County of Los Angeles
Department of Health Services

PERIOPERATIVE SERVICES

Direct/Indirect Care
Inpatient and Ambulatory Care

Annual Core Competency
Self-Study Guide
2012
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This study guide is designed to update the nursing department workforce member on important issues that assist them in providing safe and competent patient care. The study guide is divided into three sections.

Section I – 2012 National Patient Safety Goals, preventing surgical site infection by implementing the principles of aseptic technique, electrosurgical unit (ESU) and fire safety.

Section II – Patient Safety includes competencies relating to the following: Positioning of the surgical patient and recognizing and providing care for a surgical patient experiencing Malignant Hyperthermia.

Section III – Performance Stations include the following competencies: Admitting a Patient Into the OR, Surgical Hand Scrub, Gowning & Gloving, and Sponges, Sharps, and Instrument Count.

This packet is designed to provide the licensed/unlicensed perioperative workforce member the information necessary to prepare for DHS annual core perioperative competency testing.

The following table describes which workforce members must complete the testing requirements for the peri-operative nursing department licensed/unlicensed direct care providers.

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<th>Workforce Member</th>
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2012 DHS Annual Core Competency Self-Study Guide, Perioperative Services
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| **Section II** | | |
| Malignant Hyperthermia | | |
| Positioning of the Surgical Patient | | |

| **Section III** | | |
| Surgical Counts | | |
| Gowning and Gloving | | |
| Surgical Hand Scrub | | |

Direct Care Surgical Technicians and LVNs working in the Operating Room or in Labor & Delivery

These staff will complete the Inpatient Non-direct care unlicensed staff competencies

Non-Direct Care unlicensed staff working in the OR or in Labor and Delivery patient care areas including:

- Unit clerks
- Nursing Attendants
- Student Nurse Workers
- Hospital Medical Assistants
- Secretaries
- Student workers
- Unit Support Associates (e.g., Escort)

*These staff items DO NOT function in the Operating Room or L&D surgical unit. They may carry out support duties.

**NOTE:**

1. RNs and LVNs identified in the above table working in Labor and Delivery will complete the inpatient and perioperative competencies.

2. RNs identified in the above table working in the Operating Room complete the perioperative competencies.

3. If your position is not listed in the table or you are not sure in which category you belong, consult your immediate supervisor.
INSTRUCTIONS

1. Review the content in this packet as applicable to your job requirements.
2. Review the learning activities as described on the applicable clinical competency descriptions.
3. Clinical Nurse Specialists, Clinical Nurse Educators, Nursing Instructors, and Nurse Managers are available to answer any questions you may have regarding the content.
SECTION I
PATIENT SAFETY

Objectives:

Upon completion of this section, the workforce member will be able to:

1. State the Purpose of National Patient Safety Goals
2. Identify the 2012 National Patient Safety Goals for Hospitals and Ambulatory Surgery Centers (e.g., perioperative).
3. Describe nursing roles and responsibilities related to implementation of National Patient Safety Goals
4. Define Aseptic Technique
5. Describe Principles of Aseptic Technique
6. Apply Principles of Aseptic Technique to the Perioperative Environment

I. Introduction to 2012 National Patient Safety Goals

A. The National Patient Safety Goals were implemented in 2003 to reduce the risk of adverse events and improve patient safety. There are many strategies that healthcare facilities may use to meet these goals. Nursing staff plays a critical role in implementing these strategies in order to ensure patient safety in the healthcare setting.

B. The Joint Commission develops, reevaluates, and revises the National Patient Safety Goals (NPSGs) on an annual basis. While some goals are revised or deleted, others become part of The Joint Commission Standards. Since January 1, 2003, The Joint Commission has required healthcare organizations to comply with the NPSGs (The Joint Commission, 2010). The NPSGs are evidence-or expert-based. They are developed by The Joint Commission to reduce the risk of adverse events and improve patient safety.

C. For 2011 The Joint Commission revised four elements of performance to allow healthcare organizations to adopt practices that reflect current medical knowledge and science and are supported by authoritative sources, such as articles in peer reviewed journals or professional organizations (The Joint Commission, 2010). Because The Joint Commission requires that these elements be validated by legitimate sources, surveyors will investigate the sources used to guide practice during their onsite visits. There is one new NPSG for 2012 for hospitals, to “implement evidence based practices to prevent indwelling catheter-associated urinary tract infections (CAUTI)” (The Joint Commission, 2011).

II. The 2012 National Patient Safety Goals for Hospitals and Ambulatory Surgery Centers include the following:

A. Improve correct identification of patients
   1. Using two patient identifiers [NPSG.01.01.01].
   2. Label containers (specimen, blood, etc) while in the presence of the patient & surgical team.

B. Improve the safety of using medications [NPSG.03.04.01]
   1. Labeling medications, medication syringes, cup and basins and other solution on and off the sterile field.
   2. All medications and solutions both on and off the sterile field and their labels are reviewed by the entering and exiting staff responsible for management of medication.

C. Reduce the risk of healthcare associated infections
   1. Meeting hand hygiene guidelines.
   2. Implement evidence-based practices to prevent indwelling catheter-associated urinary tract infections (CAUTI).
D. Universal Protocol
   1. Conducting a pre-procedure verification process.
   2. Marking the procedure site.
   3. Performing a time-out.

III. Safety Goal Guidelines
Healthcare organizations use a variety of strategies to successfully meet the NPSGs. The Joint Commission monitors compliance to ensure the NPSGs are incorporated into practice. In this section, strategies to meet the NPSGs are presented. Additionally, each facility has specific policies and procedures in place to meet these goals. Workforce members must follow facility policy.

A. Improve the Accuracy of Patient Identification
   1. The purpose of this goal is to accurately identify the patient and ensure that the right patient receives the right service or treatment.
   2. Use at least two patient identifiers when providing care, treatment, and services. The following are examples of strategies that may be implemented to improve patient identification.
      a. Healthcare providers must use at least two patient identifiers prior to any treatment, procedure, medication, clinical/surgical intervention, or patient encounter.
      b. Patient identifiers include Patient's Name and one of the following per facility policy:
         1. Medical record unit number (MRUN)
         2. Date of birth
      c. Each patient is issued a patient identification card and/or band once identification is confirmed. The card/band will have the patient's full name (last name, first name), date of birth, (month, day, year in numerical format), and permanent MRUN.
      d. Perioperative staff will verify:
         1. Patient identification band/card with name, MRUN, date of birth.
         2. If the facility does not use a medical identification card/plate, staff may verify patient identification using the following documents per LA County DHS policy:
            a. Valid California Driver’s license.
            b. Valid Department of Motor Vehicles identification card.
            c. Government issued identification card with the patient’s or legally responsible relative’s picture and address (i.e., Matricula Consular, etc.), passport, or school identification.
               NOTE: Legally responsible relative means responsible relative as defined in California Code of Regulations, Title 22, Section 50351.
      e. Patients with the same or similar names should be housed in separate rooms or wards/units whenever possible. A "name alert" sticker should be placed on the patient’s medical record, medication administration record, and chart of patients with similar names or John Does. It is highly recommended that caregivers communicate “name alert” during the hand off communication process.
      f. If the patient requires emergency admission/evaluation prior to the identification process, a temporary medical record (temporary name and MRUN) is issued.
      g. After delivery, mother and infant should not be separated until they are identified and identification bands are applied to each.
      h. Label containers (specimen, blood, etc) while in the presence of the patient and surgical team.

B. Improve the Safety of Using Medications
   1. Label all medications and other solutions on and off the sterile field in perioperative and other procedural settings.
      a. Medications and solutions in unlabeled containers are unidentifiable. Therefore, medications and solution removed from their original containers must be labeled in order to prevent medication errors, including medications and solutions placed in syringes, medicine cups, and basins.
      b. Labeling must occur when any medication or solution is transferred from the original packaging to another container, but not immediately administered by the individual preparing it. All original
medication/solution containers must remain available for reference in the perioperative/procedural area until the procedure is completed.

c. Medications or solutions that are found unlabeled must be immediately discarded.

2. Label each medication or solution as soon as it is prepared.
3. Verify all medication or solution labels verbally and visually.
4. Labels must include – Medication name, strength, quantity, diluent, and volume (if not apparent from the container).
5. Immediately discard any medication or solution found unlabeled.

C. Universal Protocol
   1. The universal protocol is intended to achieve the goal of preventing wrong site, wrong procedure, and wrong person surgeries by conducting pre-procedure verification, marking operative sites, and performing a "time-out" for all surgical and non-surgical invasive procedures.
   2. Conducting a pre-procedure verification process:
      a. The pre-procedure verification process is designed to ensure all relevant documents (consent, history and physical, etc.), studies/diagnostic results, and implants/devices are available and have been reviewed prior to the start of the procedure.
      b. Pre-procedure verification is an ongoing process of information gathering and verification beginning with the determination to do the procedure, continuing through all settings and interventions involved in the preoperative preparation, up to and including the "time-out" just before the start of the procedure. This process must be documented on a pre-procedure checklist.
      c. Missing information or discrepancies must be addressed before starting the procedure.
   3. Marking the procedure site:
      a. The operative site must be marked to clearly identify the intended site of incision or insertion when there is more than one possible location for the procedure and when performing the procedure in a different location would negatively affect safety. Special intraoperative imaging techniques may be used for locating and marking the exact vertebral level for spinal procedures, in addition to preoperative skin marking of the general spinal region.
      b. If at all possible, the patient should be involved during the marking of the procedure site.
      c. For procedures involving right/left distinction, multiple structures (such as fingers and toes), or multiple levels (as in spinal procedures), the intended site must be marked such that the mark will be visible after the patient has been prepped and draped.
   4. Performing a time-out:
      a. A "time-out" is a final verification of the correct patient, procedure, site, and implants (as applicable). The "time-out" procedure is documented according to institutional policy.
      b. In order to ensure active communication among all members of the surgical/procedure team, a "time-out" is conducted in a "fail-safe" mode, i.e., the procedure is not started until any questions or concerns are resolved.
      c. All healthcare team members involved in the procedure must be part of the “time-out” and may not perform other duties during the “time-out” procedure.

D. Reduce the Risk of Healthcare Associated Infections
   1. Meet hand hygiene guidelines by washing hands with soap and water or using an alcohol-based hand product before and after touching the patient or the patient’s environment.
   2. Implement evidence-based practices to prevent indwelling catheter-associated urinary tract infections (CAUTI).
      a. Limit indwelling catheter use and duration.
      b. Use aseptic technique for preparation of the site, equipment and supplies.
      c. Secure catheters in a manner that does not obstruct urine flow and drainage.
      d. Maintain the sterility of the urine collection system and replace when necessary
E. Reduce the Risk of Healthcare Associated Infections: Monitor Temperature and Humidity
   1. Air in the perioperative environment contains microbes carrying dust, lint, skin particles, and respiratory droplets. The number of microorganisms in the air in the operating room or procedure room is in direct proportion to the number of people moving in and around the room. Healthcare workers may be colonized with bacteria which may be transmitted by air and lead to outbreaks of surgical site infections.
   2. Heating, air conditioning and ventilation systems are designed to dilute and remove contaminants from the air and control the pattern of airflow within the operating room. Properly functioning systems carry airborne contaminants away from the sterile field and removes them through the exhaust ducts. This decreases contamination of the sterile field and minimizes the risk of infection to the patient.
   3. Temperature and humidity should be monitored and recorded. The Association of periOperative Registered Nurses (AORN) states that the relative humidity in the perioperative suite, including the operating room and recovery areas, should be maintained between 30% and 60% (AORN, 2011).
      a. Low humidity increases the risk of fire in the perioperative environment due to the risk of electrostatic charges and use of flammable agents.
      b. Low humidity increases the potential for dust in the perioperative environment.
      c. High humidity increases the risk of microbial growth and potential for surgical site infection.
   4. The Association of periOperative Registered Nurses (AORN) states that the temperature in the operating room should be maintained between 68 degrees F and 73 degrees F (AORN, 2011).

IV. Preventing Surgical Site Infection: Aseptic Technique
   A. The best practice to decrease the risk for surgical site infection and other infections acquired in the operating room setting is adherence to the principles of aseptic technique.
      1. Aseptic technique is a set of practices and procedures performed under controlled conditions to minimize contamination by infectious microorganisms (pathogens).
      2. Asepsis refers to the absence of pathogenic organisms, while aseptic technique refers to the practices which prevent contamination with microorganisms.
      3. All members of the surgical team share the responsibility for reducing the number of microorganisms in the operating room to the lowest level possible.
      4. Patients undergoing surgery are at risk of infection from themselves, surgical personnel, instruments, and supplies, and the surgical environment.
   B. Practice of aseptic technique before and during surgical procedures reduces the risk of postoperative surgical site infection (SSI).
      1. These practices include:
         a. Hand hygiene
         b. Surgical scrub
         c. Patient skin preparation
         d. Use of protective barrier for the patient (drapes)
         e. Use of protective barrier for the surgical team (surgical attire)
         f. Use of sterile technique to prepare and maintain a sterile field
      2. The Center for Disease Control and Prevention (CDC) Guidelines for Prevention of Surgical Site Infection states that rigorous adherence to the principles of aseptic techniques by the surgical team and other personnel are the foundation to reduction of SSIs.

V. Description of Principles of Aseptic Technique
   A. This rigorous adherence to the principles of aseptic techniques during the perioperative period occurs when everyone in the operating room environment develops a surgical conscience.
      1. Surgical conscience is evidenced by consistently exhibiting ethical behavior, promoting patient safety, and doing the right thing even when no external monitors are present.
      2. It is an inner commitment to adhere strictly to aseptic practice, to report any break in aseptic technique, and to correct any violation of aseptic technique, whether or not anyone else is present or observes the violation.
B. The skin is the first line of defense against the entry of microorganisms into the body. When an incision is made, a portal of entry for pathogenic organisms is created, placing the patient at risk of infection.
   1. Leave hair at the operative site unless it interferes with the intended incision. Clipping is the preferred method of hair removal as clipping decreases the potential for nicks and scratches in the skin.

VI. Application of Principles of Aseptic Technique to the Perioperative Environment
A. Preparation of scrub personnel:
   1. Preparation for surgery includes wearing appropriate operating room attire. Scrubbed personnel must scrub their hands and arms with a facility-approved antimicrobial detergent or use an approved brushless, waterless surgical hand preparation prior to donning sterile gowns and gloves.
   2. The surgical scrub renders the skin of the surgical team member surgically clean and leaves an antimicrobial residue on the hand and arms to prevent growth of microbes for several hours.
   3. The scrub person should don their sterile gown and gloves on a sterile area away from the main instrument table to prevent contamination of the field.
   4. Once the gown is donned, the front of the gown is considered sterile from the chest to the level of the sterile field. Gown sleeves are considered sterile from two inches above the elbow to the cuff, circumferentially.
   5. Scrubbed persons must keep hands at or above waist level and in sight at all times. The hands must not be tucked under the arms as the armpit area is not considered sterile.
   6. Sterile gloves that become contaminated should be changed as soon as possible.

