Safety Culture and Care: A Program to Prevent Surgical Errors

MAUREEN WHITE HEMINGWAY, MHA, RN; CATHERINE O’MALLEY, MSN, RN; SANDRA SILVESTRI, MS, RN, CNOR

Continuing Education Contact Hours

This program meets criteria for CNOR and CRNFA recertification, as well as other CE requirements.

AORN is provider-approved by the California Board of Registered Nursing, Provider Number CEP 13019. Check with your state board of nursing for acceptance of this activity for relicensure.

Conflicts of Interest Disclosures

Maureen White Hemingway, MHA, RN; Catherine O’Malley, MSN, RN; and Sandra Silvestri, MS, RN, CNOR, have no declared affiliations that could be perceived as posing potential conflicts of interest in the publication of this article.

The behavioral objectives for this program were created by Helen Starbuck Pashley, MA, BSN, CNOR, clinical editor, with consultation from Susan Bakewell, MS, RN-BC, director, Perioperative Education. Ms Starbuck Pashley and Ms Bakewell have no declared affiliations that could be perceived as posing potential conflicts of interest in the publication of this article.

Sponsorship or Commercial Support

No sponsorship or commercial support was received for this article.

Disclaimer

AORN recognizes these activities as CE for RNs. This recognition does not imply that AORN or the American Nurses Credentialing Center approves or endorses products mentioned in the activity.
Safety Culture and Care: A Program to Prevent Surgical Errors

MAUREEN WHITE HEMINGWAY, MHA, RN; CATHERINE O’MALLEY, MSN, RN; SANDRA SILVESTRI, MS, RN, CNOR

ABSTRACT

Surgical errors are under scrutiny in health care as part of ensuring a culture of safety in which patients receive quality care. Hospitals use safety measures to compare their performance against industry benchmarks. To understand patient safety issues, health care providers must have processes in place to analyze and evaluate the quality of the care they provide. At one facility, efforts made to improve its quality and safety led to the development of a robust safety program with resources devoted to enhancing the culture of safety in the Perioperative Services department. Improvement initiatives included changing processes for safety reporting and performance improvement plans, adding resources and nurse roles, and creating communication strategies around adverse safety events and how to improve care. One key outcome included a 54% increase in the percentage of personnel who indicated in a survey that they would speak up if they saw something negatively affecting patient care. AORN J 101 (April 2015) 405-412. © AORN, Inc, 2015. http://dx.doi.org/10.1016/j.aorn.2015.01.002

Key words: safety culture, quality assurance, safety program, preventing surgical errors, process improvement.
In 1999, the Institute of Medicine (IOM) published *To Err Is Human: Building a Safer Health Care System,*¹ an eye-opening report that focused on reducing the rate of preventable medical errors and the serious consequences of these errors to patients. Data from the IOM report indicated that an estimated 100,000 patients died each year as a result of preventable medical errors.¹ As a result of the IOM report, the majority of health care facilities established patient safety changes. However, according to a 2013 systematic review of several articles, "the true number of premature deaths associated with preventable harm to patients is estimated at more than 400,000 per year,"²(p122) which shows a remarkable increase in the number of reported adverse events related to medical errors and patient harm in the past 15 years.

Commitment to a culture of safety in the perioperative setting is essential to a hospital’s ability to improve patient care, prevent surgical errors, and function as a high-reliability organization. Improving delivery of care requires analyzing performance measures to identify safety or quality issues. Reporting measures allow facilities to collect data necessary to evaluate the relevancy and frequency of safety or quality issues. In addition, databases populated with real-time information allow individual practitioners and members of a department, a hospital, or even an entire health care system to measure, benchmark, and design measurable quality improvement (QI) programs. "Having high-quality safety culture data at a unit level allows the team to identify specific areas of weakness or cultural opportunity for improvement."³(p289) Subsequent to analysis of reporting measures and identification of a safety or quality issue, personnel can develop and implement process improvement plans.

In 2006, personnel at Massachusetts General Hospital (MGH), Boston, undertook initiatives to improve the hospital’s quality and safety program. This article describes the process changes that led to enhanced quality assurance (QA) in MGH’s Perioperative Services department.

