

Chapter 02: Patient Safety and Risk Management

Test Bank

MULTIPLE CHOICE

1. Governmental and professional agencies and organizations, whether voluntary or involuntary, have a significant influence on patient safety policies in the healthcare setting. Select the agency or organization statement that presents a true reflection of its focus or purpose.
 - a. *The Joint Commission (TJC)*: Nonvoluntary bureau that tests healthcare institutions against evidence-based elements of performance
 - b. *Surgical Care Improvement Project (SCIP)*: Trends surgical site infection statistics
 - c. *American Society of Anesthesiologists (ASA)*: Professional organization of anesthesia providers and technologists
 - d. *World Health Organization (WHO)*: United Nations (UN)–based and supported authority on health throughout most of the world

ANS: D

The UN created WHO to function as its health oversight and coordination authority for all UN member nations who in turn have joined WHO. In 2004, WHO launched the World Alliance on Patient Safety, by which it began to examine patient safety in acute as well as in primary care settings relevant to all WHO member nations. WHO was created by and functions within the UN as the directing and coordinating authority for health throughout UN member nations.

REF: p. 21

2. Since its organization and establishment as a professional nursing association in the early 1950s, the Association of periOperative Registered Nurses (AORN) continues its endeavor to:
 - a. promote guidelines influencing patient safety.
 - b. create professional operating room (OR) nursing care delivery models.
 - c. interpret healthcare statistics critical to perioperative nursing care.
 - d. ensure risk reduction strategies are the foundation of perioperative education.

ANS: A

AORN provides an array of standards, recommended practices (RPs), guidelines, publications, videos, and tool kits that specifically address patient safety from the perioperative team's point of view.

REF: p. 22

3. A healthy 32-year-old nursing student is scheduled for excision of a left-sided subglottal cyst with frozen section and possible radical neck dissection. The preoperative verification process provides the opportunity to collect and verify information about the patient to ensure patient safety. Among the patient data that must be verified are:
 - a. emergency contact name.
 - b. laboratory and imaging results.
 - c. advance directive on file.
 - d. immunization records.

ANS: B

Preoperative verification process ensures that all relevant documents (e.g., the history and physical examination, surgical consent, required laboratory studies) and imaging studies (properly labeled and displayed) are available before the start of the procedure. Preprocedure verification is best conducted when the patient can be involved and should be completed before the patient leaves the preprocedure area.

REF: p. 24

4. A patient was positioned, prepped, and draped following general endotracheal anesthesia induction. The team assembled to perform the time-out as described in the WHO surgical checklist. Successful employment of the time-out can only be ensured when:
 - a. the time-out is initiated by the surgeon.
 - b. the entire team stops and focuses active attention together.
 - c. perioperative services has a physician champion and surgeon buy-in.
 - d. someone simultaneously checks the patient ID band.

ANS: B

All members of the team must introduce themselves by name and role and participate in sharing critical elements of care. The team includes the surgeon, anesthesia provider, and nursing staff, plus any allied or ancillary care providers contributing to the procedure when the time-out is performed.

REF: p. 23

5. When unexpected events occur that have, or could have, compromised patient safety, a systematic investigatory process takes place. Significant information is gained through this meticulous exploration. The primary motive for carrying out a root cause analysis is to:
 - a. establish cause and trends based on who was involved.
 - b. determine precisely what happened and why.
 - c. find out what needs to take place to prevent a recurrence of the event.
 - d. uncover factors that contributed to the environment and the event.

ANS: C

Root cause analysis is a systematized process to identify variations in performance that cause, or could cause, a sentinel event. The analysis phase of root cause analysis progresses from “why” questions to “what can be done to prevent this” questions that flow and ultimately result in an action plan. Root cause analysis concentrates on systems and processes, not individuals.

REF: p. 10

6. The National Patient Safety Goals (NPSG) are intimately aligned with the perioperative nursing-sensitive interventions that define the daily role functions of the perioperative nurse. In the early days of the twentieth century (1900s), as perioperative nursing evolved as a specialty of nursing practice, history was chronicled when someone remarked that:
 - a. “Surgical nurses are the glue that holds surgical care together.”
 - b. “A nurse is always there to be the patient’s advocate.”
 - c. “The primary role of the surgical nurse is to protect the patient from the risks of surgery.”
 - d. “*Primum non nocere* (first do no harm).”