B. Preparation and maintenance of the sterile field:
   1. Sterile fields should be prepared as close as possible to the time of use. The potential for contamination increases with time because dust and other particles present in the environment settle on horizontal surfaces over time.
   2. A sterile field should not be covered because it is difficult to remove the cover without contaminating the sterile field.
   3. Once a sterile field is created it should be monitored by all team members for possible contamination.
   4. The scrub person drapes an unsterile table toward self first to avoid leaning over an unsterile area. Cuffing drapes over gloved hands prevents contamination.
   5. Use non-perforating devices to secure tubing and cords and prevent them from sliding to the floor.
   6. If a sterile drape is accidentally torn or perforated, the openings can allow microorganisms to invade and contaminate the field.
   7. Anything hanging over the edge of a sterile field is considered unsterile, such as tubing or the table drape.
   8. Items used within a sterile field should be sterile and only sterile items touch sterile surfaces. All items added to the sterile field must be sterile. Package integrity and sterility indicators must be verified before items are placed onto the sterile field.
   9. Additional sterile supplies are brought to sterile team members by the circulator, who opens sterile packages and ensures a sterile transfer to the field.
   10. When opening a wrapped package for the sterile field, the unscrubbed person should open the wrapper flap that is furthest away first and the wrapper flap that is the closest last.
   11. If the sterility of any item is in doubt, it is considered contaminated and discarded.
   12. Scrubbed persons touch only sterile items and areas and remain as close to the sterile field as possible. Scrubbed persons do not wander about or leave the room.
   13. Scrubbed persons face the sterile field. When scrubbed persons move or change places with each other they do so back to back or face to face and maintain a safe distance apart to avoid contamination.
   14. Unsterile persons should maintain a distance of at least one foot from the sterile field. The field should be faced and observed when passing to avoid touching. Unsterile persons never walk between two sterile fields.
   15. The circulating nurse must minimize all activity near the sterile field to avoid creating air currents which may cause contamination of the field.
Study Questions

Select the best answer to each question.

1. All of the following are 2012 National Patient Safety Goals EXCEPT:
   a. Improve the accuracy of patient identification by using one patient identifier
   b. Improve the safety of using medications by labeling medications and solutions
   c. Reduce the risk of healthcare associated infections by following hand hygiene guidelines
   d. Improve the accuracy of patient identification by labeling specimens while in the presence of the patient

2. Label each medication or solution:
   a. On and off the sterile field
   b. As soon as it is prepared (e.g., mixed)
   c. Transferred from the original packaging to another container, but not immediately administered
   d. All of the above

3. Which of the following is a component of the Universal Protocol?
   a. Hand off communication
   b. Pre-procedure verification
   c. Ensuring post-operative orders are completed prior to surgery
   d. Administering broad spectrum antibiotics 24 hours prior to surgery

4. Which of the following actions is a method that may be used to improve medication safety?
   a. Drawing up multiple unlabeled syringes to save time
   b. Storing look-alike sound-alike medications in the same location
   c. Pre-labeling syringes to save time during medication preparation
   d. Labeling all medication containers and other solutions on and off the sterile field in perioperative and other procedural settings

5. The goal of a surgical hand scrub includes:
   a. Temporarily halting the secretory activity of the skin
   b. Total elimination of microbes to render the skin sterile
   c. Leaving an antimicrobial residue on the hand and arms to prevent growth of microbes for several hours
   d. All of the above

6. The following practice maintains the sterile field:
   a. The scrub person dons his gown and gloves on the main instrument table
   b. The surgical resident tucks his gloved hands under his arms to avoid contamination
   c. The circulator monitors the sterile field while the scrub person performs hand scrub
   d. Sterile team members change position facing face-to-back while maintaining retraction

7. Low humidity in the perioperative environment:
   a. Increases the risk of surgical fire
   b. Decreases the risk of surgical fire
   c. Increases the risk of microbial growth and surgical site infection
   d. None of the above
PATIENT SAFETY
Answers to Study Questions

1. a  2. d  3. b  4. d  5. c  6. c  7. a

If you answered all of the questions correctly, go on to the next section. If you missed one or more, read the content again and repeat the study guide questions.

REFERENCES


BIBLIOGRAPHY


ELECTROSURGICAL UNIT (ESU) AND FIRE SAFETY IN THE PERIOPERATIVE SETTING

Objectives:
1. Identify principles of ESU usage.
2. Describe proper care and use of ESU in a manner that minimizes the potential for injuries.
3. Identify ignition sources when ESU is being used
4. Identify correct placement of the return electrode
5. Describe contributing factors that can cause surgical burns/fire from ESU usage

ESU Units
I. Proper care and handling of electrosurgical equipment is essential to patient and personnel safety. Electrosurgery is used routinely to cut, coagulate, dissect, fulgurate, ablate, and shrink body tissue with high frequency (i.e., radio frequency) electrical current. Ultrasonic dissectors dissect tissue by vibration. Vessel sealing devices use a combination of pressure and heat to permanently occlude vessels.

II. ESU Usage
ESU Instructions
A. Instructions for ESU use and a manual for maintenance and inspections should be readily available to users. Each type of ESU has specific manufacturer’s written operating instructions to be followed for safe operation of the unit. A brief set of clearly readable operating instructions should be readily accessible with each system and should be placed on or attached to each ESU for reference.
B. Accessories should be used, handled, cleaned and processed according to manufacturer’s instructions.
C. ESU should be securely mounted on a shelf or tip-resistant cart.
D. ESU cord should be adequate length and flexible to reach electrical outlet without stress or the use of an extension cord. Increased risk of tension on the electrical cord increases the risks that it will become disconnected or frayed.
E. An ESU that is not working properly or is damaged should be removed from service immediately and reported to bioengineering services.
F. Safety/warning alarms should be operational and visible. Audible activation indicators and alarms should be loud enough to be heard above other sounds in the OR.
G. ESU should be protected from spills and fluids should not be placed on top of the ESU. Liquids seeping into the ESU pose an electrical hazard.
H. ESU foot pedal should be encased in an impervious cover when there is a potential for fluid spills.
I. Operator should confirm the power settings before activation. Settings should be based upon the manufacturer’s written instructions and intended application.
J. The ESU should be operated at the lowest effective power setting to achieve the desired effect.
K. Use cutor blend settings instead of coagulation whenever possible.
L. Only the person controlling the active electrode activates the ESU.
M. The ESU should be placed near the sterile field, and the cord should reach the wall or column outlet without stress on the cord and without blocking a traffic path.

III. The Active Electrode Should Be Used In A Manner that Minimizes the Potential for Injuries
Active Electrode
A. Active electrode should be connected directly into a designated receptacle on the ESU an adaptor is used, it should be approved by the manufacturer of both the ESU and the accessory and not compromise the ESU safety features. Incomplete circuitry, unintentional activation, and incompatibility of the active electrode to the ESU may result in patient and personnel injuries.
B. Active electrode should be visually inspected at the surgical field before use to identify any apparent damage to the cord or hand piece (e.g., impaired insulation). Insulation failure allows an alternate pathway for the current to leave the electrode.
C. For minimally invasive surgery only non-conductive, salt-free solutions should be used.

Media for cavity distention include:

1. CO2 gas
2. Dextran 70
3. Glycine
4. Isotonic electrolytic solution (e.g. Normal saline, Ringer’s lactate)
5. Mannitol
6. Sorbitol
7. Water

D. If securing the active electrode cord to the drapes, plastic or another nonconductive material should be used. The cord should not be coiled. This minimizes the risk of patient or staff member injury from conduction of stray current.

E. Active electrodes should not be used in the presence of flammable agents, including vapors (e.g., Antimicrobial skin prep or hand antisepsis agents, tinctures, defatting agents, colloidal, petroleum-based lubricants, phenol, aerosol adhesives, uncured methyl methacrylate). Open suture packages containing alcohol should be removed from the sterile field as soon as possible. Ignition of flammable substances by active electrodes has led to fires and patient injuries. Alcohol based skin prep agents are particularly hazardous because the surrounding hair or fabric can become saturated. Pooling can occur in body folds and crevices (e.g., umbilicus, sternal notch). Vapors can become trapped under incise drape or surgical drapes. Using nonflammable prep agents eliminates this risk.

F. The active electrode should be placed in a clean, dry, well-insulated safety holster when not in use to minimize the risk of injury from unintentional activation. Injuries have resulted when the active electrode has been left lying on the patient between uses. Electrodes that do not fit in the holster should be placed in a designated location with tips away from flammable material.

G. When battery-powered, hand-held cautery is used, the protective cap should be reapplied when the cautery is not in use, thus preventing inadvertent pressure on the activation button.

H. The active electrode tips should be securely seated into the hand piece. A loose tip may cause a spark or burn to tissue contacting the exposed, uninsulated section of the tip. Tips should be used according to manufacturer’s instructions and not be altered (e.g., bent) unless specified by the manufacturer. If insulation is desired, it should be acquired from a medical device manufacturer. Fires and patient injuries have resulted when insulating sheaths have been made from inappropriate material (e.g., rubber catheters).

I. Active electrode tip should be cleaned frequently, away from the incision, to remove eschar. Eschar buildup on the active electrode tip impedes the desired current flow, causing the entire unit to function less effectively and serving as a fuel source, which can lead to fires. Debris on the electrode tip can tear tissue and cause rebleeding. Abrasive electrode cleaning pads are available for noncoated electrodes, or electrosurgical tips are available with a special coating that minimizes eschar buildup. Sponges used close to the active electrode tip should be moist to prevent unintentional ignition. Active electrodes should not be cleaned with a dry sponge. Fires have resulted from ignition of dry sponges near the incision site and when they are used to clean the active electrode.

J. The active electrode should not be used in the presence of intestinal gases. These gases contain hydrogen and methane, which are highly flammable. Fires and patient injuries have occurred.

K. Active electrode should not be used in an oxygen-enriched environment. Caution should be exercised during surgery on the head and neck near combustible anesthetic gases. The active electrode should be used as far from the oxygen source as possible. The lowest practical level of oxygen should be administered to the patient. When administering oxygen in an open system (e.g., nasal prongs), drapes should be tented or a scavenging system used to prevent buildup of oxygen under the drapes. Fires, including airway fires, have resulted from the active electrode sparking in the presence of concentrated oxygen.
L. If the active electrode is being used in a fluid-filled cavity, the fluid used should be an electrically inert, near isotonic solution (e.g., dextran 10, dextran 70, glycine 1.5%, sorbitol, and mannitol) unless the manufacturer of the equipment instructs otherwise. Using an electrolyte solution instead of a nonconductive medium may render the active electrode less effective. Subsequent increases in the power setting have resulted in burns at the dispersive (i.e., return) electrode site.

M. If the active electrode becomes contaminated, it should be disconnected from the ESU. This minimizes the risk of unintentional activation and reduces the potential for patient and personnel injuries.

N. Remove active electrode tip from electrosurgical/electrocautery unit before discarding. Discard tip in sharps waste container.

O. When battery-powered, hand-held cautery units are used, the batteries should be removed before disposal of the cautery unit. Inadvertent activation after disposal has caused fires.

P. Personnel should be prepared to immediately extinguish flames should they occur. Saline or water should be available on the sterile field. A carbon dioxide (CO2) fire extinguisher should be readily available. This type of fire extinguisher can extinguish fires involving cloth and paper, and it is safe to use in the presence of electrical current.

IV. Dispersive Electrode
   A. Patient’s skin condition should be assessed and documented before and after ESU use. The most frequently reported patient injury from electrosurgery has been tissue damage (burn) at the dispersive electrode site. With advances in technology in return electrode monitors and increased use of laparoscopy, this may be changing to other types of injuries (e.g., direct coupling, capacitive coupling), however burns at the site of the dispersive electrode continue to occur.

   B. Single-use dispersive electrodes should be used according to the manufacturer’s written instructions for safe operation. In addition to instructions on the electrode package; additional instructions may be located in the box of electrode packages.

   C. Dispersive electrodes should be compatible with the ESU.

   D. Electrodes should be an appropriate size for the patient (e.g., neonate, infant, pediatric, adult) and not be altered (e.g., cut, folded). Using the appropriately sized dispersive electrode is important for preventing patient injuries. Using a large dispersive electrode prevents concentration of current and minimizes the potential for electrosurgical injuries.

   E. Personnel should verify that the electrode is intact, conductive gel, if present, is moist, and the manufacturer’s expiration date had not been reached.

   F. The conductive and adhesive surfaces of the electrode should be placed directly on clean, dry skin, over a large, well-perfused muscle mass on the surgical side, and close to the surgical site. Muscle is a better conductor of electricity than adipose tissue.

   G. Electrodes should not be placed over bony prominences, scar tissue, hairy surfaces, or areas distal to tourniquets and pressure points. Fatty tissues, tissue over bone, scar tissue, and hair can impede electrosurgical return current flow. High impedance leads to heating of the tissue, arcing to the tissue under the dispersive electrode, and subsequent burns. Burns have resulted when electrodes have been positioned over hairy surfaces. Hair removal may be necessary. Adequate tissue perfusion cannot be assured if the dispersive electrode is placed distal to tourniquets or over scar tissue.

   H. The electrode should not be placed over an implanted metal prosthesis. The tissue over prosthesis contains scar tissue, which impedes return of the electric current.
I. Avoid placing the dispersive electrode over a tattoo, many of which contain metallic dyes.

J. The single-use dispersive electrode should maintain uniform body contact. Potential problems include tenting, gaping, and moisture, all of which interfere with adhesion to the patient’s skin. Injuries have been associated with inadequate adhesion of the dispersive electrode. The single-use dispersive electrode should be placed on the patient after final positioning for the surgical procedure to prevent buckling on the electrode and to maintain good skin contact with electrode. If any tension is applied to the dispersive electrode cord or if the surgical team repositions the patient, personnel should reassess the integrity of the dispersive electrode, its contact with the patient’s skin and its connection to the ESU. If the patient is repositioned, personnel should verify that the dispersive electrode remains in full contact with the patient’s skin to avoid burns resulting from inadequate contact with the dispersive electrode.

K. The dispersive electrode should be removed carefully; Skin injuries can result when the adhesive border pulls on the skin during electrode removal. Holding the adjacent skin in place and peeling the dispersive electrode back slowly will avoid denuding the surface of the skin.