**HISTORICAL APPROACHES TO QUALITY AND SAFETY**

Massachusetts General Hospital is a level I trauma teaching hospital in Boston, where personnel care for approximately 36,000 surgical patients each year. At MGH, a steady growth in the number of surgical procedures has corresponded with an increase in the hospital’s surgical capacity, which has resulted in the need for a more robust quality and safety program.

Historically, within the structure of MGH’s safety program, personnel involved in any untoward or unexpected clinical happening in the perioperative setting were expected to write an incident report. Some personnel expressed concern about a reporting process that could be misused in the form of retribution against the individuals involved in the incident. At that time, to address staff perception of this process, hospital leaders changed the required incident report to a safety report. By writing a safety report, personnel could acknowledge the event without fear of punitive or disciplinary actions from facility managers or administrators. Despite this change, additional concerns about MGH’s safety program remained. Personnel voiced concerns related to two aspects of the former safety reporting system:

- a lack of feedback from managers to staff members after submission of a safety report, and
- the absence of performance improvement plans to address opportunities for employee growth.

The perception shared by personnel was that safety reports were simply relegated to a file cabinet without discussion of how to address safety and quality issues. The difficulty shared by managers was the lack of necessary data relevant to system issues, such as perioperative patient positioning injuries, to develop a performance improvement program.

**PERFORMANCE IMPROVEMENT PLANS**

The demands of a busy surgical day previously would hamper managers’ efforts toward implementing safety and process improvement programs. In general, the health care field can be filled with people who want to provide optimal clinical care. Although it would be unfair to say that there was a culture of low expectations at MGH, this may have been the perception shared by personnel. As a result of the IOM’s 1999 report, leaders at MGH recognized that health care practitioners and facility personnel must identify preventable adverse events and create an environment dedicated to transparency. To that end, MGH perioperative services personnel have continually sought to put systems into place to address perioperative errors, including the process improvements discussed in this article. Subsequent reporting and evaluation of preventable medical errors² have reinforced the importance of our project to patient safety.

**DEVELOPING A PROGRAM FOR IMPROVED SAFETY AND CARE**

Improvements to the safety culture at MGH began in 2006, after hospital leaders and personnel determined that a just
culture, in which individuals feel comfortable in reporting near misses or errors, was the right environment to nurture. This initiative represented a multidimensional effort by the institution’s leadership team, with assessment and development of specific categories to enhance the safety culture. First institutionally related steps included meeting the following objectives:

- development of an enhanced and more responsive electronic safety reporting system,
- implementation of a system of safety behavior auditing and feedback,
- creation of ongoing facility-wide dissemination of safety issues and relevant modification of policies and procedures,
- addition of developmental steps within the Perioperative Services department,
- promotion of consistent policy for debriefing of safety reports with all involved personnel, and
- addition of new nursing positions specifically focused on safety and quality within perioperative services.

**PROCESS CHANGES**

During the change process, administrators and members of the project team fully supported and included perioperative nursing leaders, including the associate chief nurse, nursing director, and nurse consultants. Following are changes instituted during this process improvement.

**Safety Reporting Measures**

Members of the project team made revisions to the electronic safety reporting system that assists caregivers with providing quality care. The scope of these revisions had three components:

- capture relevant data (e.g., patient intraoperative positioning injuries),
- create databases to identify trends (e.g., counting discrepancies), and
- track issues (e.g., system problems) over time.

One advantage of an electronic safety reporting system is that it captures trends for particular issues. For example, perioperative nurses had been concerned about patient positioning injuries, and by using the hospital’s internal web-based safety reporting system, team members were able to gather information around this specific issue for evaluation and analysis.

**Safety Debriefings**

After an adverse safety or quality event occurs, all involved personnel must conduct an initial safety debriefing session. “A growing body of literature suggests that surgical briefings and debriefings can result in impressive reductions in morbidity and mortality . . . but the evidence to date supports case-by-case structured briefing and debriefing.”

Implementation of safety incident debriefing sessions at MGH have provided a constructive forum to elicit information and emphasize a team perspective to quality patient care. These sessions also inform the use of an algorithm of discussion points based on the safety report and individual interviews with participants in the event, with which managers make determinations on policy and then strong education or reeducation for personnel.