ANS: C

Most perioperative nursing interventions are aimed at protecting patients from the unintended insults of regular surgical care and the risks inherent in surgery. Tightly coupled systems are most prone to accidents, and surgical suites, emergency departments, and intensive care units are examples of complex, tightly coupled systems.

REF: p. 17

7. A patient was transferred to the postanesthesia care unit (PACU) by the anesthesia provider and perioperative nurse. A hand-off report was given, using situation, background, assessment, recommendation (SBAR) format, to the accepting PACU nurse. The first element of information that should be presented in the hand-off report is:
 - a. the expected discharge criteria.
 - b. the names and roles of the nurse and anesthesia provider.
 - c. patient identification and procedure performed.
 - d. pain management orders.

ANS: C

All patient encounters should begin with patient identification verification. The receiving healthcare provider bears the responsibility for obtaining all of the information needed to safely care for the patient before the transferring staff leaves the area. Time for clarification and questioning must be provided. The purpose of hand-off communication and reports is to provide essential, up-to-date, and specific information about the patient. Standardized hand-off communication must include an opportunity to ask and respond to questions.

REF: p. 24

8. The OR is a danger-prone area for both patients and staff. Providing a safe environment of care for the patient involves identifying, mitigating, and managing the hazards inherent in surgical care. Choose the answer below that completes the blanks in this sentence: The risk of the surgical hazard of _____ can be mitigated through _____.
 - a. wrong patient, wrong site, and wrong side surgery; site marking and presurgical checklists
 - b. electrical and thermal burns; alcohol-free prep solution
 - c. surgical site infection; flash sterilization
 - d. surgical airway fire; fire extinguishers in every OR

ANS: A

Evidence shows that wrong site surgery not only can devastate the patient and family but also can impact the perioperative team adversely. All institutions accredited by TJC must follow the *Universal Protocol for Preventing Wrong Site, Wrong Procedure, Wrong Person Surgery*. The surgical team must agree that this is the correct patient and that the planned procedure is on the specified side and site. Marking the surgical site must be done so that the intended site of incision or insertion is clear and unambiguous.

REF: p. 24

9. Laparoscopic procedures that emergently convert to open procedures place the patient at risk for unintentional retained foreign objects (RFOs). What new and evolving risk reduction strategy could prevent RFOs and frustrating, time-consuming miscount adventures at the end of these procedures?
- Creating precounted laparotomy sets with only the few necessary instruments
 - Performing radiologic surveillance on all conversion procedures at closure
 - Counting all instruments including a laparotomy set before the laparoscopy
 - Replacing or tagging sponges and laparotomy instruments with radiofrequency identification (RFID) chips

ANS: D

New sponge-tracking technologies have emerged that enhance risk reduction strategies to prevent inadvertent retention of retained surgical items (RSIs). These include sequentially numbered sponges, bar coding, and RFID products. Researchers suggest that, given medical and liability costs of more than \$200,000 per incident, sponge tracking technologies can substantially reduce the incidence of retained surgical sponges at an acceptable cost. At a minimum, all facilities should have a “count” policy that reflects AORN’s *Recommended Practices for Sponge, Sharp, and Instrument Counts*.

REF: p. 30

10. A 49-year-old long-distance runner with dysfunctional uterine bleeding was scheduled for a hysteroscopy. During the procedure, sterile saline was used to expand the intrauterine compartment and enhance visualization. The perioperative nurse meticulously monitored fluid use and documented infiltration to the uterus and fluid collected as drainage from the uterus. The perioperative nurse was concerned that approximately 500 mL of fluid was unaccounted for and alerted the surgeon. The nurse’s motive for this surveillance was to:
- determine the potential for intravascular uptake of fluid or third spacing.
 - estimate the likelihood for fluid puddles on the floor, causing a fall hazard.
 - determine the potential for dependent pooling under the patient and subsequent electrical burn.
 - determine the potential for dependent pooling under the patient and sacral maceration.