L. The patient’s metal jewelry should be removed if it is within the activation range of the active electrode. Metallic jewelry, including that used in body piercing, presents a potential risk of burn from directed current (i.e., active electrode touching it), heat conducted before an electrode cools, and leakage current. Eliminating metal near the activation site minimizes this risk.

M. If multiple ESUs are used simultaneously during a surgical procedure, the applicable instructions from the manufacturer should be followed. Compatibility of equipment and proper functioning of corresponding electrode monitoring systems should be verified with the manufacturer. Separate dispersive electrodes should be used for each ESU. Personnel should place the dispersive electrodes as close as possible to their respective surgical sites and ensure that single-use dispersive electrodes do not overlap.

N. Two dispersive electrodes should be used in unique situations when high impedance is reasonably anticipated (e.g., very obese patients) or during prolonged application of current at high power settings (e.g., ablation). Users should refer to the manufacturer’s recommendations for these applications.

O. Dispersive electrodes should be kept dry and protected from seeping or pooling of fluids under the dispersive electrode. Liquids may prevent the electrode from adequately contacting the skin. These solutions also can cause skin injury from prolonged skin exposure.

P. There should be no contact between the patient and metal devices that could offer potential alternate return paths for the electrical current (e.g. OR beds, stirrups, positioning devices, safety strap buckles). Patient monitoring electrodes (e.g. Electrocardiogram, oximetry, fetal) should be placed as far away from the surgical site as possible. Alternate pathway burns have been reported at electrocardiogram (ECG) electrode sites and temperature probe entry sites with ground-referenced electrosurgery units.

V. **ESU Use During Endoscopic Procedures**
   A. Personnel should understand the risks of electrosurgery during endoscopic procedures. Electrosurgical injuries are caused by direct coupling of current, insulation failure, and capacitive coupling.

   B. Direct coupling is caused by the surgeon touching the laparoscopic active electrode to another anatomic structure. This can cause necrosis of underlying tissue. Insulation failure of the laparoscopic electrode can be caused by trauma during use or reprocessing. Current leaves the electrode through this alternate pathway. This can cause serious patient injury particularly when the injury is internal. Capacitively coupled radio frequency currents can cause undetected burns to nearby tissue and organs outside the endoscope viewing field.
C. Endoscopic trocar cannula systems should meet safety criteria. Metal cannula systems are best for the port of electrosurgical instruments. All-plastic system is another alternative. Using this system, the capacitor is the patient, which minimizes the concern of concentrated capacitively coupled current, however, a risk of direct coupling injuries remains. Hybrid trocar (i.e. combination plastic and metal) systems should not be used. Each trocar and cannula can act as an electrical conductor, thereby inducing an electrical current from one to the other, which could cause capacitive coupling injuries.

D. Personnel should verify that the insufflation gas is nonflammable (i.e. carbon dioxide).

E. Postop instructions:
   Patients should be taught to immediately report any signs or symptoms of infection, excessive pain, bleeding, or inability to void. Symptoms of a laparoscopic electrosurgical injury can occur days after discharge from the perioperative setting and may include infection from an injured intestinal tract. Lower gastrointestinal bleeding and inability to void may be early manifestations of a bowel injury.

VI. ESU use with Patients Who Have Pacemakers, Internal Cardioverter-Defibrillators (ICDs) or other Electrical Implants
A. Electrosurgery can interfere with both the pacemaker’s circuitry and function and create ECG artifact. Monitoring the peripheral pulse provides a mechanism to evaluate peripheral perfusion in the presence of ECG artifact.

B. Check with pacemaker manufacturer regarding its function during use of electrosurgery.

C. Have a pacemaker programmer unit (or magnet if appropriate for the type of pacemaker) available to place the pacemaker in an asynchronous mode.

D. Have a defibrillator immediately available.

E. Keep all electrosurgical cords and cables away from the pacemaker and its leads.

F. Use bipolar electrosurgery whenever possible.

G. Use the lowest possible power setting on the electrosurgical generator.

H. If monopolar electrosurgery is deemed necessary, ensure the distance between the active and dispersive electrodes is as short as possible and place both electrodes as far away from the pacemaker as possible to ensure the current path does not pass through the patient’s heart or the implanted pacemaker device.

I. Precautions for an ICD include:
   1. Obtain cardiac consult and determine the risk associated with deactivating the ICD intraoperatively.
   2. Have continuous ECG and peripheral pulse monitoring
   3. Use bipolar electrosurgery as an alternative whenever possible

J. Postoperative precautions for all implanted electrical devices have the proper functioning of the device verified by an individual trained in the programming.

VII. Other Electrosurgical Devices
A. When using an ultrasonic electrosurgical device a dispersive electrode is not necessary. An ultrasonic device has a generator that produces electrical energy that is sent to the hand piece, where it is converted into mechanical energy. Since no electrical current enters the tissue current does not need to be returned to the generator by a dispersive electrode.
B. Argon enhanced coagulation (AEC)

AEC should be used according to manufacturer’s written instructions:

1. All safety measures for monopolar electrosurgery should be used when using AEC. The AEC unit uses monopolar alternating current delivered to the tissue through ionized argon gas.
2. Air should be purged from the argon gas line and electrode by activating the system before use, after moderate delays, between activations, and between uses. Activating without adequately purging may present the greatest risk of embolism when operating in an open cavity.
3. Coagulation or blended cutting current, which contains coagulation, should be used. This minimizes the risk of gas emboli entering the blood stream and the risk of gas embolism.
4. The argon gas flow should be limited to the lowest level possible.
5. The electrode should not be placed in direct contact with tissue and should be moved away from the patient’s tissue after each activation.
6. Personnel should be knowledgeable about signs, symptoms and treatment of venous emboli.
7. Monitoring devices (e.g. end-tidal carbon dioxide) should be used for early detection of gas emboli.
Study Questions

Select the best answer to each question.

1. Use of the electrosurgical unit (ESU) should include the following safety precautions:
   a. Technology to detect stray current
   b. Use cut or blend instead of coagulation whenever possible
   c. Operate at the lowest effective power setting to achieve desired effect
   d. All the above

2. Which is the BEST statement regarding usage of the ESU?
   a. Use an extension cord if the ESU power cord does not reach electrical outlet
   b. Place fluids on the top of the ESU during surgical procedures for easy access
   c. Accessories should be used, handled and cleaned according to hospital guidelines
   d. Attach a brief set of clearly readable operating instructions to each ESU for ready access

3. Care of the active electrode includes all of the following EXCEPT:
   a. Connect directly into a designated receptacle on the ESU.
   b. Do NOT use the active electrode in the presence of flammable agents
   c. Coil electrode cords and then attach to the drape with a metal towel clip
   d. Place the active electrode in a clean, dry, well-insulated safety holster when not in use

4. Clean eschar from active electrodes using the following method:
   a. Clean with a dry sponge
   b. Clean frequently, away from the incision
   c. Use a NON-abrasive electrode cleaning pad
   d. Use a rubber catheter to insulate the tip for easier cleaning

5. For safety reasons, do NOT use active electrodes in the following manner
   a. In presence of flammable agents or vapors
   b. When using an open oxygen system with un-tented drapes
   c. With administration of a high level of oxygen during head/neck surgery
   d. All the above

6. Ask the patient the following questions during the preoperative patient assessment:
   a. Are you wearing any jewelry or have any body piercing?
   b. Do you have any implanted devices such as a pacemaker?
   c. Do you have any retained metal in your body, such as joint implants or screws?
   d. All the above

7. What is the BEST location to place the dispersive electrode?
   a. Scar tissue
   b. Bony prominence
   c. Abdomen over fatty tissue
   d. Large, well-perfused muscle mass

8. What is the BEST method for removing the dispersive electrode?
   a. Hold corner of electrode and remove quickly
   b. Place a warm towel over electrode to loosen gel, and then remove quickly
   c. Hold the adjacent skin in place and peel the dispersive electrode back slowly
   d. Do not remove the dispersive electrode in the OR, the PACU nurse will remove
9. Select example(s) of high risk situations when the electrosurgical unit is in use:
   a. Oxygen concentrated under the drapes
   b. Pooling of prep solutions under drapes
   c. Use of oxygen and nitrous oxide by anesthesia staff
   d. All the above

PLEASE CHECK YOUR ANSWERS TO THE STUDY QUESTIONS

ESU
Answers to Study Questions


If you answered all of the questions correctly, go on to the next section. If you missed one or more, read the content again and repeat the study guide questions.

BIBLIOGRAPHY


Interventions for the Patient Experiencing Malignant Hyperthermia

Objectives:
1. Describe signs of Malignant Hyperthermia (MH)
2. Identify potential triggering agent(s) for MH
3. Name the medication used to treat MH
4. List interventions for the patient experiencing an MH crisis

Malignant Hyperthermia

I. Signs of Malignant Hyperthermia (MH)
   A. If the body is unable to maintain a normal temperature and the temperature increases significantly above normal, a condition known as hyperthermia occurs.
   B. Hyperthermia is an acute condition which occurs when the body produces or absorbs more heat than it can dissipate. It is usually due to excessive exposure to heat. The heat-regulating mechanisms of the body eventually become overwhelmed and unable to effectively deal with the heat, and body temperature climbs uncontrollably. This is a medical emergency that requires immediate medical attention.
   C. Malignant hyperthermia is a rare life-threatening condition that is triggered by exposure to certain drugs used for general anesthesia. These drugs include all volatile inhalation anesthetics, many anesthetic gas agents and the neuromuscular blocking agent succinylcholine. In susceptible individuals, these drugs can induce a drastic and uncontrolled increase in skeletal muscle oxidative metabolism which overwhelms the body's capacity to supply oxygen, remove carbon dioxide, and regulate body temperature. If not treated quickly, this may lead to circulatory collapse and death.

II. Triggering Agent(s) for MH
   A. Volatile anesthetics are a class of general anesthetic drugs. They share the property of being liquid at room temperature, but evaporate easily for administration by inhalation. All volatile inhalation anesthetics, including desflurane and sevoflurane, are MH triggers. Nitrous oxide, propofol, etomidate, ketamine, barbiturates, opioids, non-depolarizing muscle relaxants, and local and regional anesthetics are safe for MH patients.
   B. Neuromuscular-blocking drugs block neuromuscular transmission at the neuromuscular junction, causing paralysis of the affected skeletal muscles. Succinylcholine (Anectine) is a neuromuscular blocking agent widely used in emergency medicine and anesthesia to induce muscle relaxation, usually to make endotracheal intubation possible. Succinylcholine is an MH triggering agent.
   C. Malignant hyperthermia (MH) was first identified in 1960. The drug dantrolene was introduced in 1979 as a method of treatment for MH.
III. Interventions and Treatments for a Patient in MH Crisis

A. Preoperative Assessment - all patients planning to undergo general anesthesia should be asked the following questions:
   1. Is there a patient or family history of MH or any prior problems with anesthetics?
   2. Have there been unexpected deaths or complications arising from anesthesia (including the dental office) with the patient or any family member?
   3. Is there a personal history of a neuromuscular disorder (e.g., muscle weakness)?

B. Intraoperative Preparedness
   1. A Malignant Hyperthermia cart containing dantrolene for the treatment of MH is available for all operating rooms.
   2. Recommended MH cart contents usually include 36 vials of dantrolene, sterile water without bacteriostatic agent for injection, and sodium bicarbonate.
   3. The OR should have access to ice and have cooled saline available.

C. Common signs of MH include body rigidity, unexpected tachycardia, tachypnea, and jaw muscle rigidity. The most sensitive indicator of MH in an operative patient is an unanticipated increase of end-tidal carbon dioxide. Increase temperature may be a late sign of MH.

D. Treatment of MH
   Treatment of MH will require simultaneous interventions by members of the surgical team, including the following:
   1. Call for help and call for the MH Cart
   2. Notify surgeon; terminate surgery as quickly as possible.
   3. Discontinue use of anesthetic gases and succinylcholine.
   4. Hyperventilate the patient with 100% oxygen at high flow.
   5. Prepare dantrolene by adding 60 mL preservative-free water for injection to each 20mg vial, shaking to mix.
   6. Administer dantrolene starting with a dose of 2.5 mg/kg IV.
   7. Dantrolene is to be continued until signs of MH (hyperthermia, muscle rigidity, hypercarbia) are reversed.
   8. Monitor the patient’s blood gases and treat metabolic acidosis with bicarbonate, if necessary.
   9. If the patient’s temperature is > 39°C, implement cooling measures:
      a. Cool saline lavage of open body cavities, stomach, bladder, rectum
      b. Apply ice to body surfaces
      c. Infuse cold saline intravenously
   10. Patient should be treated with standard drugs for dysrhythmias
**Study Questions**

Select the best answer to each question.

1. Which of the following interventions should be taken when treating MH?
   a. Get equipment to cool the patient
   b. Get equipment to warm the patient
   c. Prepare and administer the medication succinylcholine
   d. No additional supplies or equipment are needed to treat MH

2. Signs of MH include all of the following **EXCEPT**:
   a. Body rigidity
   b. Body limpness
   c. Increase in end tidal carbon dioxide
   d. Increase in skin and body core temperature

3. Malignant hyperthermia is a condition triggered by ______ in susceptible patients:
   a. Administration of IV sedatives
   b. Administration of local anesthetics
   c. Allergy to the anesthetic gas desflurane
   d. Administration of the agent succinylcholine

4. The starting dose for dantrolene is:
   a. 1 mg/kg
   b. 2 mg/kg
   c. 2.5 mg/kg
   d. 5 mg/kg

5. Potential triggering agents for MH include the following:
   a. Propofol
   b. Ketamine
   c. Dantrolene
   d. Desflurane

**PLEASE CHECK YOUR ANSWERS TO THE STUDY QUESTIONS.**

**INTERVENTIONS FOR THE PATIENT EXPERIENCING MALIGNANT HYPERTERMIA**

Answers to Study Questions

1. a. 2. b 3. d 4. c 5. d

Please check your answers to the study questions. If you missed one or more questions, read the content again and repeat the study guide questions.
REFERENCES


SAFE POSITIONING OF THE SURGICAL PATIENT

Objectives:

1. Describe common injuries related to positioning of the surgical patient.
2. Identify potential physiological changes related to anesthesia.
3. List factors that place a patient at increased risk for injury related to surgical positioning.
4. Identify DHS requirements for intraoperative patient reassessment.

Positioning of the Surgical Patient to Help Reduce Injuries

Positioning requires planning based on assessment of the patient and planned operative procedures. Ongoing assessment is necessary throughout the perioperative period.

