

Hospitals Combat Errors at the 'Hand-Off'

New Procedures Aim to Reduce Miscues as Nurses and Doctors Transfer Patients to Next Shift

By LAURA LANDRO

For hospitals, the "hand-off" has long been the Bermuda Triangle of health care: Dangerous errors and oversights can occur in the gap when a patient is moved to another unit or turned over to a new nurse or doctor during a shift change.

Now, with growing evidence that communication breakdowns during such transfers are the single largest source of medical error, the Joint Commission on Accreditation of Health Care Organizations is requiring hospitals for the first time to establish standards for hand-off communications -- and break down long-standing cultural barriers in the exchange of patient information between doctors and nurses.

TRANSFER OF CARE

The SBAR checklist some hospitals are using to improve patient hand-offs:

S: Describe the Situation. In a few seconds, get someone's attention.

B: Background. Provide enough information to give the listener some context for the problem.

A: Assessment. Give your assessment of the overall condition

R: Recommendation. Give your specific recommendations.

The stakes are high, as hospitals that fail to comply with Joint Commission patient safety standards risk losing accreditation, which is often required for reimbursement from Medicare and private insurers. Hospitals generally have some hand-off procedures, but they tend to be ad-hoc arrangements that vary from unit to unit or even nurse to nurse. Many hospitals have only begun to implement new checklists, forms and routines that will formalize these structures.

But a few hospitals and health-care quality groups have been ahead of the pack, borrowing communication strategies used in aviation and the military, where hand-off failures can lead to devastating accidents. The non-profit Institute for Healthcare Improvement, for example, is working with hospitals on a communication model

known as SBAR -- an acronym for Situation, Background, Assessment and Recommendation -- adapted from a program used to quickly brief nuclear submariners during a change in command.

Oakland, Calif.-based managed-care giant Kaiser Permanente, which operates 30 medical centers, has pioneered use of the model to help nurses and doctors quickly organize their thoughts and convey the most critical information in just 60 seconds. At OSF St. Joseph Medical Center in Bloomington, Ill., cases of harm to patients fell by more than half in the year after the SBAR program was implemented in October 2004. And the Veterans Administration is funding development of a hand-off tool for medical teams using similar principles at its hospitals.

"A hand-off is a precision maneuver, but in medicine it has been left to happenstance," says Richard Frankel, a professor of medicine at Indiana University who is working on safety programs with the VA medical center in Indianapolis.

Reduced work hours for medical residents, which went into effect in 2003, have reduced the likelihood that a patient will be harmed by a resident whose judgment is impaired by fatigue, notes Dr. Frankel, but shorter shifts "just increases the number of hand-offs during any given day not done with precision."

Bungled hand-offs range from a patient getting a dose of a drug that was already administered on a previous shift, to doctors inappropriately reviving a patient because they aren't aware of a "do not resuscitate" order, says Leora Horwitz, a specialist in internal medicine at Yale University and the West Haven, Conn., VA Hospital.

In a survey published last month in the Archives of Internal Medicine, Dr. Horwitz found that few internal-medicine residency programs around the country have a comprehensive transfer-of-care system in place. While the onus shouldn't be on patients to convey such information, she advises patients and families: "If you think there's something important for the doctor to know, say it."

Better Communications

An example of how a nurse in a hospital might employ the SBAR tool to brief a doctor or hand off a patient to the next shift:

- **Situation:** Sally Jones in room 344 is having significant shortness of breath.
- **Background:** She has had recent diagnosis of pneumonia. Her respiratory rate is 35. Breathing appears labored and she appears fatigued.
- **Assessment:** I think her condition is deteriorating.
- **Recommendation:** She might need to go on a ventilator; please come and check on her.

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Source: OSF St. Joseph Hospital, Bloomington, Ill.

The University Health System Consortium, an alliance of 95 academic medical centers, recently published guidelines on how to best comply with the new Joint Commission standards, including using programs such as SBAR. This fall, the consortium will offer its members an online training program for residents, "Do No Harm," which will include strategies for improving hand-off communication.

John Whittington, patient safety officer at OSF St. Joseph Medical Center, says the SBAR "quick briefing" model can help overcome differing communication styles, such as nurses who give long, descriptive reports and doctors who say, "just give me the headlines," and don't want a nurse's opinion. OSF started training staffers to use the SBAR communication model in 2004, offering pocket cards and laminated "cheat sheets" posted at each phone.

At first, nurses and other staffers were hesitant to provide the "R" -- for recommendation -- to physicians, Dr. Whittington says, but doctors were asked to encourage staff to do so. By last year, the briefing format was used by more than 98% of nurses and the rate of adverse events -- defined as an unexpected medical problem that causes harm -- fell to 39.6 from 89.9 per 1,000 patient days, Dr. Whittington says.

"It does sound like this is something we should have been doing for the last 100 years, but one of the reasons errors are made during hand-offs is the longstanding culture of medicine," says Frank Mazza, vice president of medical affairs at Austin, Texas-based Seton Healthcare Network. Seton began using the SBAR model in its four labor-and-delivery units in January 2005, as part of an effort to

eliminate complications for patients and make it easier for nurses to quickly brief each other and doctors.

It was rough at first, Dr. Mazza says, as nurses overcame hesitancy about making assessments, "but we now have complete buy-in from the medical staff."

At Doctors Hospital, in Coral Gables, Fla., part of the Baptist Health South Florida system, patients get a "Ticket to Ride" whenever they leave their hospital room, be it a transfer to another unit or a roundtrip down the hall for an X-ray. With checklists for tests, procedures and nurse's

observations, the new peach-colored form helps relay patients seamlessly between staffers -- much the way air-traffic controllers hand off planes as flights move across regional airspaces.

Some large hospital groups and academic medical centers with electronic medical records have had considerable success with automated logs to document transfers, but the use of such technology is still rare. Brigham and Women's Hospital in Boston, for example, has used a computerized sign-out system for several years, and is developing a more-advanced version for the sickest patients in the ICU. David Bates, chief of the Division of General Medicine, says electronic systems are the only way to ensure the safe hand-off of large numbers of patients in a busy hospital, "so a standard set of information can get exchanged every time."

As part of its transition to electronic medical records, Kaiser has developed a Nurse Knowledge Exchange computer program, which allows departing nurses to create customized electronic reports on patients for the incoming nurses, such as lab results or medication changes. But the nurse coming on duty also makes bedside rounds with the outgoing nurse, and engages patients when possible in a discussion of treatments and progress.

"In almost all serious avoidable episodes of patient harm, communication failures play a central role," says Michael Leonard, physician leader for patient safety at Kaiser's Colorado division. By teaching caregivers new models of "structured communication," he adds, "we can make sure that we are all in the same movie."