

Tool Tutorial



Operating Room Briefings: Working on the Same Page

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Communication among team members is critical in medicine, particularly in the operating room (OR). Surgical teams are composed of caregivers who, in some cases, may know little about one another or lack a common understanding of a particular patient's or procedure's unique needs. Because of such issues and the importance of teamwork during an operation, it is important for OR teams to take the time before a procedure to discuss the operative plan, patient risks, potential hazards, safety concerns, and operating knowledge of required equipment.^{1,2}

OR teams deal with the potential uncertainty inherent with surgery, sophisticated instruments, rapid transfer of critical information to team members, team coordination, and the patient's condition.³ Thus, effective teamwork is important in the OR, and its absence can lead to poor transfer of critical information, impaired decision making, and, ultimately, increased risk of patient harm.^{4,5} Several studies have found communication failures as the root cause in 80% of OR sentinel events, 77% of wrong-site surgery, and other medical errors in the OR.⁶⁻⁸ To reverse this trend, the Joint Commission on Accreditation of Healthcare Organizations has called for "effective communication" among surgical team members and it mandated the Universal Protocol for

Preventing Wrong Site, Wrong Procedure, Wrong Person Surgery™ (Universal Protocol) for surgical procedures in July 2004.^{9,10}

A team of quality and safety researchers at The Johns Hopkins Medical Institutions responded to this call by creating the OR Briefing tool. This tool provides a structured approach to promote effective interdisciplinary communication and teamwork in the OR.

Tool Description

The OR Briefing is a preoperative team discussion that takes one to two minutes and is done in the same manner as a time-out (often called an "expanded time-out"). Its purpose is to check critical information and promote and support open communication during the operation. The OR Briefing tool includes instructions (Table 1, page 352) and a checklist divided into three sections (Table 2, page 353). The surgeon leads the introduction (Section I), during which names and roles of team members are written on a whiteboard, and Section II reviews critical information (that is, confirming the correct operation, patient, surgical site, and administration of antibiotics).⁹ Section III prompts each caregiver type (surgeon, anesthesiologist, and nurse) for pertinent information related to his or her responsibilities for the

Table 1. OR Briefing Tool User Instructions**Problem Statement**

Communication failures were the root cause in OR sentinel events, wrong-site surgery, and other medical errors in the OR. Effective communication must be a primary component of any team-based activity, particularly surgical procedures.

Operating Room Teams

OR teams are composed of a group of multidisciplinary providers who may or may not be familiar with one another. In addition, each provider has discipline-specific priorities and constraints, such that any one team member is rarely aware or knowledgeable of important details involved in the case before arriving in the OR.

Purpose of Tool

The purpose of this tool is to provide a framework for communicating the necessary information that all OR team members will need to participate as effective members of the team and ensure a safe, successful procedure.

Who Should Use This Tool

Any member of the surgical team, often the surgeon, can initiate the briefing; however, representatives from surgery, anesthesiology, and nursing each have relevant information to share during this discussion.

When to Use This Tool

When all members of the team are in the operating room; after the patient is anesthetized.

procedure and articulation of any safety concerns. The OR Briefing does not substitute for the preoperative review, which is performed independently by each member of the team as a part of the regular evaluation and data collection before the procedure.

Tool Application to Quality and/or Safety

The OR Briefing provides a structure for communication and teamwork in the OR that is intended to identify and mitigate hazards. It includes the Joint Commission's time out to ensure that the correct patient and site or side are identified and the procedure is appropriate.⁹ In addition, it serves as a

memory and efficiency tool to avoid communication failures¹ and orchestrates the transfer of important information among team members. By promoting familiarity and removing barriers to communication, this tool allows staff to articulate concerns, make hazards visible, and plan ways to mitigate these hazards—all catalysts for safety.¹¹⁻¹⁴

Tool Application Settings

We have found that the principle and format of the OR Briefing can be applied to any medical procedure in any area of the hospital (for example, intensive care unit [ICU], inpatient unit, or outpatient clinic) and is currently being adopted to mitigate risk in many of these areas. For example, it could be used in the ICU before a central line insertion or in the emergency department before a chest tube insertion.

"Best" Application

The OR Briefing is best applied in the surgical suite after the patient is anesthetized, before administration of antibiotics, and just before incision.

How To

Table 1 is the user instructions for applying the OR Briefing tool in the OR.

Output

Table 3 (page 354) is an example of an OR Briefing. The surgeon takes the lead, stating her name and role, and prompts others to follow; the correct patient, site, and surgical procedure are reconfirmed. Several potential safety hazards are communicated to the team, including the patient's penicillin allergy, low hemoglobin level, and questionable intravenous access. To mitigate potential hazards, the anesthesiologist orders two units of red blood cells and inserts a new peripheral intravenous line. He also checks to ensure that there are no esophageal probes. The surgeon asks about any safety concerns and encourages everyone to let her know if they see a problem during the case. Finally, the nurse inventories the equipment and devices needed, and the anesthesiologist explains the esophageal bougie approach to ensure that everyone on the team is familiar with this procedure.

Table 2. OR Briefing Checklist

Implementation Instructions

Make sure all team members are in the OR suite and the patient is anesthetized. Just prior to starting the procedure, implement the checklist, beginning with the introduction of names and roles and work, in descending fashion, through the list.