A. Surgery is performed on various anatomical parts of the body; therefore the body is placed in many positions so that the surgery can be performed.
   1. The surgical team is responsible for providing the patient with a physiologic and anatomically safe environment. Safe patient positioning is a shared responsibility of the nurse, anesthesiologist, and surgeon. Each team member must know the physiological changes and risk associated with each position.
   2. A non-anesthetized awake patient has control of his/her range of motion (ROM) via pain and pressure receptors that warn against over stretching and twisting of ligaments, tendons, and muscles.
   3. Drugs, anesthetic agents, and muscle relaxants depress pain and pressure receptors. Loss of tone causes muscular relaxation, so normal defense mechanisms can’t guard against joint damage, muscle stretch or strain.

B. Positioning of a patient for surgery requires:
   1. Exposure of the operative area without exceeding physiological and anatomic limits.
   2. Maintenance of the best possible body alignment.
   3. Consideration of the individual patient needs and physical condition.
   4. Continuation of adequate function of the body’s systems.

C. Positioning is one of the elements required to provide safe surgery
   1. The patient’s muscular and vasomotor mechanisms are affected by the use of medications and anesthetic agents
      a. General anesthesia and regional blocks prevent the body’s normal defense of pain from warning of exaggerated stretching, twisting, and compression.
      b. Anesthetic agents relax skeletal muscles and depress the activities of the central and autonomic nervous systems, which may lead to damage to nerves and vascular structures and compromise to respiratory and circulatory function
   2. Attempts to compensate for restrictions imposed on respiratory mechanics may lead to fatigue and increased hypoventilation. Mechanical or manual techniques may be used to restore ventilation to normal volume, but hypoxia and hypercarbia may still occur and may contribute to post-operative morbidity and mortality
   3. Anesthesia, coupled with positioning of the patient for surgery, impacts pulmonary compliance, distribution of inspired air within the lungs and pulmonary blood volume
   4. When the patient’s position is altered, respiratory changes are usually slow whereas circulatory changes are dramatic and rapid.
      a. Most changes are related to gravitational effects on the cardiovascular and respiratory system
      b. Changes in position redistribute blood within the venous, arterial, and pulmonary vasculature
      c. Pulmonary mechanics change with varying body positions
   5. Venous dilatation normally accompanies general and spinal anesthesia.

2012 DHS Annual Core Competency Self-Study Guide, Perioperative Services 24
6. Venous thromboembolism (VTE), including deep venous thrombosis (DVT) and pulmonary embolus (PE) are major risk factors for patients undergoing surgery. Venous obstruction may alter blood flow and cause pooling of blood in the veins, leading to clot production. Braces, padding and straps may occlude superficial veins.

7. Nerves especially prone to injury include the brachial plexus due to anatomical length and nerves located in superficial locations in the body.

D. Prevention of injury to patients related to surgical positioning

1. Key interventions
   a. Recognize potential problems and take appropriate action
   b. Plan and provide nursing interventions to prevent injury to the patient related to positioning

2. Assessment for Risk Factors
   The following factors may place a patient at increased risk for injury related to surgical positioning:
   a. Long procedures: time is a critical factor
   b. Excessive, sustained pressure to certain areas of the body because of the surgery, including use of retraction and patient position
   c. Low or interrupted blood perfusion
   d. Demineralizing bone conditions, poor nutrition, malignant metastasis
   e. Extremes in age, weight or height
   f. Diminished circulatory and respiratory function/status

3. Action
   a. Communicate and collaborate with surgical team members
   b. Prepare positioning support equipment
      1. Place padding to protect body/bony prominences, superficial nerves and blood vessels
      2. Maintain body in a physiological and anatomical position as much as possible
   c. Protect circulation, pressure, respiration (C.P.R.).
      1. Nerves - protect brachial, femoral, peroneal, sciatic, and other nerves
      2. Circulation - avoid pressure on all body parts, especially breasts, testes, and buttocks
      3. Alignment - avoid stress on joints including fingers, wrist, ankles, knees and toes

E. DHS Policy for Intraoperative Monitoring of Patient Position

DHS Policy # 328 states that each patient’s position shall be periodically assessed intra-operatively to ensure optimum anatomical and physiological parameters are maintained, including but not limited to, adequate respiration and circulation, prevention of excessive pressure to nerves and/or bony prominences, protection of eyes and support of extremities and head.

1. After positioning, evaluate the patient’s alignment and tissue integrity
   a. Specific to the patient position
   b. Include the following systems as applicable: respiratory, circulatory, neurological, musculoskeletal, integumentary

2. Reassess body alignment and tissue integrity after repositioning or any movement of the patient, procedure bed, or devices that attach to the procedure bed

3. Monitor by reassessing the systems (respiratory, circulatory, neurological, musculoskeletal, and integumentary) every three (3) hours. This action should be repeated as often as necessary for duration of the procedure if the procedure duration is greater than three (3) hours.

4. Document patient care activities
   a. Any related finding
   b. Interventions implemented for any of the above mentioned findings
Study Questions

Select the best answer to each question.

1. DHS Policy 328 requires patient reassessment for body alignment and tissue integrity:
   a. Every hour after the initial positioning of the patient
   b. Every two hours after the initial positioning of the patient
   c. Reassessment of the patient is not required if there is a complete initial assessment
   d. After positioning, repositioning, or any movement of the patient, procedure bed, or devices attached to the procedure bed

2. Anesthetic agents relax skeletal muscles and depress the actions of the:
   a. Circulatory system only
   b. Central nervous system only
   c. Autonomic nervous system only
   d. Central nervous system and autonomic nervous system

3. Positioning a patient for surgery is the responsibility of:
   a. The surgeon only
   b. The circulating nurse only
   c. The anesthesia provider only
   d. The circulating nurse, anesthesia provider, and surgeon

4. Which of the following factors may increase a patient’s risk for injury related to positioning?
   a. Obesity
   b. Pre-existing circulatory disease
   c. Length of the surgical procedure
   d. All of the above

5. The following may be factors in positioning-related patient injury EXCEPT:
   a. Malnutrition
   b. Age of the patient
   c. Hair and eye color
   d. Length and location of nerves in the body

PLEASE CHECK YOUR ANSWERS TO THE STUDY QUESTIONS.

SAFE POSITIONING OF THE SURGICAL PATIENT
Answers to Study Questions

1. d 2. d 3. d 4. d 5. c

If you answered all of the questions correctly, go on to the next section. If you missed one or more questions, read the content again and repeat the study guide questions.
REFERENCES


Burden, Nancy; et al; *Ambulatory Surgical Nursing*, 2nd edition 2000, W.B. Saunders Co.


Gruendemann, Barbara: *Positioning Plus™*- Published by the Educational Department of Devon Industries Inc, 1987.

Count of Los Angeles

2012 DHS ANNUAL CORE COMPETENCY
PERIOPERATIVE SERVICES

SECTION III
Skills Performance Validation Stations

DIRECT CARE LICENSED NURSES WORKING IN THE OPERATING ROOM or LABOR & DELIVERY

ADMITTING THE PATIENT INTO THE OPERATING ROOM
A. Infection Prevention-Hand Hygiene
B. Patient Identification
C. Valid Consent
D. Universal Protocol/laterality
E. History & Physical

DIRECT CARE UNLICENSED STAFF WORKING IN THE OPERATING ROOM or LABOR & DELIVERY

PREVENTION OF SURGICAL SITE INFECTION
A. Surgical Hand Scrub
   1. Soap & Water
   2. Brushless-waterless/alcohol-based hand rub
B. Gowning and Gloving

DIRECT CARE LICENSED & UNLICENSED STAFF WORKING IN THE OPERATING ROOM or LABOR & DELIVERY

REDUCING THE RISK OF RETAINED ITEMS
A. Performing Sponge, Sharps, and Instrument Count
2012 DHS Annual Core Competency
Perioperative Services

Admitting a Patient Into the Operating Room

OBJECTIVES

By end of this section the workforce member will:

1. Verbalize the need for hand hygiene prior to contact with patient/patient’s environment.
2. Verify patient identity to ensure that the correct patient is being admitted into the operating room.
3. Verify that the patient has an appropriate history and physical in the medical record.
4. Verify that the patient has a valid consent in his/her medical record.
5. When applicable, verify that the operating surgeon correctly marked the site prior to admitting the patient into the operating room.

The perioperative RN demonstrates the ability to establish an environment of safety for the surgical patient. Practicing good hand hygiene is the most important intervention in preventing the spread of infection. The RN prepares the patient, equipment and environment to ensure safety during operative or other invasive procedures. The RN supports patients’ rights and ethics by delivering consistent, competent, and ethical care within the standards of practice, while maintaining privacy and support of the patient’s value system.

1. Hand Hygiene

Hand hygiene may be done by washing the hands with soap and water or cleansing the hands with an alcohol-based hand rub. Guidelines developed by the Centers for Disease Control and Prevention (CDC) and infection control organizations recommend that healthcare workers use an alcohol-based hand rub (a gel, rinse, or foam) to routinely clean their hands between patient contacts, as long as their hands are not visibly soiled. Table 1 describes indications for hand washing/hand antisepsis and the preferred agent to use according to the CDC.

<table>
<thead>
<tr>
<th>Indications for Hand washing and Hand Antisepsis</th>
<th>Preferred Agent to Use</th>
</tr>
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<tbody>
<tr>
<td>When hands are visibly dirty or contaminated with proteinaceous material or are visibly soiled with blood or other body fluids.</td>
<td>Soap and water</td>
</tr>
<tr>
<td>Before having direct contact with patients</td>
<td>Alcohol-based hand rub*</td>
</tr>
<tr>
<td>After contact with a patient’s intact skin (e.g., when taking a blood pressure or lifting a patient).</td>
<td>Alcohol-based hand rub*</td>
</tr>
<tr>
<td>After contact with body fluids or excretions, mucous membranes, non-intact skin, wound dressings.</td>
<td>Soap and Water</td>
</tr>
<tr>
<td>When moving from a contaminated body site to a clean-body site during patient care.</td>
<td>Alcohol-based hand rub*</td>
</tr>
<tr>
<td>After contact with inanimate objects (equipment, bed, etc.) in patient’s immediate area.</td>
<td>Alcohol-based hand rub*</td>
</tr>
<tr>
<td>After removing gloves.</td>
<td>Alcohol-based hand rub*</td>
</tr>
<tr>
<td>Before eating</td>
<td>Soap and water</td>
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<tr>
<td>After using the restroom</td>
<td>Soap and water</td>
</tr>
<tr>
<td>After direct contact with a patient who has <em>Clostridium difficile</em> or <em>Bacillus anthracis</em> (anthrax).</td>
<td>Soap and water</td>
</tr>
</tbody>
</table>

* Alcohol-based hand rub is the preferred agent as long as hands are not visibly soiled.
A. When must hands be washed with soap and water?
   1. Before and after contact with each patient and when visibly dirty, soiled or contaminated with blood or body fluids.
   2. Before eating or handling food.
   3. After using the restroom.
   4. After direct contact with a patient who has Clostridium difficile or Bacillus anthracis (anthrax).
   5. After removing gloves, if gloves are visibly soiled with blood or body fluids.
   6. After every 5-10 applications of the alcohol based hand sanitizer.
   7. Before and after performing surgical procedures on patients.

B. Hand Hygiene Technique
   1. Alcohol-based hand wash
      a. Apply product to palm of one hand and rub hands together, covering all surfaces of hands and fingers until hands are dry.
      b. Follow manufacturer’s recommendations regarding the volume of product to use.
   2. Soap and water
      a. Wet hands with water.
      b. Apply soap.
      c. Rub hands together vigorously for at least 15 seconds, covering all surfaces of the hands and fingers.
      d. Rinse hands with soap and water and dry thoroughly using a disposable towel.

C. Fingernails
   1. Artificial fingernails are not permitted for those who have direct contact with patients (who touch the patient as part of their care or service), handle instruments or patient care equipment, or for those who have contact with food.
   2. Natural fingernails must be clean, with tips less than ¼ inch long.
   3. Fingernail polish must be in good condition and free from chips.

Artificial fingernail is defined as any material applied to the fingernail for the purpose of strengthening or lengthening nails (e.g., tips, acrylic, porcelain, silk, jewelry, overlays, wraps, fillers, superglue, any appliqués other than those made of nail polish, nail-piercing jewelry of any kind, etc.).

An alcohol-based hand rub is the recommended agent for all other hand antisepsis indications (Table 1) unless the hands are visibly dirty or soiled with blood or other body fluids.
2. **Patient Identification**
   A. Patient identification is a crucial aspect of patient safety
      1. Healthcare providers must accurately identify the patient and ensure that the right patient receives the right service or treatment.
      2. Use at least two patient identifiers when providing care, treatment, and services. The following are examples of strategies that may be implemented to improve patient identification.
         a. Healthcare providers must use at least two patient identifiers prior to any treatment, procedure, medication, clinical/surgical intervention, or patient encounter.
         b. Patient identifiers include patient name and one of the following per facility policy:
            1. Medical record unit number (MRUN)
            2. Date of birth

3. **Valid Consent**
   A. The informed consent form is designed to meet legislative or regulatory requirements and to limit the liability of the Department of Health Services by documenting proof of consent, or refusal of consent, by a person to a procedure or activity. Refer to Informed Consent, Department of Health Services, and Los Angeles County Policy # 314 – June 1, 2011. Medical care may only be provided at a Department of Health Services facility when appropriate consent has been obtained from the patient or the patient’s legal representative, except in the case of a medical emergency.
      1. Informed consent- a person’s agreement to allow or undergo a medical treatment /surgery that is based on a full disclosure of the factors needed to make a decision based on reasoning/sound judgment.
      2. A person does not give up the right to control what is done with his/her body when he/she seeks medical care at a hospital.
      3. The physician has both an ethical and legal duty to obtain the patient’s consent. Failure to obtain the patient’s consent in accordance with applicable legal standards may result in a charge of battery, negligence and/or unprofessional conduct.
      4. Perioperative nursing staff has the duty to verify the appropriate consent has been obtained before a patient undergoes any special or surgical procedure. In addition, the nursing staff will ascertain that the consent is valid and is part of the patient’s medical record.
      5. An IMED form is an example of written evidence of consent.

   B. A complete informed consent process must include:
      1. The nature of the proposed care, treatment, services, medications, interventions or procedures.
      2. Potential benefits, risks, or side effects, including potential problems that might occur during recuperation.
      3. The likelihood of achieving treatment goals.
      4. Reasonable alternatives.
      5. The relative risks, benefits and side effects related to alternatives, including the possible result of not receiving care, treatment and services.
      6. When indicated, any limitations on the confidentiality of information learned from or about the patient.
      7. Disclosure of the provider’s potentially conflicting interests, such as research or financial interests.

   C. It is the treating physician’s responsibility to obtain informed consent. It is the exclusive duty of the treating physician or the legally authorized designee to provide the information necessary to secure the patient’s informed consent, and respond to the patient’s questions concerning the proposed procedure.