**Audits**

Integrated into this quality initiative was the requirement for the perioperative nurses and leadership team to perform audits. Audits are a valuable tool to use in monitoring and improving quality care. Performing audits creates an opportunity for the perioperative nursing leaders to observe staff member compliance with policies and procedures and provides a way to investigate hurdles to compliance that personnel may encounter in their daily nursing practice. For example, an incident involving a retained foreign body resulted in changes to the count policy. After initial audits revealed that this change did not address the root cause in patient care, the policy was revised again to ensure positive outcomes in patient care.

Although audits may be difficult and time consuming to conduct, personnel at MGH believe they are a vital link to compliance and provide an opportunity to explain issues so that members of the leadership team can discover obstacles to policy adherence. Personnel should not use workarounds such as gathering medications for the entire day as opposed to patient-specific medications. If they are using workarounds, managers should ask for an explanation about why they are needed. Another difficulty with audits is to assure personnel that the audit is a nonpunitive action that offers a chance to improve care, educate staff members, and provide an understanding of current practices.

**Communication Methods**

Communicating changes in policy or practice is as important as the changes themselves. In the perioperative setting of a major trauma center, communication with each individual is a challenge. For the most part, people want to follow the rules. If the rules change, communication about the change and why it is necessary is paramount for compliance. One avenue that we have had great success with is the use of a weekly practice alert (Figure 1). As part of the improvement initiative, the perioperative nurse consultants developed an informational report to reach all clinical staff nurses with timely policy
changes or reminders. The original intent was to send an alert by e-mail, posting on boards and on MGH ORTV, which is a digital interactive display system designed to improve communication across the perioperative services, when a serious issue had arisen and to remind personnel of an existing policy or alert them to a change in policy. This has evolved into a weekly practice alert highlighting important topics that have occurred over the past week. To create the alert, a weekly report pulls the most pertinent issues from the safety reports created over the course of a week, which are formatted as short one-page summaries of nursing practice issues that every perioperative staff member receives via e-mail each Friday. The practice alerts are a popular item with all perioperative nursing staff. Although the perioperative nurse consultants create the alerts, quite frequently the staff RNs will send an item that they feel should be highlighted in the alert to the perioperative nurse consultants.

Resources: New Nurse Role

Perioperative services personnel at MGH identified the resources needed to affect positive patient outcomes. As a result, leaders created new staffing and resource roles within perioperative services to provide support for becoming a high-reliability organization. The perioperative environment is a complex one, with team members of varying education levels. Nurses are the front-line personnel who care for patients on a daily basis. Yang et al reported that perioperative nurses “play an important role in ensuring patient safety and reinforce the necessity of vigilance in the OR.”5(p755) The perioperative administrators and nursing leaders instituted the role of...
perioperative QA staff specialist in the MGH OR and filled the position with a master’s-level senior perioperative nurse capable of understanding the history and culture of the MGH OR. The unique aspect of this role is the pairing of a patient safety perspective with an understanding of providing quality care, which provides a seamless framework and mind-set for the QA staff specialist when undertaking relevant and quality tracer audits related to specific safety reports, as well as when articulating and processing information to develop a process improvement plan that addresses specific safety concerns.

The QA staff specialist is present at every staff meeting and is a role that has come to represent the quality and safety commitment in perioperative services. This experienced nurse is able to develop pertinent safety initiatives based on actual situations and has the ability to start and maintain a dialogue of concerns and specific safety issues with staff perioperative nurses who see quality and safety opportunities on a daily basis. The obvious advantage to this role is that as a perioperative nurse, the QA staff specialist understands the role of the perioperative nurse.

When a safety event occurs, another advantage of the QA staff specialist role is that the management team is separate from both the safety event and the fact-finding team. The perioperative QA nurse will begin an inquiry into the event to understand the intentions of the person who wrote the safety report. This is an initial nonthreatening conversation among staff members to understand the involved factors. If the issue is a serious reportable event, the perioperative leadership team is then included in the investigation. The objectivity of the QA staff specialist is important to building trust and functioning as a neutral third party. The perioperative nurse consultants and/or the perioperative QA staff specialist and the involved staff members conduct initial meetings after a staff member files a safety report. A nonthreatening conversation ensues during which the goal is to help understand what happened, not to assign blame. Thus, this approach fulfills the commitment to maintaining the values of a high-reliability organization, such as deference to expertise, and to ensuring that collaboration occurs in the perioperative services department and among the corresponding roles in the departments of surgery and anesthesia.

