

Enhancing Patient Safety During Hand-Offs

*Standardized communication and teamwork using the
'SBAR' method.*

It's 21:30 and the charge nurse for the unit arrives to relieve you for a break, an hour overdue. She apologizes—she was responding to several crises and this is the only time available for your break. She asks you to “hit the highlights” of each patient's care during your shift and requests that your break be as brief as possible, as there are other nurses waiting for their breaks. You shuffle through your patient notes, wondering where to begin and how to cover the critical points for each patient.

If this sounds even vaguely familiar to you, you will probably agree that such a situation can be overwhelming—you might even decide not to take your break, because you are not comfortable with providing only a synopsis of crucial information.

Nurses often lack or underutilize standardized methods that could assist the hand-off of patient information from one health care provider to another. This lack of standardization may cause confusion, which could

lead to medical errors. Since a 1999 landmark report from the Institute of Medicine estimated that as many as 98,000 patients die as a result of medical errors in hospitals each year,¹ health care as a system has been looking to experts in other high-risk industries, such as aviation, for solutions. These approaches include effective teamwork and the development of a standardized methodology for communicating critical patient information. The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) included the following new National Patient Safety Goal for 2006: “Implement a standardized approach to ‘hand off’ communications, including an opportunity to ask and respond to questions.”²

Mistakes that threaten patient safety are rarely the fault of an individual; rather, errors are often related to factors linked to inadequate or faulty systems. Clinicians are forced to care for patients in an environment with inadequate communication networks, poor organization of staff roles and responsibilities, and communication failures between teams.³ In fact, more than 60% of sentinel events are caused by poor communication.⁴ This suggests that current communication methods used by health care providers, including nurses, are inadequate.

Developing, practicing, and maintaining improved team communication skills may be the difference between an optimal outcome and an adverse event. Better communication techniques may also help relationships between nurses and physicians who may have been trained in opposing communication techniques: nurses are trained to report information in a descriptive, narrative fashion, while physicians are trained to seek only the key highlights in a patient's history.^{5,6}

CREW RESOURCE MANAGEMENT

More than 20 years ago the aviation industry improved teamwork and communication among those who staffed aircraft by using crew resource management (CRM).⁷ CRM includes a focus on communication, decision making, coordination of staff and team members, leadership, and relationships among team members. Teamwork improved overall and CRM became so successful that it was mandated by the Federal Aviation Administration. Health care regulatory agencies, such as JCAHO, are recognizing the value of CRM and have begun recommending its concepts in patient safety initiatives.²

In clinical practice, small groups of providers can work together on a regular basis, such

Susan Hohenhaus is a clinical human factors nurse researcher at Duke University Health Systems, Durham, NC. Stephen Powell is managing principle of Healthcare Team Training, and a captain at Delta Airlines, Peachtree City, GA. Jay T. Hohenhaus is a staff CRNA at Soldiers and Sailors Memorial Hospital, Wellsboro, PA. Contact author: Susan Hohenhaus, shohenha@ptd.net.

as in a “fixed” team, or as a result of a patient crisis, such as in a “formed” team.⁸ As personnel are added or removed, team members must communicate and respond in a concise, timely manner. An effective, standardized approach to the communication of critical information is essential to the success of this “hand-off” of patient care.

Adapting CRM techniques to health care situations may be helpful during hand-offs, especially by establishing a standardized approach to briefings. Briefings are quick exchanges of information among health care providers and are slightly different from traditional nursing reports, which contain more extensive information. Briefings may be helpful before or after a procedure or during status briefs for quick team updates, such as a heparin administration check during a cardiac surgery procedure.³

STANDARDIZED COMMUNICATION

One promising standardized communication technique for the transfer of patient information is situation-background-assessment-recommendation (SBAR).^{6,7} *Situation* and *background* are objective components; *assessment* and *recommendation* are components that allow delivery of subjective information, including opinion, coupled with a request for a specific intervention. Developed by the U.S. Navy to improve communication of critical information, SBAR was implemented by a multidisciplinary team of health care providers at Kaiser Permanente of Colorado.⁷ This tool creates redundancy, which establishes an expected pattern of communication. When there is a deviation from the pattern, errors in the process

become more evident; for example, if a nurse is relaying information using SBAR and skips the background step, the receiver should notice the omission more readily if the technique is used routinely.

