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Surgical/Procedural Verification; Correct Patient, Correct Site, Correct Procedure, PTCR20r

POLICY STATEMENT:

Children's Hospital and Medical Center is committed to patient safety. Verification of correct patient, correct site and correct procedure is a priority process for surgical and invasive procedures. The operating provider performing the surgical or invasive procedure assumes ultimate responsibility for performing the correct procedure at the correct surgical site on the correct patient. Staff will support the operating provider in this patient safety goal through a formal verification process that is completed and documented in a collaborative team manner.

PURPOSE:

To promote patient safety by providing guidelines for verification of correct site, correct procedure and correct patient for surgical or invasive procedures.

FORMS:

Electronic IntraOp Nursing Record
Electronic Pre-Operative Checklist
Inpatient Pre-Operative Checklist
Time-Out Process Checklist

PROCEDURE:

Scheduling:

The verification process for correct site surgery will begin with surgery scheduling.

1. The following information is required when scheduling a surgical procedure:
 - a. correct spelling of the patient's full name;
 - b. date of birth;
 - c. procedure to be performed (written with no abbreviations; procedures involving laterality will have the word LEFT, RIGHT, or BILATERAL spelled out on the surgery schedule and on all relevant

- documentation including consents and orders).
 - d. the physician's full name(s);
 - e. implants or special equipment required when applicable.
2. Information listed above will be entered into the surgery scheduling system and repeated back to the person scheduling.
- a. The operating provider's office staff will be requested to fill out and fax a "Surgery Sheet/Orders" form to the scheduling office as a second verification.
 - b. Cases scheduled without all required information will have a note on the surgery schedule indicating "ADDITIONAL SITE INFORMATION IS REQUIRED". In this case the operating provider will be notified to provide further clarification and required information.

Pre-Operative or Pre-Procedure Verification:

The RN preparing the patient for surgery or the invasive procedure will be responsible for the verification process the day of surgery or at the time of the invasive procedure.

1. CORRECT PATIENT:
- a. Two patient identifiers will be used to determine correct patient:
 - i. the patient's full name, which must be stated by the patient, if age appropriate, or by the parent(s), legal guardian or by healthcare proxy; and
 - ii. the patient's medical record number.
 - b. Patient room number will NOT be used as a patient identifier.
2. CORRECT PROCEDURE:
- a. The history and physical, signed order, or progress note on the patient medical record, and the consent will be reviewed to verify consistency in surgical or invasive procedure(s) to be performed. The procedure on the consent will have NO abbreviations, and in the case of laterality, the words LEFT, RIGHT, or BILATERAL must be spelled out.
 - b. The patient, if age appropriate, or parent(s), or legal guardian(s) will be asked to give their understanding of the surgical or invasive procedure. The legal guardian's signature verifies this, and makes the consent legal. This signature must be witnessed, and the witness must also sign the consent form.
3. CORRECT SITE:
- a. For procedures requiring the site to be marked, the operating provider, or designee who will be involved directly in the procedure and will be present during the procedure, will mark the procedure or surgical site(s) with his or her initials prior to the patient entering the procedure or operating room. The word "yes" is also an acceptable mark at the intended surgical site.
 - b. It will NOT be acceptable to mark the procedure or surgical site(s) with an "X".
 - c. The non-operative site will NOT be marked. Sites for exam under anesthesia will NOT be marked.
 - d. Prior to marking, the operating provider, provider, or designee will verify for consistency and accuracy:
 - i. the patient's identity;

- ii. consent(s);
 - iii. medical record data including history and physical; and
 - iv. all x-rays when applicable.
- e. The site will be marked with a surgical grade marker that is visible after the skin is prepped and the drape applied.
 - i. At the end of the surgical or invasive procedure, an attempt will be made to remove the site marking in the event the patient will be having subsequent procedures.
- 4. The patient will be involved in the process of verification to the extent possible.
 - a. If the patient is unable to verify the information, the verification process will take place with the parent(s) or legal guardian.
- 5. Documentation of the verification process:
 - a. Verification of correct patient, correct procedure and correct site will be demonstrated by a complete Time-Out process and fire safety precaution checklist in the Electronic Medical Record. Complete indicates each item has been reviewed by the OR team and actions/changes made when applicable. All items are reviewed during each time-out.
- 6. Discrepancies:
 - a. A discrepancy at any point in the verification process will result in a halt in the proceedings and the patient will not be transported to the procedure or operating room until the discrepancy is resolved.
 - b. The preoperative RN will notify the appropriate manager for assistance in resolution.
 - c. All team members will agree to the solution and the patient and/or parent(s) or legal guardian(s) will be involved if possible.
 - d. The discrepancy and resolution will be documented by the involved physician or provider and the RN on the patient's medical record.