4. **Universal Protocol**
   A. Created to address the continuing occurrence of wrong site, wrong procedure and wrong person surgery in Joint Commission accredited organizations.
B. The three principal components of the Universal Protocol include a preprocedure verification, site marking (per facility protocol), and a time out. Guidelines to eliminate wrong site surgery:

1. Verify patient identity and that the correct patient is being taken to the operating room.
2. Verify with the patient or the patient's designated representative the procedure that is expected to be performed, as well as the location/site of the operation.
3. Confirm the consent form with the patient or the patient's designated representative.
4. In the case of a bilateral organ, limb, or anatomic site (e.g., hernia), the surgeon and patient should agree on the intended surgical site and the operating surgeon should mark the site prior to the patient receiving narcotics, sedation, or anesthesia.
5. If the patient is scheduled for multiple procedures that will be performed by multiple surgeons, all the items on the checklist must be verified for each procedure that is planned to be performed.
6. Conduct a final verification process with all members of the surgical team to confirm the correct patient, procedure, and surgical site prior to the incision or beginning of the procedure.

5. History & Physical

A. A 2004 update to the Comprehensive Accreditation Manual for Hospital is provision of care standard PC.2.120EP 7 that requires an update to a history and physical (H & P) on admission or prior to an invasive procedure.

1. If an H & P has been performed and documented within thirty (30) days of the patient's admission to the hospital or admission for a scheduled operative procedure or invasive procedure, the following guidelines are applied:
   a. For outpatient procedures or same-day admissions, when the H & P is completed within 30 days prior to the procedure, an update is required after admission and no more than 24 hours prior to the procedure.
   b. The H & P must be performed by a licensed practitioner in accordance with state law and hospital policy.
2. The updated history and physical examination must address the patient's current status and any changes in the patient's status. If no changes have occurred, the licensed practitioner will record that in the patient's medical record.
3. The licensed practitioner is required to examine the patient. This updated physical examination must include any components of the exam that might have changed since the prior history and physical examination. This information must confirm the necessity for admission or any other services rendered and it must be recorded in the patient's file.
4. Information must be documented and included within the patient's medical record through progress or consultation notes prior to surgery or within 24 hours of admission.

B. Components

1. Chief complaint & history of present illness.
2. Past medical and surgical history.
3. Relevant family health history, social history.
4. Physical examination including the system and relevant site impacted by any potential surgical or invasive procedure: pertinent review of body systems.
5. Signature/date/time.
### Guidelines to Admitting a Patient into the Operating Room

#### Direct Care Licensed Nurses Working In The Operating Room Or Labor & Delivery

1. **Infection Control – hand hygiene**
   - RN will state that before and after providing patient care he/she will wash hands.

2. **Patient Identification (ID)**
   - RN will select the correct ID band from samples provided.

3. **Valid Consent**
   - RN will select the correct valid consent from samples provided.

4. **Universal Protocol/Laterality**
   - RN will select a patient diagram that illustrates the correct surgical site marking per surgical procedure written on the consent form.
   
   (Note: All diagrams provided reflect an anterior view of the patient’s body. The red line on the diagram represents surgical marking per facility policy/protocol.)

5. **History & Physical (H & P)**
   - RN will select a valid H&P from samples provided.
2012 DHS Annual Core Competency 
Perioperative Services

Admitting a Patient into the Operating Room

Sample Scenario

Name: Wolfton, Daisy  MRUN: 789-65-03
DOB: 05/02/1949  Diagnosis: Left Incarcerated Hernia

SCHEDULED FOR SURGERY: 12/01/11 Time: 0900 AM

62 year old female seen in the clinic on 11/15/2011. Patient was informed that she has a left inguinal hernia. She was sent to pre-operative clinic. Patient was cleared to have surgery on 12/1/2011 @ 0900 a.m. Dr. Sam Jones discussed the pending procedure, benefits, risks, and alternatives associated with not having the surgery done. Patient decided to have the surgery and signed the consent. On the day of surgery her left inguinal space was marked by Dr. Jones. The patient’s consent and H & P are in her medical record.
The RN will admit this patient into the operating room.

The RN will admit this patient into the operating room by:

1. **Verbalize Infection Control – hand hygiene**

2. **Verify Patient Identification (ID)**

3. **Verify Valid Consent**

6. **Verify Universal Protocol/Laterality**

7. **Verify current and complete History & Physical (H & P)**
Example of a Valid ID: All Information Included (Name/MRUN/DOB)

NAME: Wolfton, Daisy
MRUN: 789-65-03
DOB: 05/02/1949
LAC-DHS

Example of an Invalid ID Band: Incomplete MRUN

NAME: Wolfton, Daisy
MRUN: 789-65
DOB: 05/02/1949
LAC-DHS

Example of an Invalid ID Band: Missing DOB/ Misspelled Name

Name: Wofton, Daisy
MRUN: 789-65-03
LAC-DHS
EXAMPLE OF AN INVALID CONSENT

Note: Incomplete surgical site/Incorrect Patient ID/Wrong MD

COUNTY OF LOS ANGELES

Your physician of record is Dr. DR. SMITH
The contact telephone number is 323-409-4591
Your faculty supervising physician is Dr. DR. SIN

1. The purpose of this form is to document that your physicians have discussed with you the surgical, diagnostic, or therapeutic procedure that your physicians have recommended that you undergo. You should read the form carefully and ask questions of your physicians before you decide whether or not to give your consent for this operation.

2. All operations and procedures may involve risks of unsuccessful results, complications, and injury, or even death, from both known and unforeseen causes, and no warranty or guarantee is made as to result or cure. You have the right to be informed of such risks as well as the nature of the operation or procedure, the expected benefits or effects of such operation or procedures, and the available alternative methods of treatment and their risks and benefits. You also have the right to be informed whether your physician has any independent medical research or economic interests related to the performance of the proposed operation or procedure. Except in cases of emergency, operations or procedures are not performed until you have the opportunity to receive this information and have given your consent. You have the right to consent to or to refuse any proposed operation or procedure at any time prior to its performance.

3. The physicians named above have recommended the following operation or procedure:
   Inguinal Hernia Repair (Open)

SURGICAL SITE(S) / ANATOMICAL SPECIFICATION: GROIN

Describe in simple terms:
This procedure involves repairing an inguinal hernia. An inguinal hernia is an abnormal bulge in the groin area due to a weakness in the abdominal wall. This procedure will be done using a cut made in the skin directly over the hernia.

Your surgeon will push what is bulging through the abdominal wall back into its original place. The muscle and tissue in the area will be closed to repair the opening in the abdominal wall and prevent the hernia from coming back. Mesh is often used to reinforce the area.

Your surgeon will close the cut with stitches, staples, strips of tape, or other ways.

Expected benefits or effects of the operation or procedure:
This procedure may relieve the bulge and any symptoms caused by the hernia and may prevent entrapment
EXAMPLE OF AN INVALID CONSENT

Note: Wrong Patient ID

COUNTY OF LOS ANGELES

of bowel, which would require emergency surgery.

Risks, complications or particular discomfort:
* Bleeding.
* Damage to nerve(s). This may include temporary or permanent pain, numbness, or weakness. This may be discovered during the procedure or later.
* Pain, numbness, swelling, weakness or scarring where the skin is cut.
* The procedure may not cure or relieve your condition. It may come back.
* You may need additional tests or treatment.
* Abnormal collection of blood in an area. You may need drainage.
* Infection.
* Long-term pain.
* Chest pain. Chest pressure.
* Rapid or irregular heartbeat.
* Your hernia may come back.
* Wound infection, poor healing or reopening. Blood or clear fluid can also collect at the wound site(s).
* Urinary tract problems after procedure. This can include difficulty holding urine, frequent urination, bleeding and pain. These may be temporary or permanent.
* Seroma. A lump from a collection of body fluid in the tissue.
* Damage to nearby structures. This may be discovered during the procedure, or later.
* Damage to the testes, blood vessels to the testes, sperm ducts or nearby structures. This may be discovered during the procedure, or later.

The following Alternatives, if any, have been discussed including the expected benefits or effects and the risks or complications of such alternatives:
* Watching and waiting with your doctor.
* Wearing a supportive device to hold a hernia in place.
* Repairing the hernia with the use of a scope. A scope is a thin lighted tool with a camera attached. Your surgeon will make smaller incisions to insert the scope and other tools for the procedure.
* You may choose not to have any treatment at all.

4. The operation or procedure will be performed at the LAC+USC Medical Center
   The Los Angeles County + USC Healthcare Network maintains personnel and facilities to assist physicians in the performance of the operation or procedure recommended in #3 above.

5. Upon your authorization and consent, the operation or procedure identified above, together with any different or further procedures, which, in the opinion of your supervising or attending physician or surgeon, may be indicated due to any emergency, will be performed on you. The operation or procedure
EXAMPLES OF AN INVALID CONSENT

Note: Wrong Patient ID

will be performed by your physician of record (or in the event that that physician is unable to perform or complete the operation or procedure by a qualified substitute supervising physician or surgeon) together with associates and assistants to whom your physician or surgeon may assign designated responsibilities.

6. If your physician determines that there is a reasonable possibility that you may need a blood transfusion as a result of the surgery or procedure to which you are consenting, your physician will inform you of this and will provide you with a brochure concerning blood transfusions. This brochure contains information concerning the benefits and risks of the various options for blood transfusions, including pre-donation by yourself or others. You also have the right to have adequate time before your procedure to arrange for pre-donation, but you can waive this right if you do not wish to wait. You should understand the transfusion of blood or blood products involve certain risks, including the transmission of disease such as hepatitis or the AIDS virus, and that you have a right to consent or refuse consent to any transfusion. You should discuss any questions that you may have about transfusions with your physician.

7. By your signature, you authorize the pathologist to use his or her discretion in the disposition or use of any member, organ, or other tissue removed from your person during the operation(s) or procedure(s) identified above.

8. You are making a decision whether or not to consent to the performance of the operation or procedure that is described in #3. Your signature on this informed consent indicates (1) that you have read and understood the information provided on this form, (2) that you have been verbally informed about this operation or procedure, (3) that you have had a chance to ask questions, (4) that you have received all of the information you desire concerning the operation or procedure, and (5) that you authorize and consent to the performance of the operation or procedure.

Any blank space on the remainder of this page is intentional to allow for signing on single page.


**EXAMPLE OF INVALID CONSENT**

*Note: Incomplete Form*

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**SIGNATURES FOR CONSENT** (Print Legibly)

I have discussed with the patient (or surrogate), in language they could understand, all relevant aspects of this procedures(s) that would be regarded as significant by a reasonable person in the patient’s condition and circumstances when deciding to accept or reject the proposed treatment or procedure; including (1) the nature and purpose of the procedure; (2) the medical condition requiring the procedure; (3) the risks, complications, and expected benefits or effects of the treatment or procedure; (4) Any possible alternatives to the treatment or procedure and their risks and benefits, both medical and surgical, if appropriate; (5) The right to not consent to the treatment or procedure; and (6) the prognosis if treatment is not performed, as included in this document.

I have answered any questions asked by the patient (or surrogate). The patient (or surrogate) demonstrated understanding of our discussion, has decision-making capacity, and has authorized the performance of the procedure.

Physician or Designee (Nurse Practitioner or Physician Assistant) obtaining consent:

<table>
<thead>
<tr>
<th>Physician or Designee Name</th>
<th>Signature</th>
<th>Physician PGY (*)</th>
<th>Date</th>
<th>Time</th>
<th>SID #</th>
</tr>
</thead>
<tbody>
<tr>
<td>(*) For surgery, PGY II or above must obtain consent. For Dental, PGY I allowed. For all others, PGY I or above may obtain consent.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Patient/Parent/Conservator/Guardian (if signed by other than patient, indicate relationship):

<table>
<thead>
<tr>
<th>Patient/Parent/Conservator/ Guardian Name (print)</th>
<th>Signature</th>
<th>Relationship</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
</table>

Witness:

<table>
<thead>
<tr>
<th>Witness Name (print)</th>
<th>Signature</th>
<th>Title (MD, RN, etc)</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
</table>

**INTERPRETER SERVICES** (DHS Policy 314.2)

If an interpreter is used, the Interpreter Attestation during Informed Consent (Form HS-1001) **MUST** be used.

**Interpreter used:** [ ] Yes, complete attached HS 1001 [ ] No

---

**IMPRINT L.D. CARD (NAME MRUN CLINIC/AWARD)**

Wolff, Daisy
MRUN: 889-65-03
DOB: 12/01/2011

**AUTHORIZATION FOR AND INFORMED CONSENT TO SURGERY OR SPECIAL DIAGNOSTIC OR THERAPEUTIC PROCEDURES**

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**FILE IN MEDICAL RECORD**

Page 4 of 6
### EXAMPLES OF AN INVALID CONSENT FORM

*Not Applicable* - for Competency Testing Only

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**COUNTY OF LOS ANGELES**

**DEPARTMENT OF HEALTH SERVICES**

**BLOOD TRANSFUSION**

In the event a blood transfusion is required (policy #237) or if a blood transfusion is refused (policy #236), treating physician or operating surgeon **MUST** complete **Authorization for Consent to Blood Transfusion and Refusal to Permit Blood Transfusion** (Form NE-101)

**Blood Transfusion Form Required:** [ ] Yes Complete Attached NE-101 [ ] No

**TREATMENT WITHOUT CONSENT**

All three of the following elements must be present if medical treatment is to proceed without consent: (1) Patient lacks capacity to consent, (2) no legal representative is available, and (3) a delay in the treatment of an unforeseeable medical condition would lead to serious disability or death if not immediately diagnosed and treated. Two physician signatures are required to treat without consent.