Communication and Feedback
In response to long-term staff member complaints that safety reporting did not provide feedback, the quality and safety team began sending an e-mail to the report’s originator to express thanks for his or her commitment to improving patient care, as well as a short note on what actions the quality and safety team will take in response to the report. When determining what feedback will be valuable, the quality and safety team has found that safety report writers appreciate a follow-up disposition of the issue. The sharing of pertinent and timely information to the front-line staff is important for them to see the direction of the changes to improve practice.

When there is an event that necessitates an immediate change in policy, the perioperative nurse consultant team includes the issue in a practice alert as soon as possible. However, this team does not solely rely on electronic communication. Important changes are also discussed in a timely fashion at various staff meetings. Once a week, the perioperative QA staff specialist attends the team leader meeting to discuss safety reporting and any new issues. Finally, there is a dedicated quality and safety staff meeting held monthly to update the team on the resolution of nonurgent safety reports. Broader changes and trends are categorized for the staff at this meeting. For instance, the discussion may revolve around the number of safety reports related to an environment-of-care issue. The QA staff specialist may formulate a plan to educate the OR assistants’ team to use a standard and consistent approach to environment-of-care issues. The staff nurses become more involved in these processes because they are encouraged to lead the discussion in this venue. Keeping the focus on patient care and good nursing practice allows everyone to be engaged in quality patient care.

For a serious issue, members of the quality and safety office will task the QA staff specialist to separately interview participants involved in the issue. This gives the participants a chance to relay their information in a safe environment in advance of a debriefing meeting, during which the QA staff specialist will ask the individuals involved to come prepared to address the following questions developed by the MGH Quality and Safety Department:

- From the staff member’s perspective, what happened?
- What would improve future care for the patient and for team members?
- What could the staff member have done differently to improve the outcome?
- What can the staff member commit to changing or doing differently in the future?

These questions have helped health care providers engage in self-reflective practices.

Discovering the root cause of an event also provides an opportunity to review pertinent policy. Sometimes in the course of these events, it becomes necessary to introduce a policy change. At times, we have discovered that a policy is open to
interpretation. No policy should be so restrictive as to inhibit practice in different situations; however, if the policy is so vague that personnel struggle to interpret it, then changes must be made. When reviewing a policy pertinent to an event, the two questions to ask are

- Did the staff members involved follow policy?
- Will changing the policy prevent the root cause to this event?

Policies should reflect best practices, and staff members’ practices should reflect the policy. If the investigation and debriefing reveal that a policy has become too broad, changes should be made. All changes to policy at MGH are vetted by members of the Nursing Practice Committee, Perioperative Quality Assurance Committee (PQAC), and the Surgical Executive Committee, after which the Perioperative Nurse Consultants will develop an education plan.

ENHANCING QUALITY AND SAFETY

According to Wachter, the term safety culture may be defined as

... commitment to safety that permeates all levels of an organization ... it calls up a number of features identified in studies of high reliability organizations such as acknowledgement of the high risk, error-prone nature of an organization’s activities, a blame free environment where individuals are able to report ... an expectation of collaboration across ranks to seek solutions ... and a willingness on the part of the organization to direct resources to address safety concerns.

When seeking to improve quality and safety, hospital leaders and personnel must be able to distinguish between adverse events and near misses, as well as QA and QI. There are clear distinctions between an error, an adverse event, and a near miss. A medical error is defined as “an error that happens in a medical setting and is made by someone who is engaged in a medical activity.” An adverse event is an unexpected problem arising from a health care encounter, which may be a procedure-, drug-, or system-related event. According to Wachter, a near miss, or a close call, is a situation that only by chance did not produce a patient injury and does not become an adverse event, whereas an adverse event is any injury directly caused by medical care. A near miss has the potential to become an adverse event unless actions are taken to mitigate the risk. As part of this initiative, a multidisciplinary team formed and scheduled monthly meetings to understand and to review the system issues around near misses and adverse events that occurred within the perioperative environment and to ensure that changes are being made that enhance and address quality and safety issues. This is also a forum to discussion of other safety measures, such as the Universal Protocol.

