A unified effort by physician and nurse leaders to introduce preoperative briefings has helped boost perceptions of OR safety at a Colorado hospital. The briefings, held right before the incision, are an expanded timeout that allows the team to check critical information and establish an atmosphere of open communication.

Preop briefings are receiving attention as a way to avoid the communication breakdowns that have been identified as a major factor in errors.

The hospital has conducted team training for 260 of its perioperative staff, including 60 physicians, and key physician leaders are behind the effort.

Since the briefings were introduced in 2006, the OR has seen ratings improve on a survey that measures staff and physician perceptions of safety.

Memorial Hospital in Colorado Springs is one of 5 hospitals participating in the AORN Foundation’s human factors project funded by Kimberly-Clark Health Care. The hospitals gave a status report at the AORN Congress in March in Orlando. Memorial’s team elaborated about its effort in an interview with OR Manager. A progress report is planned for the September AORN Journal.

Human factors in health care can be defined as the process and skills needed to make an environment safe and productive, according to Safer Healthcare (www.saferhealthcare.com), a Denver-based company that provided training for the AORN project. Human factors address areas such as stress and fatigue, situational awareness, vigilance, and decision making. To improve safety, team members learn skills related to communication, teamwork, assertion (speaking up), and recognizing red flags, among others.

The AORN project has focused on preoperative briefings as a platform for improving communication and safety. Each hospital has developed its own format for the briefings. At the AORN Congress, participating hospitals reported mixed success with introducing briefings.

Physician leadership pivotal

Physician leadership has been pivotal in helping to get the briefings off the ground, says Jill Garrett, RN, CPHQ, perioperative care manager, who applied for the AORN funding.

Garrett says she has been struck by the fact that 80% of cases of wrong-site surgery occur with the knowledge of at least one person in the room, according to the Joint Commission. The commission identified communication problems as a root cause in 72% of sentinel events and about 55% of the wrong-site surgery reports received in 2006.

“Improvement in communication made a lot of sense. But we knew this had to be physician driven,” says Garrett. The chief medical officer, John D. Slack, MD, a cardiologist and proponent of briefings, has lent his support.

Dr Slack traces his interest to a talk he heard several years ago by Michael Leonard, MD, the nationally known patient safety expert from Kaiser, who has adapted teamwork strategies from aviation to health care. Dr Leonard maintains that because of the complexity of health care and the limitations of human performance, clinicians need standardized communication tools, a culture where they can speak up, and a common language for alerting team members to unsafe situations.

Dr Slack says he was impressed when Dr Leonard noted that a fatigued flight
crew who is used to working together is safer than a rested crew that has never worked together before.

**Chief of surgery a convert**

Memorial began working with Dr Leonard to teach nurses to use the SBAR method when calling a physician about a patient. SBAR, which stands for situation, background, assessment, and recommendation, is a tool designed to convey essential facts quickly.

“That was a satisfier for our physicians,” Dr Slack says. “We recognized that a nurse who was prepared facilitated decision making and thus patient safety.”

The chief of surgery, Larry Dillon, MD, admits he is a convert to preop briefings. At first, he says he thought “it was one of the corniest things I’d ever heard of.”

But he felt an obligation to try it because of his position. After conducting briefings for 4 or 5 weeks, “I became a total convert,” he told OR Manager, noting he caught several potential errors solely as a result of the briefings.

He says he now conducts briefings “with the history and physical in one hand and the consent in the other” so he can review details about the patient, whom he might not have seen for several weeks.

Another early adopter was a vascular surgeon, Scott Hurlbert, MD, chair of the quality committee. A sign the culture was changing came when nurses began to say to some of the other surgeons, “Your timeouts are not as good as Dr Hurlbert’s,” Dr Slack notes.

**Kickoff for training**

Memorial launched its OR human factors project with training, supported by the AORN funding.

The kickoff was a medical staff dinner in November 2005, with Dr Leonard as the speaker. No surgery was scheduled that evening, and over 200 physicians attended. Also invited were perioperative staff, including nurses, schedulers, surgical technologists, and patient care assistants.