<table>
<thead>
<tr>
<th>Name (print) Operating surgeon or treating physician</th>
<th>Signature</th>
<th>Physician ID #</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name (print) Second physician</th>
<th>Signature</th>
<th>Physician ID #</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
</table>

*Any blank space on the remainder of this page is intentional to allow for signing on single page.*

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**IMPRINT I.D. CARD [NAME MRUN CLINICAWARD]**

**Wolftom, Daisy**

**MRUN:** 789-65-03

**BOP:** 05/02/1949

**AUTHORIZATION FOR AND INFORMED CONSENT TO SURGERY OR SPECIAL DIAGNOSTIC OR THERAPEUTIC PROCEDURES**

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**FILE IN MEDICAL RECORD**

Page 5 of 6
EXAMPLE OF AN INVALID CONSENT FORM

Not Applicable- for Competency Testing Only

<table>
<thead>
<tr>
<th>COUNTY OF LOS ANGELES</th>
<th>DEPARTMENT OF HEALTH SERVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>VERIFICATION OF FACULTY SUPERVISING PHYSICIAN</td>
<td></td>
</tr>
<tr>
<td>To be completed with patient/surrogate just before procedure. Faculty supervising physician responsible listed on this form must be the same as the faculty supervising physician listed on the record of operation.</td>
<td></td>
</tr>
<tr>
<td>[ ] There is no change in the name of the faculty-supervising physician.</td>
<td></td>
</tr>
<tr>
<td>Name (print) Physician or designee</td>
<td>Signature</td>
</tr>
<tr>
<td>verifying no change</td>
<td></td>
</tr>
<tr>
<td>[ ] There is a change in the name of the faculty supervising physician.</td>
<td></td>
</tr>
<tr>
<td>The new name is:</td>
<td></td>
</tr>
<tr>
<td>Name (print) Physician or designee</td>
<td>Signature</td>
</tr>
<tr>
<td>informing patient of change</td>
<td></td>
</tr>
<tr>
<td>[ ] I acknowledge I have been informed of the physician/surgeon named above (if signed by other than patient, indicate relationship)</td>
<td></td>
</tr>
<tr>
<td>Name (print)</td>
<td>Signature</td>
</tr>
<tr>
<td>Patient/Parent/Conservator/Guardian</td>
<td></td>
</tr>
<tr>
<td>[ ] Copy given to the patient, only if change made.</td>
<td></td>
</tr>
</tbody>
</table>

INTERPRETER SERVICES (DHS Policy 314.2)
If an interpreter is used, the Interpreter Attestation during Informed Consent (Form HS-1001) MUST be used. Interpreter used: [ ] Yes, complete attached HS 1001 [ ] No

Any blank space on the remainder of this page is intentional to allow for signing on single page.

[Imprint i.d. card]

IMPRINT I.D. CARD (NAME MRUN CLINIC/SECTION) |
Wolfen, Daisy |
MRUN: 889-65-03 |
DOB: 12/01/2011

AUTHORIZATION FOR AND INFORMED CONSENT TO SURGERY OR SPECIAL DIAGNOSTIC OR THERAPEUTIC PROCEDURES
EXAMPLES OF A VALID CONSENT FORM

Note: Correct MD/Correct Surgical Site/ Correct Patient ID

COUNTY OF LOS ANGELES

Your physician of record is Dr. Sam Jones MD
The contact telephone number is 323-409-4591
Your faculty supervising physician is Dr. John Smltens MD

1. The purpose of this form is to document that your physicians have discussed with you the surgical, diagnostic, or therapeutic procedure that your physicians have recommended that you undergo. You should read the form carefully and ask questions of your physicians before you decide whether or not to give your consent for this operation.

2. All operations and procedures may involve risks of unsuccessful results, complications, and injury, or even death, from both known and unforeseen causes, and no warranty or guarantee is made as to result or cure. You have the right to be informed of such risks as well as the nature of the operation or procedure, the expected benefits or effects of such operation or procedures, and the available alternative methods of treatment and their risks and benefits. You also have the right to be informed whether your physician has any independent medical research or economic interests related to the performance of the proposed operation or procedure. Except in cases of emergency, operations or procedures are not performed until you have the opportunity to receive this information and have given your consent. You have the right to consent to or to refuse any proposed operation or procedure at any time prior to its performance.

3. The physicians named above have recommended the following operation or procedure:
   Inguinal Hernia Repair (Open)

SURGICAL SITE(S) / ANATOMICAL SPECIFICATION: Left Groin

Describe in simple terms:
This procedure involves repairing an inguinal hernia. An inguinal hernia is an abnormal bulge in the groin area due to a weakness in the abdominal wall. This procedure will be done using a cut made in the skin directly over the hernia.

Your surgeon will push what is bulging through the abdominal wall back into its original place. The muscle and tissue in the area will be closed to repair the opening in the abdominal wall and prevent the hernia from coming back. Mesh is often used to reinforce the area.

Your surgeon will close the cut with stitches, staples, strips of tape, or other ways.

Expected benefits or effects of the operation or procedure:
This procedure may relieve the bulge and any symptoms caused by the hernia and may prevent entrapment
EXAMPLE OF A VALID CONSENT FORM

Note: Correct Patient ID

COUNTY OF LOS ANGELES

of bowel, which would require emergency surgery.

Risks, complications or particular discomfort:
* Bleeding.
* Damage to nerve(s). This may include temporary or permanent pain, numbness, or weakness. This may be discovered during the procedure or later.
* Pain, numbness, swelling, weakness or scarring where the skin is cut.
* The procedure may not cure or relieve your condition. It may come back.
* You may need additional tests or treatment.
* Abnormal collection of blood in an area. You may need drainage.
* Infection.
* Long-term pain.
* Chest pain. Chest pressure.
* Rapid or irregular heartbeat.
* Your hernia may come back.
* Wound infection, poor healing or reopening. Blood or clear fluid can also collect at the wound site(s).
* Urinary tract problems after procedure. This can include difficulty holding urine, frequent urination, bleeding and pain. These may be temporary or permanent.
* Seroma. A lump from a collection of body fluid in the tissue.
* Damage to nearby structures. This may be discovered during the procedure, or later.
* Damage to the testes, blood vessels to the testes, sperm ducts or nearby structures. This may be discovered during the procedure, or later.

The following Alternatives, if any, have been discussed including the expected benefits or effects and the risks or complications of such alternatives:
* Watching and waiting with your doctor.
* Wearing a supportive device to hold a hernia in place.
* Repairing the hernia with the use of a scope. A scope is a thin lighted tool with a camera attached. Your surgeon will make smaller incisions to insert the scope and other tools for the procedure.
* You may choose not to have any treatment at all.

4. The operation or procedure will be performed at the LAC+USC Medical Center.
The Los Angeles County + USC Healthcare Network maintains personnel and facilities to assist physicians in the performance of the operation or procedure recommended in #3 above.

5. Upon your authorization and consent, the operation or procedure identified above, together with any different or further procedures, which, in the opinion of your supervising or attending physician or surgeon, may be indicated due to any emergency, will be performed on you. The operation or procedure

AUTHORIZATION FOR AND INFORMED CONSENT TO SURGERY OR SPECIAL DIAGNOSTIC OR THERAPEUTIC PROCEDURES

Page 2 of 6

231 (10/2009)
EXAMPLES OF A VALID CONSENT FORM

Note: Correct Patient ID

COUNTY OF LOS ANGELES

DEPARTMENT OF HEALTH SERVICES

will be performed by your physician of record (or in the event that that physician is unable to perform or complete the operation or procedure by a qualified substitute supervising physician or surgeon) together with associates and assistants to whom your physician or surgeon may assign designated responsibilities.

6. If your physician determines that there is a reasonable possibility that you may need a blood transfusion as a result of the surgery or procedure to which you are consenting, your physician will inform you of this and will provide you with a brochure concerning blood transfusions. This brochure contains information concerning the benefits and risks of the various options for blood transfusions, including pre-donation by yourself or others. You also have the right to have adequate time before your procedure to arrange for pre-donation, but you can waive this right if you do not wish to wait. You should understand that transfusion of blood or blood products involve certain risks, including the transmission of disease such as hepatitis or the AIDS virus, and that you have a right to consent or refuse consent to any transfusion. You should discuss any questions that you may have about transfusions with your physician.

7. By your signature, you authorize the pathologist to use his or her discretion in the disposition or use of any member, organ, or other tissue removed from your person during the operation(s) or procedure(s) identified above.

8. You are making a decision whether or not to consent to the performance of the operation or procedure that is described in #3. Your signature on this informed consent indicates (1) that you have read and understood the information provided on this form, (2) that you have been verbally informed about this operation or procedure, (3) that you have had a chance to ask questions, (4) that you have received all of the information you desire concerning the operation or procedure, and (5) that you authorize and consent to the performance of the operation or procedure.

Any blank space on the remainder of this page is intentional to allow for signing on single page.
EXAMPLE OF A VALID CONSENT FORM

Note: Completed Form

SIGNATURES FOR CONSENT (Print Legibly)

I have discussed with the patient (or surrogate), in language they could understand, all relevant aspects of this procedure(s) that would be regarded as significant by a reasonable person in the patient's condition and circumstances when deciding to accept or reject the proposed treatment or procedure; including (1) the nature and purpose of the procedure; (2) the medical condition requiring the procedure; (3) the risks, complications, and expected benefits or effects of the treatment or procedure; (4) Any possible alternatives to the treatment or procedure and their risks and benefits, both medical and surgical, if appropriate; (5) The right to not consent to the treatment or procedure; and (6) the prognosis if treatment is not performed, as included in this document.

I have answered any questions asked by the patient (or surrogate). The patient (or surrogate) demonstrated understanding of our discussion, has decision-making capacity, and has authorized the performance of the procedure.

Physician or Designee (Nurse Practitioner or Physician Assistant) obtaining consent:

[Signature]

Physician or Designee Name and Signature  Physician PGY (*) Date Time

(*) For surgery, PGY II or above must obtain consent. For Dental, PGY I allowed. For all others, PGY I or above may obtain consent.

Patient/Parent/Conservator/Guardian (if signed by other than patient, indicate relationship):

[Signature]

Patient/Parent/Conservator/Guardian Name (print) Relationship Date Time

Witness:

[Signature]

Witness Name (print) Signature Title (MD, RN, etc) Date Time

INTERPRETER SERVICES (DHS Policy 314.2)

If an interpreter is used, the Interpreter Attestation during Informed Consent (Form HS-1001) MUST be used.

Interpreter used: [ ] Yes, complete attached HS 1001 [X] No

IMPRINT L.D. CARD (NAME MSRN CLINICWARD)

WOLFIN DAISY

MOUNT 789-65-03

DOB: 05/02/1949

AUTHORIZATION FOR AND INFORMED CONSENT TO SURGERY OR SPECIAL DIAGNOSTIC OR THERAPEUTIC PROCEDURES
EXAMPLES OF A VALID CONSENT FORM

Not Applicable- for Competency Testing Only

COUNTY OF LOS ANGELES

BLOOD TRANSFUSION

In the event a blood transfusion is required (policy #237) or if a blood transfusion is refused (policy #236), treating physician or operating surgeon MUST complete Authorization for / Consent to Blood Transfusion and Refusal to Permit Blood Transfusion (Form NE-101)

Blood Transfusion Form Required: [ ] Yes Complete Attached NE-101 [ ] No

TREATMENT WITHOUT CONSENT

All three of the following elements must be present if medical treatments is to proceed without consent: (1) Patient lacks capacity to consent, (2) no legal representative is available, and (3) a delay in the treatment of an unforeseeable medical condition would lead to serious disability or death if not immediately diagnosed and treated. Two physician signatures are required to treat without consent.

Name (print) Operating surgeon or treating physician

Name (print) Second physician

Signature

Signature

Physician ID #

Physician ID #

Date

Date

Time

Time

Any blank space on the remainder of this page intentional to allow for signing on single page.
EXAMPLE OF A VALID CONSENT FORM

Not Applicable - for Competency Testing Only

COUNTY OF LOS ANGELES

VERIFICATION OF FACULTY SUPERVISING PHYSICIAN
To be completed with patient/surrogate just before procedure. Faculty supervising physician responsible listed on this form must be the same as the faculty supervising physician listed on the record of operation.

[ ] There is no change in the name of the faculty supervising physician.

Name (print) Physician or designee verifying no change
Signature
Physician ID #
Date Time

[ ] There is a change in the name of the faculty supervising physician.

The new name is:

Name (print) Physician or designee informing patient of change
Signature
Physician SID #
Date Time

[ ] I acknowledge I have been informed of the physician/surgeon named above (if signed by other than patient, indicate relationship).

Name (print)
Patient/Parent/Conservator/Guardian
Signature
Relationship
Date Time

[ ] Copy given to the patient, only if change made.

INTERPRETER SERVICES (DHS Policy 314.2)
If an interpreter is used, the Interpreter Attestation during Informed Consent (Form HS-1001) MUST be used. Interpreter used: [ ] Yes, complete attached HS 1001 [ ] No

Any blank space on the remainder of this page is intentional to allow for signing on single page.

IMPRINT ID CARD (NAME MRUN CLINIC/A/YARD)

Wolfon, Daisy
MRUN: 789-65-03
DOB: 05/02/1949

FILE IN MEDICAL RECORD

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2012 DHS Annual Core Competency Self-Study Guide_ Perioperative Services 47
The red line on the diagram represents surgical marking per facility protocol.
(i.e. Surgeon’s initial, the word “yes,” or mark with an “X”)
The red line on the diagram represents surgical marking per facility protocol. (i.e. Surgeon’s initial, the word “YES,” or mark with an “X”)

Anterior View
Admitting a Patient into the Operating Room
Universal Protocol/Laterality Diagram

ANTERIOR VIEW

The red line on the diagram represents surgical marking per facility protocol.
(i.e. Surgeon’s initial, the word “YES,” or mark with an “X”)

2012 DHS Annual Core Competency
Perioperative Services

2012 DHS Annual Core Competency Self-Study Guide, Perioperative Services 50
Admitting a Patient into the Operating Room
Universal Protocol/Laterality Diagram

ANTERIOR VIEW

The red line on the diagram represents surgical marking per facility protocol.
(i. e. Surgeon’s initial, the word “YES,” or mark with an “X”)
2012 DHS Annual Core Competency
Perioperative Services

SINGLE ASSESSMENT
Printed: Thursday, 12/1/2011, 0800 a.m. by Lilia Williams

Patient: Daisy Wolfton Fac/Camp: G/G MRUN: 789-65-03
DOB: 05/02/1949 Loc: 54124A Acct #: 12336822
Admit: 12/01/2011 0800 a.m. Adm Phys: Sam Jones MD
Disch: Diagnosis: Left Inguinal Hernia

Initial Assessment Date: 11/15/2011 0800 AM VA INITIAL John Smittens MD

SCHEDULED FOR SURGER: 12/01/11 @ 0900 a.m.-Department of Surgery-Acute Care Surgical unit
HISTORY & PHYSICAL updated on 12/01/2011 0800 a.m. Electronically signed by Sam Jones MD

SUBJECTIVE
Reason for Visit: CC: 62 year old female with left inguinal hernia
H & P: 62 year old female noticed about 3 months ago having a left inguinal hernia. It comes in and out with valsava. No obstructive symptoms. Stated that she has trouble running. She does have urinary symptoms with urine hesitation with slow flow. No sensation of incomplete emptying. Gets up once per night to urinate.