Quality assurance differs from QI in that QA is meant to prevent adverse events by developing processes to address issues before they become events. In QI, personnel must identify the issue that resulted in an event and develop an action plan to address the issue before more harm can occur. At MGH, the PQAC is composed of key stakeholders within the QA arena and members of the leadership team, including the executive medical director, the associate chief of nursing, the directors of perioperative nursing and the central sterile processing departments, and surgical and anesthesia representatives. The makeup of the PQAC helps ensure a comprehensive discussion and recognition of perioperative safety issues. Furthermore, this multidisciplinary committee provides a forum for surgical liaisons to the hospital’s quality and safety unit when trying to reach consensus on patient care issues and report them to the hospital’s QA committee. The strength of this type of committee comes from the different team members’ perspectives and individual strengths. The idea that these roles are embedded within their respective departments assists in early identification and continued progress of patient care improvement and process improvement projects across departments.

The team-based commitment to quality and safety has carried through into other forums. The Perioperative Nurse Consultant team reviews safety reports weekly with the perioperative QA staff specialist. This team, together with the QA specialist, has effected change in surgical patient outcomes. For instance, when cardiac surgical patients were developing pressure ulcers in the postoperative period, the OR QA personnel began gathering patient positioning data in response to a call from the patient care units. The perioperative nurse consultants were able to trace the genesis of these ulcers back to the length of the surgical procedure and the required positioning of the patient in the OR. In response to the perioperative positioning that resulted in sacral pressure ulcers, the nursing staff began to use Mepilex® dressings on cardiac patients to decrease sacral skin breakdown. Additionally, the nursing staff researched and recommended the use of fluid-infusion mattresses in all cardiac patients at high risk of perioperative injuries (eg, provide examples of these patients). Both of these interventions have decreased the prevalence of postoperative pressure ulcers in cardiac patients to zero.
Further Understanding of Adverse Events

One aspect of working with a perioperative QA staff specialist is the education this individual provides to help staff members understand patient safety issues and embrace commitment to quality care. Recently, the QA staff specialist’s focus has been on helping personnel understand the concepts of adverse events, risky behavior, and drifting from safe practice.

Adverse events and errors

These can be classified as preventable or unpreventable. Preventable errors can be predicted and remediated, for example, errors involving technology (ie, equipment malfunctions prevented or remedied by routine inspections). There are situations in which errors occur that are not preventable (eg, an occurrence outside the provider’s control). Unpreventable errors cannot be predicted or assumed. For example, a debilitated patient may develop a pressure ulcer after an eight-hour, prone, orthopedic-type surgical procedure occurs, even though caregivers worked appropriately and in the patient’s best interest. In this instance, the caregivers are not responsible for the adverse event, but should take the opportunity to share the experience with other caregivers to educate them about how to prevent similar adverse events from occurring again. The focus at MGH has always been on reducing preventable human errors.

Risky behavior

There is a difference between risky behavior and errors that result from systems issues, which relates to the concept of practice drift. According to Reason, Marx (a leading patient safety expert) has written extensively on human factors as related to patient care and is credited with the phrase “to drift is human.” Practice drift occurs when personnel begin to use small deviations from an accepted practice. Behavioral choices like practice drift can create risk because they do not follow accepted best practices. After the deviation becomes familiar, then it becomes the normal way of performing a task. Eventually, the small deviation evolves until there is a huge gap between the health care provider’s practice and written policy. It is imperative that staff nurses understand the concept of practice drift and be ready to counteract it in themselves and others by regularly reviewing policy and procedures to help ensure compliance with accepted practice.

To determine whether an error may be preventable, the first question that a quality and safety investigation should determine is whether one or more persons are engaging in the identified behavior. If three or more practitioners report that they perform the identified behavior on a consistent basis, there is a systems issue involved. In that case, the organization’s leaders share in the accountability for the problem. Systems issues need to be addressed and rectified within a multidisciplinary milieu such as the PQAC and the Practice Committees.

However, reckless behavior is a conscious choice to engage in a substantial and unjustifiable risk. Leonard and Frankel define a risky action as when “the caregiver makes a potentially unsafe choice. A caregiver engaging in a risky action should receive coaching and participate in educating others in order to apply lessons learned.” Reckless behavior may be unintentional because of impaired judgment or, in some instances, it may be malicious action in which the individual wanted to cause harm. Such reckless behavior requires a different response. Individuals engaged in intentionally harmful behavior must be managed within the legal system, a substance abuse program, or an employee assistance program, whichever is the appropriate venue.