ANS: A

Fluid and electrolyte imbalances may occur rapidly in the surgical patient and can be caused by numerous factors, including preoperative fluid and food restrictions, intraoperative fluid loss, or the stress of surgery. The surgical patient is unable to regulate body fluid and electrolyte requirements by normal activities of drinking, eating, excreting, and breathing unaided. It is therefore imperative that the perioperative nurse collaborate in monitoring the fluid and electrolyte status of the patient intraoperatively.

REF: p. 38

11. A 4-week-old frail neonate had a rectal exam and dilatation under anesthesia following prior surgery for imperforate anus. When the drapes were removed, the perioperative nurse noted an area of redness, swelling, and abrasions on the buttocks of the patient. The patient had been positioned supine in the frog-leg position for 20 minutes. The nurse who noted the skin condition had relieved the circulating nurse and quickly reviewed the perioperative record and patient chart, but had not seen the patient before positioning. Which of the following safety factors may have contributed to this event?

- a. Neonates have extremely delicate skin that is prone to injury.
- b. Preoperative skin condition was assessed and documented.
- c. The relieving nurse received a hand-off report from the circulating nurse.
- d. The patient was positioned and generously padded and supported by the team.

ANS: A

Leape and colleagues (1991) found that nearly half (48%) of adverse events were associated with surgery. Their results were consistent with those of earlier investigators, who had found half of all hospital-based, potentially compensable events (i.e., injuries from substandard care) arose from treatment in the OR. TJC findings from 2006 to 2012 (TJC, 2012b) are similarly consistent with those findings: Individual efforts of the best nurses, surgeons, and anesthesia providers, combined with a recognized need for teamwork, are not sufficient to prevent injury and are especially insufficient in the perioperative setting.

REF: p. 17

12. Weighing sponges is a valuable tool for meticulous calculation of blood and fluid loss when conducted correctly and used in appropriate circumstances. Select the response that correctly reflects the best practice in weighing sponges.
 - a. Calculate all sponge weight results at the end of the case.
 - b. Use the following to calculate loss: 1.5 g = 1.2 mL = 1.5 cc.
 - c. Consider saline-soaked sponges equal to blood-soaked sponges when urine is involved in the operative field.
 - d. Keep a running total blood loss calculated from available sponges during procedure

ANS: D

When blood loss estimates must be more accurate, weighing sponges provides a reliable means of judging the amount of blood lost and of gauging the need for transfusion. Add the amount of blood loss calculated from suction canisters to the total recorded from sponges to obtain accurate blood loss estimates.

REF: p. 35

13. During a particularly long and bloody spinal fusion procedure for scoliosis, the perioperative nurse collected, monitored, and spun down the blood collected in the autotransfusion cell salvage system. She was able to provide the anesthesia provider with three units of packed red blood cells (PRBCs) by the end of the procedure. As the team calculated the estimated blood loss (EBL) as wound closure ended, the perioperative nurse also:
 - a. added the total from the suction canister.
 - b. excluded the suction canister since cell salvage returned blood to the patient.
 - c. included suction content, subtracting irrigation amount used.
 - d. requested hemoglobin and hematocrit levels to quantify EBL.

ANS: C

Measure blood in the suction canister(s) at regular intervals, subtracting the amount of any irrigating solution used.

REF: p. 36

14. As the pediatric cardiac team prepared to cannulate for a coarctation repair, their neonate patient presented with a sudden dysrhythmia, ectopy, and failure to respond to digitalis. Point-of-care serum electrolyte measurements revealed low potassium, sodium, and magnesium levels. On anesthesia induction, only 35 minutes earlier, these values were at normal levels, and the patient status was secure. The electrolyte levels were treated to normal and the patient was cannulated and placed on cardiopulmonary bypass. As the procedure continued the team pondered the cause to prevent a recurrence. What possible event could have caused, or contributed to, this loss of electrolytes?
- Unreported patient diarrhea before surgery
 - Unnoticed arterial bleeding from disconnected arterial line
 - Sterile water from back table switched with heparinized saline
 - Missed breast-feeding 2 hours before procedure

ANS: C

Intravascular infusion of a hypotonic solution would cause hypokalemia, hyponatremia, and hypomagnesemia. Signs and symptoms of hypokalemia include cardiac effects, such as ectopy, dysrhythmias, conduction abnormalities, and altered sensitivity to digitalis. Sterile water is a hypotonic solution.