MEDICAL HISTORY:
Cardiovascular
H/O HTN for 5 years controlled at 94/57
H/O Chest Pain Negative
H/O SOB Negative
Exercise Tolerance: Poor exercise tolerance
PMH: Hypertension
Meds: Norvasc 5mg PO daily
PSH: None
Allergies: None
SH: Social drinking. No smoking (quit many years ago). No drugs. Mental status - alert & oriented x3
Vital signs on initial exam: BP: 121/81 Temp: 98.6 HR: 72 RR 20.
COMI: Negative
RRR: Negative
CTA: b/l
Abdomen: Soft

Left inguinal hernia that’s completely reducible. Only palpated on valsava. No evidence of right sided inguinal hernia.

A/p 1. Left inguinal hernia. Will need left open inguinal hernia repair.
Please order CBC, BMP, LFTs, Mg, Phos, INR/PT/PTT, UA. Chest X-ray and EKG.
Will consent today. Explained to her the risks, benefits and alternatives of the left inguinal hernia.

FOOTNOTE: This is an example of a Valid H & P with correct patient information and dates.
SCHEDULED FOR SURGERY: 12/01/11 @0900 a.m.-Department of Surgery-Acute Care Surgical Unit
HISTORY & PHYSICAL

SUBJECTIVE:
Reason for Visit:  CC: 62 year old female with left inguinal hernia
H & P: 62 year old female noticed about 3 months ago having a left inguinal hernia. It comes in and out with valsalva. No obstructive symptoms. Stated that she has trouble running. She does have urinary symptoms with urine hesitation with slow flow. No sensation of incomplete emptying. Gets up once per night to urinate.

MEDICAL HISTORY:
Cardiovascular
H/O HTN for 5 years controlled at 94/57
H/O Chest Pain  Negative
H/O SOB  Negative
Exercise Tolerance:  Poor exercise tolerance
PMH:  Hypertension
Meds:  Norvasc 5mg PO daily
PSH:  None
Allergies:  None
SH:  Social drinking. No smoking (quit many years ago). No drugs.
Mental status - alert & oriented x3
Vital signs on initial exam:  BP: 121/81 Temp: 98.6  HR: 72  RR 20.
COMI:  Negative
RRR:  Negative
CTA:  b/l
Abdomen:  Soft

Left inguinal hernia that’s completely reducible. Only palpated on valsalva. No evidence of right sided inguinal hernia.

A/p 1. Left inguinal hernia. Will need left open inguinal hernia repair.

Please order CBC, BMP, LFTs, Mg, Phos, INR/PT/PTT, UA. Chest X-ray and EKG.
Will consent today. Explained to her the risks, benefits and alternatives of the left inguinal hernia.

FOOTNOTE: This is an example of an Invalid H & P. There is no update within 24 hours.
2012 DHS Annual Core Competency
Perioperative Services

SINGLE ASSESSMENT
Printed: Thursday, 12/1/2011, 0800 a.m. by Lilia Williams

Patient: Daisy Wolfton
DOB: 08/02/1949
Fac/Camp: G/G
MRUN: 889-65-03
Loc: 54124A
Admit: 12/01/2011 0800 a.m.
Adm Phys: Sam Jones MD
Disch: 
Diagnosis: Left Inguinal Hernia

SCHEDULED FOR SURGERY: 12/01/11 @ 0800 a.m.-Department of Surgery-Acute Care Surgical Unit

HISTORY & PHYSICAL

SUBJECTIVE:
Reason for Visit: CC: 62 year old female with left inguinal hernia
H & P: 62 year old female noticed about 3 months ago having a left inguinal hernia. It comes in and out with valsava. No obstructive symptoms. Stated that she has trouble running. She does have urinary symptoms with urine hesitation with slow flow. No sensation of incomplete emptying. Gets up once per night to urinate.

MEDICAL HISTORY:
Cardiovascular: No significant changes
H/O Hypertension for 5 years controlled at 94/57
H/O Chest Pain Negative
H/O SOB Negative
Exercise Tolerance: Poor exercise tolerance
PMH: Hypertension
Meds: Norvasc 5mg PO daily
PSH: None
Allergies: None
SH: Social drinking. No smoking (quit many years ago). No drugs.
Metal status - alert & oriented x3
Vital signs on initial exam: BP: 121/81 Temp: 98.6 HR: 72 RR 20.
COMI: Negative
RRR: Negative
CTA: b/1
Abdomen: Soft

Left inguinal hernia that’s completely reducible. Only palpated on valsava. No evidence of right sided inguinal hernia.

A/p 1. Left inguinal hernia. Will need left open inguinal hernia repair.
Please order CBC, BMP, LFTs, Mg, Phos, INR/PT/PTT, UA. Chest X-ray and EKG.
Will consent today. Explained to her the risks, benefits and alternatives of the left inguinal hernia.

FOOTNOTE: This is an example of an Invalid H & P. MRUN and DOB do not match the patient’s ID Band. There is no update within 24 hours.
### Competency Statement:
The Perioperative RN verifies:
- Identification of the Patient
- A valid surgical consent
- Correct surgical site marking (when applicable)

The Perioperative RN ensures:
- A valid History and Physical is present in the patient’s medical record on admission into the operating room to provide a safe environment for the surgical patient
- The correct patient is having the correct surgical procedure on the correct site

<table>
<thead>
<tr>
<th>Critical Behaviors</th>
<th>Learning Activities</th>
<th>Method of Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infection Prevention – Hand Hygiene</strong></td>
<td>States would perform hand hygiene before and after touching patient or patient’s environment.</td>
<td>Reviews: 2012 Annual DHS Perioperative Nursing Core Competency Self Study Guide: Admitting a Patient Into the Operating Room.</td>
</tr>
<tr>
<td><strong>Patient Identification</strong></td>
<td></td>
<td>Reviews: 2012 Annual DHS Perioperative Nursing Core Competency Self Study Guide: Admitting a Patient Into the Operating Room.</td>
</tr>
<tr>
<td>1. Verifies correct patient’s information such as name and hospital number (MRUN) and/or DOB with patient’s identification band (based on the sample scenario provided).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Asks patient/representative to verbally state the name of the patient and operative procedure.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Valid Consent</strong></td>
<td>Reviews surgical consent form for completeness, accuracy, and agreement with the patient’s statements (based on the sample scenario provided). Confirms the components of a valid consent:</td>
<td>Reviews: 2012 Annual DHS Perioperative Nursing Core Competency Self Study Guide: Admitting a Patient Into the Operating Room.</td>
</tr>
<tr>
<td>- Complete patient identification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Physician (surgeon’s name), contact telephone number, and faculty supervising physician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Name of procedure and anatomy site of the procedure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Benefit (s) of the procedure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Risk (s) of the procedure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Alternative(s) to procedure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Physician name &amp; signature, date &amp; time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Patient/representative name &amp; signature date &amp; time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Witness name &amp; signature, date &amp; time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Interpreter Service (DHS policy 314.2) acknowledged</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Universal Protocol – Surgical Site Marking</strong></td>
<td>Reviews 2012 Annual DHS Perioperative Nursing Core Competency Self Study Guide: Admitting a Patient Into the Operating Room.</td>
<td>Selects the form that represents correctly marked surgical site with 100% accuracy</td>
</tr>
<tr>
<td>Verifies that the surgical site is marked when applicable per facility policy/protocol (based on the sample scenario provided).</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Examples of surgical site markings used:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Surgeon’s initial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Writing the word “YES”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Marking with an “X”</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>History &amp; Physical</strong></td>
<td>Reviews 2012 Annual DHS Perioperative Nursing Core Competency Self Study Guide: Admitting a Patient Into the Operating Room.</td>
<td>Selects the form that represents a valid H &amp; P with 100% accuracy.</td>
</tr>
</tbody>
</table>
2012 DHS Annual Core Competency
Perioperative Services

Admitting a Patient into the Operating Room
Performance Checklist

Name: ______________________________________ Unit: _________ 1st Pass/Fail _________ 2nd Pass/Fail _________

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>1st Test Date:</th>
<th>2nd Test Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pass</td>
<td>Fail</td>
</tr>
<tr>
<td><strong>Infection Prevention – hand hygiene</strong></td>
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<td></td>
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<tr>
<td>States would perform hand hygiene before and after touching patient or patient’s environment.</td>
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<td></td>
</tr>
<tr>
<td><strong>Patient Identification</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Verifies patient’s information such as name and hospital number (MRUN) and/or DOB with patient’s identification band (based on the sample scenario provided).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Asks patient/representative to verbally state the name of the patient and operative procedure.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Valid Consent Form</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reviews surgical consent form for completeness, accuracy, and agreement with the patient’s statements (based on the sample scenario provided). Confirms the components of a valid consent:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Complete patient identification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Physician (surgeon’s name), contact telephone number, and faculty supervising physician</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Name of procedure and anatomy (site) of the procedure</td>
<td></td>
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</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>• Witness name &amp; signature, date &amp; time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Interpreter Service Acknowledgment (DHS policy 314.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Universal Protocol – Surgical Site Marking</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selects correctly marked surgical site (based on the sample scenario provided):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Verify that the surgical site is marked, when applicable per facility policy/protocol.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>History &amp; Physical</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selects a valid History &amp; Physical (based on the sample scenario provided):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Verify that the H&amp;P is in the medical record.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Verify that the H&amp;P is dated within 30 days of surgery date</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Verify that the H&amp;P is updated within 24 hours of surgery and signed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2012 DHS Annual Core Competency
Perioperative Services

Surgical Hand Scrub
Prevention of Surgical Site Infection

The purpose of the surgical hand scrub is to reduce resident and transient skin flora to a minimum. Microorganisms that usually occupy a particular body site are resident flora. Microorganisms that colonize the host for hours to weeks but do not establish themselves permanently are transient flora. Transient flora often is the result of organisms present in the healthcare setting and is usually acquired by direct contact. Both resident and transient flora are removed by the surgical scrubbing procedure and microbial growth is inhibited by the antiseptic action of the scrub solution used. The surgical hand scrub will remove soil, debris, natural skin oils, hand lotions, and transient microorganisms from hands and forearms, decrease number of microorganisms on the skin, and suppress growth of microorganisms on gloved hands during surgery. The skin can never be rendered as sterile, but it can be made surgically clean.

1. **Prior to Surgical Hand Scrub or Use of Waterless, Brushless Hand Preparation**
   A. All personnel should be in complete surgical attire before entering the restricted areas of the surgical environment.
   B. The scrub person will remove the following jewelry as it may harbor organisms: watches, bracelets and rings.
   C. Nails should be short. No artificial nails. If polish is worn it must be in good condition-no chips.
   D. Wear personal protective equipment (PPE): protective eyewear, mask, etc.
   E. Inspect hands and forearms for broken skin or open lesions.
   F. Pull up sleeves to at least 2 inches above the elbow.
   G. Inspect hands and forearms for visible bioburden, (i.e. dirt, oil or debris). Surgical hand scrub is used for the first scrub of the shift if required by facility policy, or any time there is visible bioburden (i.e. dirt, oil or debris).

   **Pre-wash hands and arms:** Wet hands and arms. Use soap and water or wet scrub brush and allow to work up a lather per facility policy. Lather from fingertips to 2 inches above the elbow.

2. **Surgical Hand Scrub Procedure**
   A. Under running water, use a disposable nail cleaner to clean under the fingernail.
   B. Discard nail cleaner.
   C. Scrub from the fingertips to 2 inches above the elbow as described in your facility policy and procedure.
   D. Rinse thoroughly, keeping hands above elbows and away from body/scrub attire; water flows from fingertips to elbow.

3. **Points to remember during the scrubbing procedure:**
   A. Duration of the scrub is determined by use of either the anatomic timed scrub or the counted stroke method. Each facility’s policies will address which method is to be used.
   B. Arms do not contact body; may lean forward to extend arms out from sides of body. Procedure must be repeated with a fresh brush if there is any contact of a clean hand with unclean surface during the procedure.
   C. At all times throughout the scrub, keep hands higher than the elbow to allow water to flow from hand.
   D. Avoid splashing water onto scrub attire. If surgical attire becomes soaked through, it may allow microorganisms from the wet skin and/or surgical attire to contaminate the sterile gown, therefore, the gown must be changed.

4. **Points to remember when using waterless, brushless surgical hand preparation-Avagard:**
   A. Apply Avagard to clean, dry hands and nail.
   B. Dispense one pump of Avagard into the palm of one hand.
   C. Dip the fingertips of the opposite hand into the Avagard work under the nails.
   D. Spread the remaining product over the hand, forearm and up the arm to two inches above the elbow.
   E. Repeat these steps for the opposite nails, hand, forearm and up the arm to two inches above the elbow.
   F. A final pump is dispensed into the palm of either hand and reapplied to both hands up to wrist.
   G. Continue to rub solution into hands until completely dry, then gown and gloves may be applied.
**Clinical Competency Description**

**Competency Statement:** Workforce member performs an antiseptic surgical scrub or antiseptic hand rub before donning sterile attire preoperatively to significantly reduce the number of microorganisms on the hands and forearms.