Ongoing Improvement Interventions

Perioperative administrators and nursing leaders are planning additional interventions to further improve our culture of safety, but current efforts include

- the use of multidisciplinary simulation experiences to improve team training,
- executive and leader “walkarounds” to engage with front-line staff members,
- the use of surveys that pertain to the culture of safety to understand the current environment, and
- focus groups to identify safety issues.

RESULTS

Implementation of process changes to enhance MGH’s safety program, as well as the addition of the perioperative QA staff specialist to the OR environment, has contributed to quantifiable outcomes. For example, in 2013, perioperative nursing members conducted a staff survey to understand their OR culture of safety. Eighty percent of respondents (ie, RNs, surgical technologists, OR assistants, operational associates) (n = 79) answered negatively to the question, “I feel free to question the decision or actions of those with more authority,” and 44% stated that they would not speak up if they saw something negatively affecting patient safety. Another survey question asked which actions would help the respondent to speak up, and narrative responses included “knowing that I would have support of management and peers” and “engaging in a conversation with all parties involved in an incident.” Changes that have been made in the quality and safety arena at MGH are positively affecting our culture of safety, as evidenced by a follow-up survey conducted in early 2014. Results of this survey revealed that 72% of respondents (n = 90)
would feel free to question the decision or action of those with more authority, and that 97.7% would speak up if they saw something negatively affecting patient care.

CONCLUSION
Considering recent estimates of 400,000 patient injuries related to preventable medical errors occurring in the United States each year, it is imperative to continue QI and safety improvement efforts. Despite the resources and efforts that many facilities have allocated to this initiative, there is still work to be done. According to Kathleen Sibelius, former US Secretary of Health and Human Services, the Affordable Care Act has created an opportunity for the health care industry to begin to coordinate patient care and pay for quality rather than quantity. The role of quality and safety measures in the care of the patient should continue to expand, and perioperative nursing goals should include preventing surgical near misses and adverse events.

Members of a health care organization who believe in everyday excellence demonstrate specific qualities, such as understanding the complexities of the health care environment and the belief that collaboration in the institution is key to understanding the importance of reporting adverse events and near misses. The continued focus at MGH remains on process improvement projects and a commitment to a safety culture, which requires many resources at many levels. At MGH our motto is “excellence every day,” which means we strive to perform at our best every day for every patient.

Acknowledgment: The authors wish to acknowledge Patrice Osgood, RN, MSN, CNOR, NE-BC, nursing director of perioperative services at Massachusetts General Hospital, Boston, for her review and suggestions during the preparation of this manuscript.

Editor’s notes: The Universal Protocol for Preventing Wrong Site, Wrong Procedure, Wrong Person Surgery is a trademark of The Joint Commission, Oakbrook Terrace, IL. Mepilex is a registered trademark of Mölnlycke Health Care, Gothenburg, Sweden.

References
CONTINUING EDUCATION

Continuing Education: Safety Culture and Care: A Program to Prevent Surgical Errors 1.8 CE www.aorn.org/CE

PURPOSE/GOAL
To provide the learner with knowledge specific to developing a perioperative quality and safety program to prevent surgical errors.

OBJECTIVES
1. Describe how a culture of safety affects patient care.
2. Identify how perioperative personnel can prevent adverse events and errors.
3. Discuss how to enhance a quality and safety program.

The Examination and Learner Evaluation are printed here for your convenience. To receive continuing education credit, you must complete the online Examination and Learner Evaluation at http://www.aorn.org/CE.