REF: p. 39

15. Informed consent is both a requirement and a patient right. The perioperative nurse's responsibility in terms of informed consent is to:
- obtain verbal consent when the written consent is unavailable.
 - ensure that the consent is in the medical record, correct, signed, and witnessed.
 - withhold preoperative medication until the consent is witnessed.
 - review the procedure and expected outcome with the patient.

ANS: B

On the patient's arrival in the OR, the circulating nurse and anesthesia provider are responsible for verifying that documentation of the consent is in the chart and is correct, properly signed, and witnessed before the administration of anesthesia.

REF: p. 44

16. Which of the following situations requires informed consent from the patient/family?
- Urgent/emergent surgery
 - Organ procurement
 - Selection of cast color
 - Selection of case cart picklist

ANS: B

Except in emergencies, surgical procedures should not be performed without documentation of the patient's consent on the chart. The patient also must be informed who will perform the procedure and when practitioners other than the primary surgeon will perform important parts of the procedure, even when under the primary surgeon's supervision.

REF: p. 42

17. Select the appropriate order for administering blood and blood products.
- Verify informed consent for blood, separate blood bag from identification slips,

- sign slips, verify ID numbers and expiration dates with second licensed person, verify patient with blood tag and requisition slips
- b. Verify informed consent for blood, verify patient identification and blood type and unit numbers against blood tag and requisition slip with second licensed person, sign slips
 - c. Check blood bag for damage, clots, and bubbles with second licensed person; identify patient and blood expiration date against all slips and tags; remove slips and tags from blood bag
 - d. Verify patient identification, blood unit number, and blood type between patient chart and blood tags and slips; check blood for bubbles and clots; spike blood bag with filtered tubing; sign blood slip while still on blood bag; remove when bag is infused without reaction

ANS: B

A patient having an elective surgical procedure for which blood has been requested should not be anesthetized without verification that the requested blood products are typed, cross-matched, and available and that informed consent to receive blood products has been documented. Before administration of any blood product, the circulating nurse and anesthesia provider (or a second licensed individual) must confirm the following: (1) The unit number on the blood product corresponds with the unit number on the blood requisition. Facilities using electronic records will return a “transfusion card” or “cross-match card” as verification that this unit can be given to this patient in lieu of the requisition. (2) The name, birth date, and number on the patient’s ID band agree with the name, birth date, and number on the blood product. (3) The patient’s name on the blood product corresponds with the name on the requisition. (4) The blood group indicated on the blood product corresponds with that of the patient. (5) The date and time of expiration has not been reached. (6) The blood product bag is free of leaks, damage, or signs of possible bacterial contamination (e.g., presence of fine gas bubbles, discoloration, clots, or excessive air in the bag). Both individuals who verify this information must sign the slip that comes with the blood product.

REF: pp. 36, 38

18. Proper care and handling of surgical specimens is imperative for correct diagnosis, treatment, and prognosis planning of the patient. Select the response that best reflects correct specimen care and handling.
 - a. Label consecutive specimens in alphabetical order for laboratory efficiency.
 - b. Send all specimens to the laboratory together as one pickup, including frozen sections.
 - c. Avoid placing specimens for frozen section in formalin.
 - d. Neutralize formalin/formaldehyde spills with glycerin sulfate, and call the hazmat team.

ANS: C

Specimens for frozen section should be sent fresh (e.g., without fixatives [formalin/formaldehyde]). Specimens for frozen section usually are placed on Telfa or into a dry specimen container. They are never placed in saline solution or formalin, nor are they ever transported on a counted sponge. They should be sent immediately to the laboratory. Formalin, a combination of methanol, water, and formaldehyde, is frequently used to preserve specimens if they are not taken to the laboratory immediately.

REF: pp. 32-33

19. Proper handling of specimens is crucial for patient safety. What is the most serious negative outcome that could occur as a result of the loss, mislabeling or mishandling of a surgical specimen?
- The medical facility could be sued for negligence.
 - The patient might be unsatisfied with the treatment received.
 - The patient's condition could be misdiagnosed.
 - The medical facility's reputation could be damaged.

ANS: C

A mislabeled specimen may result in misdiagnosis and consequently inappropriate treatment of the patient. Communication errors pose significant risks to patients in the misidentification of a surgical specimen before its arrival in the pathology laboratory.