Intra-Operative or Intra-Procedural Verification

1. Upon entry to the procedure or operating room, the RN will confirm identity of the patient, procedure and surgical site.
2. The operating provider will be responsible for reading and interpreting the x-ray films to be used during the procedure and will confirm the films have been placed correctly for the correct patient.
3. The circulating RN is responsible for displaying the patient's full name, allergies, weight, and planned procedure in the OR. In the event that the patient will be draped prior to the entire surgical team's presence, the MRN number will be compared against the arm band and surgical consent during the "TIME OUT".
4. Both the circulator and the scrub person will view the consent, verifying the following:
 - a. the procedure to be performed (with NO abbreviations),
 - b. the patient or legal guardian's signature,
 - c. a witness signature,
 - d. the correct operating provider,
 - e. the correct patient.

5. The "TIME OUT" process will be performed immediately before the start of the procedure, in all settings and in the location where the surgical or invasive procedure is to be performed.
 - a. The "TIME OUT" will be performed either before or after the patient is draped prior to instrumentation being handed to or picked up by the operating provider.

*In the event that the patient is draped prior to the entire surgical team's presence, the MRN will be compared against the arm band and surgical consent, during the "TIME OUT".
 - b. The "TIME OUT" will be a collaborative effort by the surgical or procedural team, and will be initiated by the RN circulator. All members present during the procedure are responsible for the correct patient, correct procedure, and correct site. **The ultimate responsibility regarding the information communicated in the "TIME OUT" lies with the operating provider.**
 - i. Surgery: the circulating RN, the scrub person, operative physician, anesthesiologist and the radiographer, when applicable. **The circulating RN will ensure the "TIME OUT" and facilitate completion of the process.**
 - ii. Procedure room: provider performing the procedure and hospital staff assigned to assist with the procedure will initiate the verbal "TIME OUT."
 - iii. At the bedside: provider performing the procedure will initiate the "TIME OUT", whether alone or with staff present.
 - c. The "TIME OUT" will be a verbal review of the following, and will include ACTIVE verbal communication between all members of the team. The TIME OUT PROCESS checklist will be utilized for this review. The TIME OUT PROCESS checklist includes but is not limited to the following:
 - i. correct patient;
 - ii. correct site/side;
 - iii. correct procedure;
 - iv. correct patient position;
 - v. correct x-rays displayed appropriately by attending physician or designee;
 - vi. correct equipment available;
 - vii. correct implants, when applicable, are available;
 - viii. TSE status for urgent/emergent neurosurgery and ophthalmology cases.
 - ix. Risk of Fire assessment, including surgical prep review
 - d. All team members present during the surgical or invasive procedure will actively participate in the "TIME OUT" by verbal acknowledgement.
 - i. Absence of a response will not be interpreted as agreement, but will be acknowledged and any issue will be addressed and resolved.
6. Discrepancies:
 - a. A discrepancy at any point in the intraoperative or intra-procedural verification process will result in a halt in the proceedings and the patient surgery or invasive procedure will not be performed until the discrepancies are resolved.
 - b. The RN assigned to assist with the surgery or invasive procedure will notify the appropriate manager for assistance in resolution.

- c. All team members (operating provider, nursing staff, the appropriate supervisor or manager) and the patient (when possible) and/or parent(s) or legal guardian(s) will mutually determine resolution of any discrepancy. If the procedure or laterality is questioned at any point in the surgical process, the operating provider shall be called to meet with patient/parents/guardians. The surgical consent will not be obtained until all parties reach consensus on the surgical plan of care. The discrepancy and the resolution of the discrepancy will be documented in detail, in the progress notes, by the nurse or physician, including but not limited to the date and time, team members involved, the specific circumstances of the discrepancy, the method of resolution, and the final resolution.
- d. Cancellation of the surgery or invasive procedure due to unresolved verification discrepancies will be documented by the involved physician or provider.
 - i. The circulating RN will document the cancellation on the intraoperative record per policy on case cancellations.