<table>
<thead>
<tr>
<th>Critical Behaviors</th>
<th>Learning Activities</th>
<th>Method of Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complies with the pre-scrub interventions prior to scrub and application of Avagard.</td>
<td>Reviews: DHS and facility-specific policies/procedures/protocols related to Surgical Scrub.</td>
<td>Completes Surgical Scrub per Performance Checklist with 100% accuracy.</td>
</tr>
<tr>
<td>• Personal Protective Equipment (PPE) in place (protective eyewear, mask, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Sleeves at least 2 inches above the elbow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• No open lesions and breaks in the skin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• All jewelry removed from hands and arms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Nails short, no artificial nails, polish in good condition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrates surgical hand scrub per facility policy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Washes hands and arms with soap &amp; water or surgical hand scrub:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Use a hospital-supplied anti-microbial agent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Lather up from the fingertips to 2 inches above the elbow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scrubs hand with scrub brush/antimicrobial agent as directed per facility policy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• For a minimum of three minutes (timed method) or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• For the appropriate number of strokes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(counted stroke method)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scrubs all surfaces of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Fingers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Hands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Arms to and including the elbow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does not allow arms to contact body, leans forward to extend arms out from sides of the body</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hands remain above elbows, away from body/scrub attire; water flows from finger tips to elbow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rinses the hands and arms thoroughly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrates alternative surgical hand preparation using Avagard per facility policy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre Avagard scrub:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Inspect hands and arms for visible soiling and debris before use of product</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Clean under nails prior to first use of day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applies Avagard scrub to clean, dry hands and arms following manufacturer instructions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Dispense one pump into palm of one hand.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Fingertips of opposite hand are dipped into Avagard; product is worked under nails</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Spread remaining Avagard over the hand and up the arm to just above the elbow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Dispense one pump of Avagard into palm of other hand and repeat steps above</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Dispense final pump into palm of either hand &amp; reapply to both hands up to wrist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allows Avagard to dry before putting <strong>on gown and gloves (Continue to rub solution into hands until dry)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOTE: If workforce member has an allergy to Avagard he/she DOES NOT have to demonstrate use of Avagard, only verbally describe appropriate steps.</td>
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</tbody>
</table>
# Surgical Hand Scrub Performance Checklist

**Name:** _____________________________  **Unit:** ___________  **1st Pass/Fail:** ___________  **2nd Pass/Fail:** ___________

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>1st Test Date:</th>
<th>2nd Test Date:</th>
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</thead>
<tbody>
<tr>
<td><strong>PRE-SCRUB INTERVENTIONS</strong></td>
<td>Pass</td>
<td>Fail</td>
</tr>
<tr>
<td>1. Prior to scrub or application of Avagard complies with all of the following:</td>
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<tr>
<td>• Wearing proper surgical attire</td>
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<tr>
<td>• Personal Protective Equipment (PPE) in place (protective eyewear, mask, etc.)</td>
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<tr>
<td>• Sleeves at least 2 inches above the elbow</td>
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<tr>
<td>• No open lesions and breaks in the skin</td>
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<tr>
<td>• All jewelry removed from hands and arms</td>
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<tr>
<td>• Nails short, no artificial nails, polish in good condition</td>
<td></td>
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<tr>
<td><strong>SURGICAL HAND SCRUB</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Washes hands and arms with soap &amp; water or surgical hand scrub:</td>
<td></td>
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<tr>
<td>• Use a hospital-supplied anti-microbial agent</td>
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<tr>
<td>• Lather up from the fingertips to 2 inches above the elbow</td>
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<tr>
<td>2. Scrubs hand with scrub brush/antimicrobial agent as directed per facility policy.</td>
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<tr>
<td>• For a minimum of three minutes (timed method) or</td>
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<tr>
<td>• For the appropriate number of strokes (counted stroke method)</td>
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<tr>
<td>3. Scrubs all surfaces of the following:</td>
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<td></td>
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<tr>
<td>• Fingers</td>
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<tr>
<td>• Hands</td>
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<tr>
<td>• Arms to and including the elbow</td>
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<tr>
<td>4. Does not allow arms to contact body, leans forward to extend arms out from sides of the body</td>
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<tr>
<td>5. Hands remain above elbows, away from body/scrub attire; water flows from finger tips to elbow</td>
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<tr>
<td>6. Rinses the hands and arms thoroughly</td>
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<tr>
<td><strong>AVAGARD SURGICAL HAND PREPARATION</strong></td>
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</tr>
<tr>
<td>1. Pre Avagard scrub:</td>
<td></td>
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<tr>
<td>• Inspect hands and arms for visible soiling and debris before use of product</td>
<td></td>
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<tr>
<td>• Clean under nails prior to first use of day</td>
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<tr>
<td>2. Applies Avagard scrub to clean, dry hands and arms following manufacturer instructions:</td>
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<tr>
<td>• Dispense one pump into palm of one hand.</td>
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<tr>
<td>• Fingertips of opposite hand are dipped into Avagard; product is worked under nails</td>
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<tr>
<td>• Spread remaining Avagard over the hand and up the arm to just above the elbow</td>
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<tr>
<td>• Dispense one pump of Avagard into palm of other hand and repeat steps above</td>
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<tr>
<td>• Dispense final pump into palm of either hand &amp; reapply to both hands up to wrist</td>
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<tr>
<td>3. Allows Avagard to dry before putting on gown and gloves (Continue to rub solution into hands until dry)</td>
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</tbody>
</table>
1. After scrubbing, hands and arms must be thoroughly dried before the gown is donned. If not thoroughly dried, contamination of the gown may occur due to strike-through from organisms contained in moisture on the skin.

2. Using the following procedure, the scrubbed person dons the sterile gown:
   A. The sterile gown is grasped by the inside neckline and lifted away from the gown wrapper.
   B. Holding the gown by the neck edge, the scrub person moves away from areas of possible contamination and lets the gown unfold downward; keep the gown high enough to avoid contamination.
   C. The scrub person locates the armholes, and both arms are simultaneously inserted into the sleeves. The arms are inserted into the gown only until the hands reach the proximal edge of the cuff.
   D. Closed gloving is begun with the hands inside the sleeves. Using the hand that is still inside the right cuff, the scrub person grasps the other glove by the glove’s everted cuff.
   E. Lay the glove palm down over the cuff of the gown. The fingers of the glove face you.
   F. Working through the gown sleeve, grasp the cuff of the glove and bring it over the open cuff of the sleeve
   G. Unroll the glove cuff so that it covers the sleeve cuff.
   H. Proceed with the opposite hand using the same technique.
   I. After gloving is completed, the scrubbed person extends a paper tab, attached to one of the gown ties, to another team member (sterile or unsterile). The scrub person then pivots away from the other team member, causing the gown to wrap around the scrub person. The scrub person grasps the tie and pulls it, releasing it from the paper tab. The scrub person ties the gown securely in front. If a tab is not included with the gown, the scrub person may attach a sterile instrument to the end of one tie and hand it to another unsterile team member who utilizes the instrument in the same manner as a paper tab.

3. Closed gloving is a method of donning sterile gloves whereby the scrubbed hands remain inside the gown sleeve until the glove cuff is secured over the gown cuff.

4. At the completion of surgery, the gown and gloves are removed. The gown is removed first. It is grasped near the neck and sleeve and brought forward over the gloved hands, evert ing the gloves as it is removed. The gown is folded so the contaminated outside surface is on the inside. It is deposited in a designated linen basket or waste receptacle.

5. Gloves are removed so that bare skin does not contact the contaminated external glove. The gloved fingers of one hand are placed under the everted glove cuff of the opposite hand and pulled off. The fold on the remaining glove is grasped with the bare fingers of the opposite hand and the glove is pulled off. This technique must be performed carefully to prevent bare skin from contacting the contaminated glove surface. Gloves are deposited in a designated waste receptacle.

6. After gloves are removed, the hands are washed with an approved detergent. Hand washing lessens the chance of contamination of the hands that may have occurred from an invisible hole or tear in the glove.

7. Gown and gloves are not worn outside the operating room.
Competency Statement: Workforce member dons sterile gown and gloves to protect patient during surgical procedures and reduce exposure to self from blood borne pathogens.

<table>
<thead>
<tr>
<th>Critical Behaviors</th>
<th>Learning Activities</th>
<th>Method of Evaluation</th>
</tr>
</thead>
</table>
| Demonstrates donning of sterile gown and gloves.  
  - Grasps the inside neckline and lifts it away from the gown wrapper.  
  - Holds the gown by the neck edge, the scrub person moves away from areas of possible contamination and lets the gown unfold downward. Keeps the gown high enough to avoid contamination.  
  - Locates the armholes; both arms are simultaneously inserted into the sleeves.  
  - Inserts the arms into the gown until the hands reach the proximal edge of the cuff.  
  - A non-sterile team member will fasten the gown in the back at the neckline and the waist.  
  - Gloving is begun with the hands inside the sleeves. Using one hand that is still inside the cuff, the scrub person grasps the opposite glove by the glove’s everted cuff.  
  - Lays the glove palm down over the cuff of the gown. The fingers of the glove face you.  
  - Working through the gown sleeve grasps the cuff of the glove and brings it over the open cuff of the sleeve.  
  - Grasps the gloved cuff and gown sleeve; pulls both the sleeve and the glove at the same time; fingers are directed into the cots of the glove.  
  - Proceeds with the opposite hand using the same technique.  
  - After gloving is completed, the scrubbed person extends a paper tab, attached to one of the gown ties, to another team member (sterile or unsterile). The scrub person then pivots away from the other team member, causing the gown to wrap around the scrub person. The scrub person grasps the tie and pulls it, releasing it from the paper tab. The scrub person ties the gown securely in front. | Reviews:  
  - DHS and facility-specific Policies/procedures/protocols related to Gowning and Gloving.  
***If the employee recognizes that they have contaminated the gown or gloves during the change, they may repeat the process again for a total of 3 opportunities. If they do not recognize that they have broken sterility then it is considered a failure. |
### Gowning and Gloving Performance Checklist

**Name: ___________________________ Unit: _________**

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</thead>
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<tr>
<td></td>
<td>Pass</td>
<td>Fail</td>
</tr>
<tr>
<td>1. Grasps the inside neckline and lifts it away from the gown wrapper.</td>
<td></td>
<td></td>
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<tr>
<td>2. Holds the gown by the neck edge, the scrub person moves away from areas of possible contamination and lets the gown unfold downward. Keeps the gown high enough to avoid contamination.</td>
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<td></td>
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<tr>
<td>3. Locates the armholes; both arms are simultaneously inserted into the sleeves.</td>
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<td>4. Inserts the arms into the gown until the hands reach the proximal edge of the cuff.</td>
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<td></td>
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<td>5. A non-sterile team member will fasten the gown in the back at the neckline and the waist.</td>
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<td>6. Gloving is begun with the hands inside the sleeves. Using one hand that is still inside the cuff, the scrub person grasps the opposite glove by the glove's everted cuff.</td>
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<tr>
<td>7. Lays the glove palm down over the cuff of the gown. The fingers of the glove face you.</td>
<td></td>
<td></td>
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<tr>
<td>8. Working through the gown sleeve grasps the cuff of the glove and brings it over the open cuff of the sleeve.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Grasps the gloved cuff and gown sleeve; pulls both the sleeve and the glove at the same time; fingers are directed into the cots of the glove.</td>
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<tr>
<td>10. Proceeds with the opposite hand using the same technique.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. After gloving is completed, the scrubbed person extends a paper tab, attached to one of the gown ties, to another team member (sterile or unsterile). The scrub person then pivots away from the other team member, causing the gown to wrap around the scrub person. The scrub person grasps the tie and pulls it, releasing it from the paper tab. The scrub person ties the gown securely in front.</td>
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Reducing the Risk of Retained Items: Sponges, Sharps and Instrument Count

Objective: To ensure that the patient is free from injury related to retained sponges, instruments and sharps.

1. Sponges, Sharps and Instrument Count should be performed:
   A. Before a procedure to establish a baseline.
   B. Any time additional items are added to the field those items should be counted.
   C. At the time of permanent relief of either the scrub person or the circulating nurse.
   D. Before closure of a cavity within a cavity.
   E. Before wound closure begins.
   F. At skin closure or end of procedure.

2. Counting Points:
   A. Sponges, sharps and instruments should be counted audibly and viewed concurrently by two individuals. This lessens the risk for count discrepancies.
   B. Keep sponges, linen, trash and sharps in the OR during the entire procedure.
   C. Report count result to surgeon.
   D. Document count on patient record according to facility policy.

3. Principles for Specific Counts
   A. Sponges
      1. Sponges should be separated, counted audibly and concurrently viewed during the count procedure.
      2. All sponges used during a surgical procedure should be x-ray detectable.
      3. Sponges should be left in their original configuration and should not be cut.

   B. Sharps
      1. Suture needles are verified by the scrub person when the package is opened.
      2. Sharps count includes, but is not limited to scalpel blades, suture needles, hypodermic needles, electrosurgical (cautery) blades, free needles and safety pins.

   C. Instruments
      1. Isolate and account for all removable instrument parts and all pieces of equipment.
      2. Review your facility policy for types of cases that require an instrument count.

   D. Incorrect Counts
      Actions to be taken in the event of an incorrect count:
      1. Immediately inform surgeon/surgical team when any count discrepancy occurs.
      2. Begin an immediate search for the missing item(s). Notify nursing supervisor/manager.
      3. If count remains incorrect/not resolved call x-ray.
      4. Radiologist/attending surgeon (per facility policy) will review x-ray film to rule out a retained item, before the patient is transferred from the OR.
      5. Document the results per facility policy.
### Competency Statement:
Workforce member counts sponges, sharps, and instruments at prescribed intervals to prevent unintended retained items.

<table>
<thead>
<tr>
<th>Critical Behaviors</th>
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<th>Method of Evaluation</th>
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</table>
| **States at least 3 required intervals for sponges and sharps counts:**  
- Before the procedure to establish a baseline  
- Any time additional items are added to the field those additional items are counted  
- At the time of permanent relief of either the scrub person or the circulating nurse  
- Before closure of a cavity within a cavity  
- Before wound closure begins  
- At skin closure or end of procedure  | Reviews: DHS and facility-specific policies/procedures/protocols related to surgical count. | Successfully completes Sponge Sharps, and Instrument Count per Performance Checklist with 100% accuracy. |
| **Demonstrates sponge and sharp count.**  
- Count sponges and sharps out loud and concurrently with team counterpart (i.e. scrub person or circulating nurse)  
- Scrub verifies number of needles with circulating nurse when package is opened  
- Separate sponges when counting.  
- Use only x-ray detectable sponges during the procedure | Reviews: DHS and facility-specific policies/procedures/protocols related to surgical count.  
| **States 3 actions to be taken in the event of an incorrect count.**  
- Immediately informs surgeon when any discrepancy in the count is discovered  
- Implements a search, inform nurse manager/supervisor  
- If incorrect count is not resolved call X-Ray  
- Radiologist/attending surgeon (per facility policy) will review x-ray film to rule out a retained item before the patient is transferred from the OR  
- Document the results per facility policy/protocol. | Reviews: DHS and facility-specific policies/procedures/protocols related to surgical count. | Successfully states 3 of 5 actions to be taken in the event of an incorrect count per Performance Checklist with 100% accuracy. |
## Sponges, Sharps, and Instrument Count
### Performance Checklist

<table>
<thead>
<tr>
<th>Name: ______________________________________</th>
<th>Unit: __________</th>
<th>1st Pass/Fail</th>
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<tbody>
<tr>
<td></td>
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</tr>
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</table>

### 1. States at least 3 required intervals for sponges and sharps counts:
- Before the procedure to establish a baseline
- Any time additional items are added to the field those additional items are counted
- At the time of permanent relief of either the scrub person or the circulating nurse
- Before closure of a cavity within a cavity
- Before wound closure begin
- At skin closure or end of procedure

### 2. Demonstrates sponges and sharps count:
- Count sponges and sharps out loud and concurrently with team counterpart (i.e. scrub person or circulating nurse)
- Scrub verifies number of needles with circulating nurse when package is opened
- Separate sponges when counting
- Use only x-ray detectable sponges during the procedure

### 3. Verbalizes 3 of 5 actions to be taken in the event of an incorrect count:
- Immediately inform surgeon when any discrepancy in the count is discovered
- Implement a search, informs nurse manager/supervisor
- If incorrect count is not resolved calls X-Ray
- Radiologist/attending surgeon (per facility policy) will review x-ray film to rule out a retained item before the patient is transferred from the OR
- Document the results per facility policy
Bibliography