REF: p. 32

20. During a simulation on intraoperative counts in which peer "teams" competed, Team 2 was determined to have demonstrated best practice in performing surgical counts. This team, whose members included a RN, CNOR, and CST, reviewed the unit practice standard and current AORN evidence-based guidelines. Select the appropriate order of counts that they demonstrated to their peers.
- The CST counted the back table, Mayo stand, and sterile field, while the RN counted the sponge bags and the items in the kick bucket.
 - The RN and CST counted aloud together as RN pointed to the sponges in the sponge bag and then as the CST touched each sponge, moving from back table to Mayo stand to sterile field.
 - The RN and the CST each counted aloud as the CST pointed to items on the floor and kick bucket, and back table. To expedite the count, the RN counted aloud as she pointed out the sponges in the sponge bag while the CST completed the back table.
 - The surgeon searched the wound as the RN and the CST counted the floor, sponge bag, dip basin, kick bucket, back table, Mayo stand, sterile field, and the sponge wrapped around the new ostomy.

ANS: B

As the first layer of closure begins, the scrub person and circulating nurse count all items consecutively in a standardized routine (e.g., proceeding from the sterile field to the Mayo stand to the back table and then off the field, or vice versa). The count is done audibly, visibly, and concurrently.

REF: p. 30

21. As the placenta was delivered and the uterus prepared for closure, the scrub person gathered up all of the sponges and dropped them in the kick bucket while the circulating nurse frantically stuffed them into sponge bag pockets. Sharps, sponges, and instrument counts were correct on closure of the uterus and again on closure of the peritoneum. On final sharps and sponge counts before skin closure, a needle was missing. Select the appropriate order of corrective action for the team.
- Count and verify suture packs, dump and count packs in sterile suture bag, check floor, check back table and Mayo stand, notify surgeon, and check linen and clean

and red trash bags. Open clean trash bags tied up in the corner from sterile table setup.

- b. Recalculate numbers on white board, check back table and Mayo stand, dump and check linen and trash, verify suture packs, notify team of possible missing needle.
- c. Notify team of needle discrepancy; recount needles on and off sterile field and white board; check sterile field, Mayo stand, and back table; check floor, under OR table, bottoms of shoes, pants' cuffs, and sterile sleeve cuffs; check sponge bags and kick bucket.
- d. Recount needles on and off sterile field, check sterile field and Mayo stand and back table; check floor, wait to notify team until miscount verified; check red bag trash, compare empty suture packs, total number on white board.

ANS: C

All incorrect closure counts should be reported immediately, and attempts made to resolve every discrepancy. If the count remains unresolved, the circulating nurse again notifies the surgeon of the unresolved count. A search of the surgical wound, field, floor, linen, and trash is made for the missing item (thus, the rationale that linen and trash not leave the OR until the end of the procedure). All personnel direct their immediate attention to locating the missing item.

REF: p. 32

22. Early on, during the preliminary sponge count on closure of a repair of a ruptured abdominal aortic aneurysm, the circulating nurse was unable to account for 2 lap sponges. He had meticulously maintained accountability for all sponges and instruments discarded from the sterile field and bagged each sponge carefully. He immediately turned and addressed the entire team in a clear voice. Select the appropriate communication that the circulating nurse must employ during this count discrepancy.
- a. "Stop everything. I'm missing a couple of sponges. They are not in the trash or back table. Check the wound."
 - b. "I think you are missing 2 sponges. Shall I call x-ray while the scrub person checks her table again? Doctor, please check the incision."
 - c. "We have a count discrepancy. We started with 70 sponges and find only 68. We are missing 2 lap sponges. Everyone, please check your areas."
 - d. "I've called x-ray because we are short 2 sponges. I've called the charge nurse to get someone to help me check the trash and linen. The rapid response team is on their way."

ANS: C

Note that the circulating nurse used SBAR format to alert the team of the critical situation. All incorrect closure counts should be reported immediately and attempts made to resolve every discrepancy. If the count remains unresolved, the circulating nurse again notifies the surgeon of the unresolved count. A search of the surgical wound, field, floor, linen, and trash is made for the missing item (thus, the rationale that linen and trash not leave the OR until the end of the procedure). All personnel direct their immediate attention to locating the missing item. If it is not found, an x-ray film may be taken and read by the radiologist or surgeon as specified in institutional policy.