7. Documentation:

- a. Verification of correct patient, correct procedure, correct site, correct equipment and available implants, when applicable, will be documented on the OR Nursing Record using the Time-Out Checklist.
- b. At the bedside: the provider that performs an invasive procedure without assistance (alone) will be responsible for documenting in the medical record that a brief pause was taken immediately prior to the start of the procedure to confirm correct patient, procedure and appropriate site.

Quality Improvement:

1. Compliance with this universal policy will be monitored.
 - a. Data collection and observation audits will be conducted on at least a monthly basis.
 - i. Results of monitoring will be presented at staff meetings at least quarterly.
 - ii. Opportunities for improvement will be identified during analysis and follow-up will be initiated by the responsible managers.

Verification:

It is the policy of Children's Hospital to require the process of verification for all surgical and invasive procedures, including those performed at the bedside. The verification process will apply to operative and other invasive procedures that expose the patient to more than minimal risk. Procedures such as venipuncture, peripheral line placement, insertion of a NG tube or Foley catheter are not subject to this process.

Fire Risk:

The entire surgical team will assess and discuss the risk for fire during the Time out for every case. The RN circulator will report the Risk of Fire as Low or High. Fire risk will be determined by the team by identifying each of the following points:

- Is an alcohol-based prep agent or other volatile chemical being used preoperatively?
- Is the surgical procedure being performed above the xiphoid process?
- Is open oxygen or nitrous oxide being administered?
- Is an ESU, laser, or fiber-optic light cord being used?

- Are there other possible contributors?

Fire risk will be scored based on the number of the above factors present in each situation. Presence of O-1 results in **Low** fire risk. Presence of 2 or more risk factors results in a **High** fire risk. If Low fire risk is identified the case will proceed with caution. If High fire risk is identified implement the following actions as applicable to each situation.

A. Is an alcohol-based prep agent or other volatile chemical being used preoperatively?

◦ **Actions:**

1. Prevent pooling of skin prep solutions on or around the patient.
2. Remove prep-soaked linen and disposable prepping drapes before placing surgical drapes.
3. Allow skin prep agents to dry and fumes to dissipate before draping the patient and using an ignition source.
4. The alcohol-based prepping agents will be removed from operating room prior to draping patient and use of ignition source.
5. Conduct skin prep "time out" to validate that the prepping agent is dry before draping the patient.
6. Allow chemicals (eg, alcohol, collodion, tinctures) to dry thoroughly and vapors to dissipate before using an ignition source (eg, electrosurgical unit [ESU], laser).
7. Flammable Chemicals found in the OR include: ChlorPrep, DuraPrep, Mastisol, Detachol, Alcohol, Dermabond and Cavilon Skin Barrier.

B. Is the surgical procedure being performed above the xiphoid process?

◦ **Actions:**

1. Coat head and facial hair near the surgical site with water-soluble surgical lubricant to decrease flammability.
2. Use an adhesive incise drape.

C. Is open oxygen or nitrous oxide being administered?

◦ **Actions:**

1. Use the same strategies as described below to manage the risks of oxygen and nitrous oxide.
2. Configure surgical drapes to allow sufficient venting of oxygen delivered to the patient via mask or nasal prongs.
3. Deliver 5 L to 10 L/min of air under the surgical drapes to flush out excess oxygen via a separate administration system, if oxygen is being administered via mask or nasal prongs.
4. Titrate oxygen to the lowest percentage necessary to support the patient's physiological needs not to exceed 30%.
5. Stop supplemental oxygen or nitrous oxide for one minute before using electrosurgery, electrocautery, or laser for head, neck, or upper chest procedures.
6. When possible, use cuffed endotracheal tubes.
7. Inflate endotracheal tube cuff with tinted saline (eg, methylene blue).
8. Evacuate surgical smoke to prevent accumulation in small or enclosed spaces (eg, back of throat).

9. Pack wet sponges around the back of the throat to help retard oxygen leaks.
10. Suction oropharynx deeply before using ignition source if oxygen is used.
11. Check anesthesia circuits for possible leaks.
12. Turn off the flow of oxygen at the end of each procedure.