I. Introduction of first names and roles which are written on the whiteboard

II. Review critical information

- Do we have the correct patient?
- Is the correct side or site marked?
- Has the procedure been agreed upon?
- Have antibiotics been given?

III. Identify and Mitigate Hazards

SURGERY: Discuss plans for the surgical procedure:

- Describe critical steps
- Provide team with pertinent information, including problems that may be encountered
- Ask team: If something were to go wrong with this procedure, what would it be, and how could we prevent the problem?
 - Risks during procedure, such as bleeding, fluid loss
 - Surgeon suggests, "If anyone has a concern during the case, please let me know."

ANESTHESIOLOGY: Discuss all relevant issues:

- Patient comorbid disease that will increase risk
- Aspects of surgery that increase risk, such as need for IV access
- Availability of blood products
- Interventions to prevent complication, such as myocardial infarction, surgical site infection

NURSING: Discuss all relevant issues:

- Are all necessary instruments available?
- Will any special equipment be considered?
- Plan for breaks (relieving nurse to introduce himself or herself when switching)

Results and Lessons to Date

The OR Briefing is currently being used at The Johns Hopkins Hospital as part of the Comprehensive Unit-based Safety Program (CUSP), as described elsewhere,¹⁵ to improve teamwork and a culture of safety. As part of CUSP, we implemented the Safety Attitudes Questionnaire, an annual survey, to assess improvements in safety and teamwork culture. We are in the process of collecting surveys before and after interventions. Preliminary findings indicate that front-line caregiver assessments of OR teamwork improved after OR

Briefings were implemented. Specifically, caregivers reported that it was easier to speak up if they perceived a problem, ask questions if there was ambiguity, and resolve conflicts appropriately (for example, not who is right but what is best for the patient).

Our preliminary research from our experiences with OR Briefings thus far has demonstrated that once the tool is implemented as part of a comprehensive safety program, caregivers recognize the critical importance of verbalizing the operative plan and planning for contingencies. For example, in one case, early in the morning

Table 3. Example of an OR Briefing

Scenario

It is 7:30 A.M. and the surgical team is assembling in Operating Room 2. The surgeon reviewed the patient record when she came in at 7 A.M.; the anesthesiologist has independently reviewed the patient's history. The surgeon and anesthesiologist have worked together on several occasions, but the nurse and circulator are unfamiliar to the surgeon. The surgeon anticipates that the laparoscopic gastric bypass will be routine but notes that the patient has a penicillin allergy.

Checklist: Section I

The surgeon takes the lead and introduces herself and her role and asks the other team members to provide their first names and roles. Team names and roles are written on the whiteboard in the room. The patient is correctly identified, the site marking is confirmed, and the name of the procedure is posted and double-checked for accuracy. The surgeon confirms that antibiotics have been administered, noting the patient's penicillin allergy.

Checklist: Section II

The *surgeon* continues by describing the surgical steps of the procedure and notes when potential problems could occur. She asks the team members

if they have any concerns about the patient's safety they want to discuss and states, "If anyone sees anything during the case that doesn't look right, please let me know."

The *anesthesiologist* discusses the patient's starting hemoglobin level of 7.4 and explains that there is only a type and screen for blood available in the blood bank. He also explains that there are two peripheral intravenous lines (one in each arm), but that they are tenuous. Therefore, the anesthesiologist plans to request two units of red cells and wants to insert a reliable peripheral intravenous line prior to incision. Finally, he reviews the esophageal bougie sizes and confirms that there are no esophageal probes in place, as they can interfere with esophageal surgery.

The *nurse* performs an inventory of laparoscopic ports, graspers, and endoscopy equipment with the surgeon and reviews esophageal bougies with the surgeon and anesthesiologist. She explains that one of her peers, who has some experience with laparoscopic surgery, will be taking her place in two hours.

The surgeon reiterates that team members should speak up if they see any problems, confirms that everyone is ready to proceed, and makes the incision.

of a procedure, the surgeon read the posted case and perceived a greater blood loss than expected by anesthesia. The surgeon raised this concern with the anesthesiologist, who was then able to better plan for blood product needs before the procedure began. In another case, additional instrumentation was needed that was not evident from the case posting. When the surgeon voiced this need during the OR Briefing, the nurse was able to prepare the instrumentation before the case started. In less than two minutes, expectations are set for all team members, which makes for a more predictable, rewarding, and safe surgical case for everyone, particularly the patient.

Other Applications

The OR Briefing tool could be modified and used at the time of patient transfer to another medical facility (for example, rehabilitation center) or during transfer of care

between providers. It can supplant the memory limitations of overworked staff and coordinate all the variables (for example, medications and allergies, history, social worker) necessary to ensure a safe and smooth transfer. As such, it can help organizations meet the Joint Commission's National Patient Safety Goal Requirement 2E, which states that facilities must implement a standardized approach to hand-off communications, including an opportunity to ask and respond to questions.¹⁶

We recommend adhering to the key aspects of the tool—identifying names and roles, reviewing key aspects of the procedure, and identifying potential hazards—when modifying the process and details of the tool to fit the local context. **I**

The authors would like to acknowledge J. Bryan Sexton, Ph.D., for his expertise in teamwork and safety culture. Dr. Sexton is the developer of the Safety Attitudes Questionnaire (SAQ) and was instrumental in refinement of the SAQ for the OR setting, administration of the survey, and data analysis.

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