Using SBAR. Let’s consider a scenario where a nurse is required to give a briefing to a colleague for a patient hand-off. The first step is to develop a succinct briefing; for example, the nurse might say, “Mr. Frost in room 14 has returned from radiology after a scan (*situation*). He was admitted for a kidney stone and has not passed it yet (*background*). He just received additional pain medicine and is resting more comfortably with a pain scale of 3 (*assessment*). He will need vital signs in 15 minutes and reassessment of his pain (*recommendation*).” The nurse then proceeds with similar information about all of her patients. In this manner, expectations of a standardized, consistent method of communication of patient information are established.

For nurses receiving SBAR information, it may be helpful to repeat the information aloud in the same format. For example, the receiving nurse might say, “Mr. Frost in room 14 has a kidney stone that has not passed.” This acknowledges the situation and background, as well as reinforces patient identification. The nurse should continue with, “That’s good that he is more comfortable.” This acknowledges the assessment. She should add, “I will reassess vital signs and pain status in 15 minutes.” This acknowledges the continuation of appropriate care for Mr. Frost.

Rehearsing the objective. In addition to having a standardized process in place, it is impor-

tant to practice the delivery and receipt of that information. One method that has been used is simulation. *Rehearsing the objective*, a term adapted from the U.S. military to describe a standardized process that promotes active practice of the delivery and receipt of information, is an important step in improving the safety of our patients.⁹

Rehearsing a patient-centered scenario gives team members a chance to experience a real-world process; teams that work together should be trained together. These rehearsals may require changes in how health care providers approach practical, simulated training. Many are familiar with the simulation of basic or advanced life-support training using mannequins, which concentrates on technical skills only. Recently, an emphasis on nontechnical skills, such as communication, planning, decision-making, and team interaction, has been incorporated into training.^{10,11} If the expected outcome of the simulation of technical skills is to reduce the risk of mistakes because of clinical inexperience, the same should hold true for nontechnical skills.¹² Rehearsing SBAR can be incorporated into other forms of training, such as the American Heart Association’s Advanced Life Support programs or the Emergency Nurses Association’s Trauma Nurse Core Course. In addition, health care leaders and educators can informally conduct simple role-playing exercises using various patient scenarios.

Opportunities for improving teamwork skills, especially communication, are plentiful within health care. Regardless of how technically proficient

individual team members are, improving team communication may be even more important in creating an effective and efficient care environment and a safer patient experience. Though successful team communication is as complex as the individuals that comprise the team, SBAR and its rehearsal are methods that may assist in creating a solution. ▼

REFERENCES

1. Institute of Medicine. *To err is human: building a safer health system*. Washington, DC: National Academies Press; 2000.
2. Joint Commission on Accreditation of Healthcare Organizations. *2006 National Patient Safety Goals*. 2006. <http://www.jointcommission.org/PatientSafety/NationalPatientSafetyGoals/>.
3. Carthey J, et al. The human factor in cardiac surgery: errors and near misses in a high technology medical domain. *Ann Thorac Surg* 2001; 72(1):300-5.
4. Joint Commission on Accreditation of Healthcare Organizations. *Health care at the crossroads: strategies for improving the medical liability system and preventing patient injury*; 2005. http://www.jointcommission.org/NR/rdonlyres/167DD821-A395-48FD-87F9-6AB12BCACB0F/0/Medical_Liability.pdf.
5. Groff H, Augello T. From theory to practice: an interview with Dr. Michael Leonard. *Forum* 2003; 23(3):10-3. http://www.rmhf.harvard.edu/files/documents/Forum_V23N3_a5.pdf.
6. Leonard M, et al. The human factor: the critical importance of effective teamwork and communication in providing safe care. *Qual Saf Health Care* 2004;13 Suppl 1: i85-90.
7. Powell SM, Hill RK. My copilot is a nurse—using crew resource management in the OR. *AORN J* 2006; 83(1):179-80, 183-90, 193-8.
8. Healy GB, et al. Error reduction through team leadership: applying aviation's CRM model in the OR. *Bull Am Coll Surg* 2006;91(2):10-5.
9. U.S. Army Infantry School. *Dismounted patrolling, proponent ATSH-R*. Fort Benning, GA: Department of the Army; 1985.
10. Taekman JM, Wright MC. Time of death? *Morbidity and Mortality Rounds on the Web: Surgery—Anesthesia* 2005. <http://webmm.ahrq.gov/case.aspx?caseID=106>.
11. Fletcher GC, et al. The role of non-technical skills in anaesthesia: a review of current literature. *Br J Anaesth* 2002;88(3):418-29.
12. Salas E, et al. Using simulation-based training to improve patient safety: what does it take? *Jt Comm J Qual Patient Saf* 2005;31(7):363-71.