert, R. K. (2010), Effectiveness of a course designed to teach handoffs to medical students. Journal of Hospital Medicine, 5: 344–348. doi: 10.1002/jhm.633

[5] Singh, H. et al. (2007). Medical errors involving trainees a study of closed malpractice claims from 5 insurers. Arch Int Med. 2007;167(19):2030-36.

[6] The Alliance of Independent Academic Medical Centers. Resource document: handoffs. Accessed online June 20, 2011 at http://www.aiamc.org/public/AIAMC_Hand-offs_Resources.pdf.

[7] Mistry, K. P. et al. Using Six Sigma® methodology to improve handoff communication in high-risk patients. Accessed online June 20, 2011 at http://www.ahrq.gov/downloads/pub/advances2/vol3/advances-mistry_114.pdf.

[8] Agency Healthcare Research and Quality. TeamSTEPPS® fundamentals course: Module 6 Communications. Accessed June 21, 2011 at http://www.ahrq.gov/teamsteppstools/instructor/fundamentals/module6/igcommunication.htm.

About WiscRisk

WiscRisk is published quarterly and circulated to more than 14,000 healthcare providers statewide. Designed to keep readers informed of trends in liability claims and loss prevention, this publication is prepared by the Risk Management Steering Committee for the Injured Patients & Families Compensation Fund.

Articles published in WiscRisk contain the expressed opinions and experiences of the authors and do not necessarily represent the position of the Injured Patients and Families Compensation Fund. Authors are required to make disclosure of any relevant financial relations, which may be related to the subject matter discussed. Authors have made proper disclosure and have no relevant financial relationships that exist now or in the past 12 months.

Steering Committee Members

Susan Turney, MD
Wisconsin Medical
Society

Robert Gribble, MD
Marshfield Clinic

Deborah Ankowicz
University of Wisconsin
Hospital and Clinics

Denny Thomas
Ministry Health Care

Ralph Topinka
Mercy Health System
Corporation

Reid Olson, MD
Dean Health Systems

Support Staff

Theresa Wedekind
State of Wisconsin Office of the
Commissioner of Insurance

Andrea Nelson
State of Wisconsin Office of the
Commissioner of Insurance

Denise Fitzpatrick, RN, MBA, CPHRM
Marsh Risk Consulting