D. Is an ESU, laser, or fiber-optic light cord being used?

◦ **Actions: ESU Use**

1. Place the patient return electrode on a large muscle mass close to the surgical site.
2. Keep active electrode cords from coiling.
3. Store the ESU pencil in a safety holster when not in use.
4. Keep surgical drapes or linens away from activated ESU.
5. Moisten drapes if absorbent, towels, and sponges that will be in close proximity to the ESU active electrode.
6. Do not use an ignition source to enter the bowel when it is distended with gas.
7. Keep ESU active electrode away from oxygen or nitrous oxide; if possible.
8. Keep the active electrode tip clean.
9. Use only active electrodes or return electrodes that are manufacturer approved for the type and model of ESU being used.
10. Use only approved protective covers as insulators on the active electrode tip (ie. NOT red rubber catheter or packing materials).
11. Activate the active electrode only when in close proximity to the target tissue and away from other metal objects that could conduct heat or cause arcing.
12. Inspect minimally invasive electrosurgical electrodes for impaired insulation; remove electrode from service if insulation is not intact.
13. Use cut or blend settings instead of coagulation when possible.
14. Use the lowest possible power setting for the ESU.
15. Only the person controlling the active electrode activates the ESU.
16. Remove active electrode tip from electrosurgical or electrocautery unit before discarding.

◦ **Actions: Laser Use**

1. Use a laser-resistant endotracheal tube when using laser during upper airway procedures.
2. Place wet sponges around the tube cuff if operating in close proximity to the endotracheal tube.
3. Use wet sponges or towels around the surgical site for all laser procedures.
4. Only the person controlling the laser beam activates the laser.
5. Verify that water and the appropriate type of fire extinguisher are available before using the laser.

◦ **Actions: Fiber-optic Light Cord Use**

1. Place the light source in standby mode or turn it off when the cable is not in active use (eg, used within 5 to 10 seconds).

2. Inspect light cables before use and remove from service if broken light bundles are visible.
3. Secure the working end (ie, the end that is inserted into the body) of the telescope or cord on a moist towel or away from any drapes, sponges, or other flammable materials.

E. Are there other possible contributors?

◦ **Actions:**

1. Select defibrillator paddles that are the correct size for the patient.
2. Use only manufacturer recommended product for defibrillator paddle lubrication.
3. Use appropriate defibrillator paddle placement for patient allowing optimal skin contact.
4. Slowly drip saline on a moving drill, burr, or saw blade.
5. Place drills or saws on the mayo stand or back table when not in use.

Marking Surgical Sites:

Marking of the surgical or procedural site(s) is the responsibility of the operative physician or healthcare provider, but may be delegated to a resident or other licensed independent provider specifically licensed to perform the scheduled procedure by the operating provider responsible for performing the procedure. This individual will be involved directly in the procedure and will be present at the time the procedure is performed.

- a. All Single organ cases **will** be marked;
- b. The operative operating provider's (or resident or other licensed independent provider that will be directly involved in the case) initials or the word "Yes" will be acceptable forms of marking. The word "No" will not be accepted as a surgical marking.
- c. All cases involving multiple structures (i.e.; fingers and toes) or multiple levels, will require each site to be marked;
- d. All cases with multiple sides/sites during the same operation will require each side and site to be marked;
- e. Laparoscopic cases - the operating provider's (or designee's) initials shall be placed on the abdomen and will be visible after draping. For laparoscopy cases involving a unilateral procedure on a paired structure (kidney, ureter, adrenals, etc.), the initials **plus** the right or left designation will be placed in the appropriate operative abdominal quadrant and will be visible after draping;
- f. Ocular muscle surgical procedures will be marked above the operative eye(s) with the operating provider's initials and the number of muscles to be operated on. **Eyes to be examined under anesthesia will NOT be marked.** Upon arrival to the operative suite, the ophthalmologist will write on the OR white board the specific muscles with subsequent action required on each muscle. This information shall be included in the "time out" process. An acceptable alternative would be an approved diagram with muscle to the treated marked by the operating provider and for it to be displayed in the OR and checked at the "time out";
- g. For myringotomies, the operative ear(s) will be marked. Both ears will be marked for bilateral myringotomy. The initials of the operating provider or the word yes on each ear to be operated on will be acceptable.
- h. If a patient is having several procedures by several different operating providers, each operating provider is responsible for marking their own surgical site. For cases involving two operating providers with different start times and performing different operations, the first operating provider will mark his/her surgical site per policy. The second operating provider will mark his/her surgical site upon their arrival to

the OR. A "time out" process for verbal verification intraoperatively is to be performed prior to the start of **each** procedure;

