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Safe Surgery Checklist

1. Before induction of anesthesia

- **Nurse & anesthesia provider verify:**
  - Patient identity / date of birth
  - Surgical site
  - Surgical procedure matches consent
  - Surgical site marked correctly
  - Anesthesia machine and medication inspection
  - Patient positioning
  - Patient warmer is in place
  - Blood availability
  - Two IVs/central access and fluids planned
  - Boots and/or anticoagulants in place
  - Complete anesthesia safety check
- **Anesthesia provider shares patient-specific information with team:**
  - Known allergies
  - Anticipated airway or respiration risk
  - Blood loss risk
  - Type of cross-match/screen
  - Hypothermia risk
  - Venous thromboembolism risk

2. Before skin incision

- **Entire surgical team:**
  - Everyone is present and ready for time-out
  - Each person states their name and role
  - Confirm patient's name
  - Confirm surgical procedure
  - Confirm site of incision
  - Confirm antibiotic prophylaxis within last hour
  - Discuss plan for re-dosing
  - Address anticipated critical events in Briefing:
- **Surgeon**
  - Operative plan
  - Critical and non-routine steps
  - Possible difficulties
  - Expected duration
  - Anticipated blood loss
  - Implants or special equipment needed
- **Anesthesia Provider**
  - Anesthetic plan
  - Airway concerns
  - Other concerns
    - Patient-specific concerns
- **Nursing Team**
  - Sterility (including indicator results)
  - Equipment issues or concerns,
  - Essential imaging available

3. Before patient leaves OR

- **Nurse verbally confirms with team:**
  - Name of procedure performed
  - Complete count of instruments, sponges and needles
  - Specimens labeled properly
  - Read out loud, specimen labeling and patient's name
- **Entire surgical team discusses:**
  - Equipment issues to address
  - Key concerns for patient management and recovery
  - Suggestions to make this case safer and more efficient

Source: *World Health Organization Patient Safety Checklist, Safe Surgery 2015 and the Health Research & Educational Trust. This checklist is not meant to be 100% comprehensive. True patient safety requires continuous monitoring and modifications.*

OR Safety Managing Risk & Quality with Timeouts and Checklists

Checklists are the rage in the OR and across medical care to help providers focus on each case to minimize errors and provide consistent quality care, safely.

Catching preventable problems in the operating room, such as wrong-site surgery, means keeping a watchful eye over the patient, from scheduling all the way to discharge[1]. Even small errors can penetrate multiple layers of a refined process and lead to serious events.

Checklists have their advantages, but they should never take the place of continued critical thinking and should never be considered 100 percent comprehensive. They are a *tool* and should be used as such. Checklists are helpful for continued quality improvement and should be considered living documents that need to be continuously adjusted per case, per incident and as awareness of opportunities for error (whether human, process or machine) come into light.

In 2008, the World Health Organization (WHO) created a Surgical Safety Checklist (available online by searching WHO patient safety checklists) to help decrease errors and adverse events, as well as to increase communication and teamwork in surgery. The checklist has been refined over the years. Today, the American Hospital Association, together with Health Research & Educational Trust, among others, have created 10 or more downloadable checklists to assist with continuous patient safety.

Case studies show leadership, communication and human factors are the top three contributors to surgical errors. Checklists can significantly reduce morbidity and mortality by reducing communication failures and medical complications. These studies also show that the checklist can support a culture of continuous quality improvement.

At-risk behaviors in the OR include:

- Lackadaisical approach to the checklist
- Full team not present and participating during timeouts
- Not checking the equipment
- Surgeon not present during patient preparation and draping
- Surgeon running two operating rooms simultaneously
- Multitasking
- Relying on memory about the pathology
- Unlabeled clear solutions on the back table
- Unsanitary conditions and not cleansing hands properly
- Using electrosurgical devices in an oxygen-rich environment
- Unannounced substitutions in the middle of a case
- Not accounting for all equipment and sponges prior to closing up the patient

Studies show that OR teams tend to have the highest compliance during patient ID, type of procedure and antibiotics, and the worst compliance with site of incision. Team member introductions also go by the wayside, taking place only half the time (most likely because teams already know each other).

It's important to note that the effectiveness of a checklist depends as much on the attention paid to each step within the checklist as it does the quality and thoroughness of the checklist itself. A strong culture of continuous quality improvement with a focus on 100 percent patient safety is vital. In the essence of pure patient safety, addressing each and every component of the checklist, as if it was the first time one has worked through it, is vital to the process.

Checklist implementation team

Include these roles when developing your own checklist:

- Administrator/Quality Improvement Officer
- Anesthesiologist and/or CRNA
- Circulating Nurse
- Scrub Technician
- Surgeon
- Others, as appropriate (perfusionists, biomedical engineers, anesthesia techs, PAs, pre-op nursing, etc.)

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Timeouts: Who Leads?

There are three timeouts prior to surgery: 1. The Block Timeout 2. The Anesthesia Timeout 3. The Surgical Timeout. Who leads is a matter of facility best practices and routine. “Anyone can initiate a timeout,” says Cindy Calder, MD, USAP-Texas in Houston. “Generally, the anesthesia provider initiates the Block Timeout; either the circulating nurse or the anesthesia provider initiates the Anesthesia Timeout—operating together as a team; and then the surgeon initiates the Surgical Timeout. The most important aspect of each timeout is that each member of the surgical team stop everything, be present and participate during each and every question as we review the checklist.”

Anesthesia Time Out

- ✓ Patient Name
- ✓ Date of birth
- ✓ Procedure
- ✓ Surgeon
- ✓ Allergies
- ✓ Aspiration risk
- ✓ Potential difficult airway
- ✓ Lines
- ✓ Need for blood and availability
- ✓ SCDSs (to prevent bloodclots)
- ✓ Suction
- ✓ Special monitoring
- ✓ Plan for normothermia

Dr. Calder notes that as surgical teams become familiar with each other throughout the course of the day, months, years, the formality of introducing names and roles may seem unnecessary or redundant; but, she says, it’s still a vital part of the process and becomes most important when equipment reps, students, fellows and others are present for a surgery.

“Going through each step of the checklist and giving each question its due is important for high-quality patient care. Each case is a person. And each person deserves our best. The checklist helps us achieve this optimal care with each case throughout the day, day in and day out.” says Dr. Calder.

Sources

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