REF: p. 32

23. A patient was presented with the prepared informed consent form during the discussion with her surgeon concerning her scheduled vaginal-assisted laparoscopic hysterectomy. She demonstrated and verbalized that she understood all of the tenets of the procedure, risks, expected outcome, complications, and procedural process. Before she signed the consent form, she informed the surgeon that she did not want any medical students or surgical residents performing any parts of the procedure other than assisting and did not want any photographs of her body taken. The surgeon agreed, and she crossed out those portions of the form and initialed them before she signed. The patient was exercising her:
- understanding and rights under the Patient Self-Determination Act (PSDA).
 - right to informed consent.
 - autonomy to protect herself from negligence and malpractice.
 - hope that everyone would honor the Health Insurance Portability and Accountability Act (HIPAA).

ANS: B

Every adult has the right to determine what happens to his or her body. In perioperative practice settings, these rights are protected via informed consent processes for the procedure itself and/or for any research interventions, and via patient wishes expressed in advance directives for healthcare. The patient also must be informed who will perform the procedure and when practitioners other than the primary surgeon will perform important parts of the procedure, even when under the primary surgeon's supervision.

REF: p. 42

24. A female patient with end-stage pancreatic cancer was admitted from hospice for a celiac plexus block to treat intractable pain. She had a Whipple procedure 18 months earlier and enjoyed a good quality of life until 3 weeks ago. She wanted to be able to complete "getting her things in order" and saying good-bye to her friends and family while enjoying her last days pain-free. The patient insisted that her Do Not Resuscitate (DNR) status NOT be rescinded. She was conscious and competent and knew what was best for herself. The patient was taking full advantage of what provision for her care?
- PSDA
 - Advance directives
 - Informed consent
 - PSDA and advance directives

ANS: D

Many individual states had statutes that allowed patients to dictate their future healthcare wishes in a legally recognized fashion if they were unable to do so when a life-threatening situation arose. Then, in the wake of the first U.S. Supreme Court case to deal with the issue—*Cruzan v. Director, Missouri Department of Health*, 497 U.S. 261 (1990)—the U.S. Congress in 1991 passed the PSDA to extend legal protection to all U.S. citizens and residents. Under the Act, patients have the legal right to accept or refuse medical treatment, including resuscitation, even if refusal will likely result in death.

REF: p. 44

25. Researchers in the area of patient safety have proposed an emphasis on transparent systems, asserting that adverse patient events cannot be effectively prevented until the legal and professional licensure systems discontinue their focus on individual error and blame. In order for a transparent system to exist and thrive, it requires:

- a. human factor reliance.
- b. confidentiality.
- c. open reporting.
- d. disciplinary guidelines.

ANS: C

They urged an emphasis on transparent systems that required open reporting, investigation, innovation, and dissemination. The aviation and nuclear systems' parallel examination of human factors served as models for ideas that led to relative success in preventing injury attributable to human error.

REF: p. 16

26. A key factor in promoting patient safety is:
- a. communication and teamwork.
 - b. adequately compensating healthcare workers.
 - c. the standardized checklists.
 - d. continuous monitoring.

ANS: C

Using surgical safety checklists is most important in promoting patient safety. Data suggests that checklist use may also improve adherence to lifesaving processes during OR patient crises such as cardiac arrest and massive hemorrhage. Studies confirm tangible improvements in safety outcomes after implementation of a checklist and found a nearly 75% reduction in failure to adhere to critical steps in management of a simulated surgical crisis.

REF: p. 24

27. Which nonprofit organization improves patient care through applied research into effectiveness and safety of devices, drugs, procedures, and processes?
- a. The Joint Commission (TJC)
 - b. National Institute for Occupational Safety and Health (NIOSH)
 - c. Consumers Advancing Patient Safety (CAPS)
 - d. Emergency Care Research Institute (ECRI)

ANS: D

ECRI is a nonprofit organization dedicated to using the discipline of applied scientific research to discover which medical procedures, devices, drugs, and processes, including fire safety, best improve patient care.

REF: p. 17