- i. The primary attending operating provider will be responsible for marking surgical incision sites if more than one operating provider is involved for the same operation. Anterior posterior spine cases will be marked by the spine operating provider.
- j. Spine surgery will be a two part process:
 - i. Pre-Operatively - the skin will be marked at the level of the procedure (i.e., cervical, thoracic, lumbar) and will indicate anterior vs. posterior and right vs. left.
 - ii. Intra-Operatively - x-rays with immovable markers will be used to determine exact location and level of surgery; the operative physician will review the x-ray(s) for confirmation and once confirmed, mark the site with cautery, suture or bone bite before removing the x-ray marker.
- k. **Sites to be examined under anesthesia will NOT be marked.**

Special Considerations

- a. Safe surgical site skin marking for infants may be performed on surgical patients > 40 weeks post-conceptual age. For cases in which it may be unsafe to mark the surgical site (infants < 40 weeks post-conceptual age), an alternative method for visually identifying the correct site will be used. The alternative method will be placement of an additional ID band with the patient identification (full name and medical record number) and the procedure to be performed documented on it. The ID band will be placed on the extremity of the same side as the laterality of the procedure.
- b. No procedures are exempt from verification of the surgical site. In the case that the operative site is not predetermined (central lines, pacemakers), extreme disruption of skin integrity (myelomeningocele), for procedures on or within natural orifices (e.g.; mouth, nose, urethra, rectum, penis, vagina, stoma, gastroenterology endoscopic procedures), and for intraoral midline procedures (tonsillectomy, adenoidectomy) the procedure will be addressed verbally and unanimously during the time out process.
- c. For dental procedures, the operative teeth will be described and documented on the patient's medical record and identified, and visually confirmed on x-ray, and marked on the Intraoperative Dental Diagram (attached below) which is to be included in the intra-operative chart.
- d. In the event a patient and/or parent(s)/legal guardian(s) refuses to have the site(s) marked, the patient's physician and/or the department manager will be required to review with the patient and/or parent(s)/legal guardian(s) the rationale for site marking. If the patient and/or parent/legal guardian still refuses to have the site marked, the alternative method will be to add an additional ID band, with patient identification (full name and medical record number), and the procedure to be performed. The band will be placed on the extremity of the same side as the laterality of the procedure. A full note addressing the patient's and/or parent(s) or legal guardian's refusal to mark and the resolution will be documented in the medical record by the attending operating provider, department manager, house supervisor, or designee.
- e. Urgent and emergent cases may not allow time for marking of a surgical/invasive site and may be omitted at the discretion of the operative physician or provider performing the procedure, however, a "time out" will be performed unless the risk supersedes the benefits. In urgent and emergent neurosurgery and ophthalmology cases, the "time out" must include the consideration of the presence of Transmissible Spongiform Encephalopathy (TSE).

Note: *Children's Hospital and Medical Center recognizes some surgical specialties, i.e., American Academy of Orthopaedic Operating providers, have adopted and set forth standards and guidelines for their physician*

membership that would be in addition to the requirements of this policy. These standards and guidelines will be accepted as additional steps that ensure correct patient, correct procedure, correct site surgery and will be practiced in conjunction with the above policy.

REFERENCES:

The Joint Commission on the Accreditation of Healthcare Organizations. Universal Protocol, Hospital Accreditation Program, UP 01.01.01-.01.03.01.

Perioperative Standards and Recommended Practices (2017). AORN, Denver, CO.

Attachments

[Intra Operative Dental Diagram](#)

Approval Signatures

Step Description	Approver	Date
Manager	Kimberly Schmidt: CH - Clin Educ Resource RN	01/2022
Owner/SME	Shona Seiler: Clinical Resource Educator Surgical Services	12/2021