The kickoff was followed by 6 weeks of training by Safer Healthcare. The 4-hour training sessions were provided to mixed groups of 25 to 30 physicians, nurses, and other staff.

The hospital’s CEO and COO joined in some of the sessions, which Dr Slack says was instrumental in conveying top-level support. He personally urged the physicians to attend, on one occasion phoning surgeons who had not shown up for their scheduled session.

**Briefings begin to take off**

After the training sessions, a steering committee discussed the next step that would be introducing the briefings.

“We initiated 2 prototypes of briefing boards—which failed miserably,” Garrett says candidly. “Then we went to the Unit Practice Council and polled the perioperative staff.” They proposed combining the briefing board with the count board. The whiteboards are now posted in each OR (illustration).

The next step was to encourage physician-led briefings.

Initially, some surgeons thought the briefing was the same as the timeout for surgical site verification, with the surgeon leading it instead of the nurse.
To clear up the confusion, Dr. Dillon sent a letter to all physicians with surgical privileges, highlighting items that should be included in a briefing. A pocket card was enclosed as a guide.

The hospital has also employed a retired pediatric surgeon, Barbara Towne, MD, to observe briefings and provide ongoing teaching and coaching.

"Now some of the surgeons are actually teaching other surgeons how to do a briefing," Dr. Towne says.

She has also seen that more staff members are willing to encourage and even coach others on briefings. Even physicians who didn't go through the training are becoming familiar with the briefings and human factors terminology, Garrett adds.

**Whiteboard guides briefings**

OR teams use the whiteboard to guide the briefings. If the whiteboard is filled out, a briefing is more likely to happen, Dr. Towne has noticed.

Garrett says briefings change the whole climate in the room: “You have all of this activity going on, in all of these silos. Then everyone stops and looks at each other. It is amazing how the atmosphere changes.”

Dr. Slack has also seen a positive effect.

“It has developed an energy and life in the OR, where people really did try to flatten the hierarchy,” he says. “It’s much more than a timeout.”

Briefings aren’t mandatory.

“It’s a progressive process,” Dr. Dillon says, and compliance is gradually increasing. He does not think there should be a penalty for not doing briefings. But if a wrong-site surgery were to happen at Memorial, he says that as the chief of surgery, “I would ask, ‘Did that physician do a timeout and a briefing?’ If they didn’t, I think there would be a punitive response. There has to be a consequence for not complying with what appears to be a safety measure we can all take for our patients.”

**Measuring climate change**

To assess the effect of the training and briefings, Memorial surveyed the staff and physicians before the project began and 1 year later, using the Hospital Survey on Patient Safety Culture from the Agency for Healthcare Research and Quality (AHRQ).

“We have seen some pretty dramatic shifts, though there is still a lot of improvement to make,” says Garrett.

Among the findings:

- Those saying near misses are reported went from 28% to 44%, indicating more feel comfortable reporting.
- Perceptions that managers address patient safety problems rose from 48% to 72%.
- Perceptions of teamwork increased from 54% to 70%.
- Perceptions of communication openness rose from 36% to 54%.

The effort won’t stop with the ORs. Dr. Slack says there are plans to roll human factors training into labor & delivery, the emergency department, the cath labs, and later the ICUs.

“It’s been totally physician driven,” Garrett says. “There’s been physician support and administrative support—that’s really the whole key.”

—Pat Patterson

The other participants in the AORN human factors project are St. Joseph Health System, Tawas City, Michigan; Memorial Sloan-Kettering Cancer Center, New York City; Mayo Clinic Hospital, Scottsdale, Arizona; and Jackson Memorial Hospital, Miami.

Information on the AHRQ Hospital Survey on Patient Safety Culture is at www.ahrq.gov/qual/hospiculture.
References


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Briefing elements

Briefing elements at Memorial Hospital:

- Announce briefing.
- Introduce personnel.
- Share critical information.
- Ask for team input.
- Conduct timeout.
- Review contingency plans.
- Ask questions about the case.