QUESTIONS
1. Having high-quality safety culture data at a unit level allows the team to identify specific areas of weakness or cultural opportunity for improvement.
   a. true       b. false
2. To measure, benchmark, and design measurable quality improvement programs, which of the following is needed?
   a. multiple research projects
   b. patient and family member buy-in
   c. databases populated with real-time information
   d. approval by all nurses
3. To help reverse the trend of increasing surgical errors, health care practitioners and facility personnel must
   1. identify preventable adverse events.
   2. obtain grants to fund projects.
   3. create an environment dedicated to transparency.
      a. 1 and 2       b. 1 and 3
      c. 2 and 3       d. 1, 2, and 3
4. After an adverse event occurs, the literature suggests that what is needed?
   1. surgical briefings and debriefings
   2. eliciting information about the event
   3. emphasizing a team perspective to patient care
   4. a case-by-case structure to debriefings
      a. 1 and 3       b. 2 and 4
      c. 1, 2, and 4    d. 1, 2, 3, and 4
5. What does conducting an audit allow?
   1. an opportunity to observe staff member compliance
   2. the means to investigate hurdles to daily nursing practice
   3. a vital link to compliance
   4. an opportunity to explain practice issues
   5. discovery of obstacles to policy adherence
      a. 4 and 5       b. 1, 2, and 3
      c. 1, 2, 3, and 4 d. 1, 2, 3, 4, and 5
6. Communicating changes in policy or practice are secondary in importance to the changes themselves.
   a. true       b. false
7. The difference between an adverse event and a near miss is that
   1. A near miss is a situation that only by chance did not produce a patient injury.
   2. A near miss has the potential to become an adverse event.
3. An adverse event is any injury directly caused by medical care.
4. Unless actions are taken to mitigate the risk, a near miss can become an adverse event.
5. An adverse event is an intentional act.
6. A near miss is considered a legally irresponsible act.
   a. 1, 3, and 5    b. 2, 4, and 6  
   c. 1, 2, 3, and 4    d. 1, 2, 3, 4, 5, and 6

8. Quality assurance is meant to prevent adverse events by developing processes to address issues before they become events.
   a. true    b. false

9. What are the issues that a multidisciplinary quality assurance team must address?
   1. a comprehensive discussion and recognition of perioperative safety issues
   2. staff diversity
   3. identifying adverse events and errors
   4. identifying risky behavior
   5. surgeon approval of all initiatives
   6. staff compensation
      a. 1, 3, and 4    b. 2, 4, and 6  
      c. 1, 2, 3, and 4    d. 1, 2, 3, 4, 5, and 6

10. Reckless behavior is conduct that
    1. requires a different disciplinary response than does unintentional behavior.
    2. is a conscious choice to engage in a substantial and unjustifiable risk.
    3. must be managed within the legal system, a substance abuse program, or an employee assistance program.
    4. may be unintentional because of impaired judgment.
    5. may be malicious actions in which the individual wanted to cause harm.
       a. 1, 3, and 4    b. 2, 4, and 6  
       c. 1, 2, 3, and 4    d. 1, 2, 3, 4, and 5
This evaluation is used to determine the extent to which this continuing education program met your learning needs. The evaluation is printed here for your convenience. To receive continuing education credit, you must complete the online Examination and Learner Evaluation at http://www.aorn.org/CE. Rate the items as described below.

**OBJECTIVES**
To what extent were the following objectives of this continuing education program achieved?
1. Describe how a culture of safety affects patient care.
   Low 1. 2. 3. 4. 5. High
2. Identify how perioperative personnel can prevent adverse events and errors.
   Low 1. 2. 3. 4. 5. High
3. Discuss how to enhance a quality and safety program.
   Low 1. 2. 3. 4. 5. High

**CONTENT**
4. To what extent did this article increase your knowledge of the subject matter?
   Low 1. 2. 3. 4. 5. High
5. To what extent were your individual objectives met?
   Low 1. 2. 3. 4. 5. High
6. Will you be able to use the information from this article in your work setting?
   1. Yes 2. No

7. Will you change your practice as a result of reading this article? (If yes, answer question #8A. If no, answer question #8B.)

8A. How will you change your practice? (Select all that apply)
1. I will provide education to my team regarding why change is needed.
2. I will work with management to change/implement a policy and procedure.
3. I will plan an informational meeting with physicians to seek their input and acceptance of the need for change.
4. I will implement change and evaluate the effect of the change at regular intervals until the change is incorporated as best practice.
5. Other: __________________________________

8B. If you will not change your practice as a result of reading this article, why? (Select all that apply)
1. The content of the article is not relevant to my practice.
2. I do not have enough time to teach others about the purpose of the needed change.
3. I do not have management support to make a change.
4. Other: __________________________________

9. Our accrediting body requires that we verify the time you needed to complete the 1.8 continuing education contact hour (108-minute) program: ________________________