

Child Health Patient Safety Organization

Patient Safety Action Alert

April 2019



Take Action to Reduce Risk of Similar Harm

Wrong-site Surgeries/Procedures are Still Occurring when Site is Difficult to Mark

Resultant Harm

Patients experience wrong-site surgeries/procedures when surgical/procedural sites are difficult, or impossible, to mark (e.g., perineum, mucosal surfaces such as with frenectomy procedures, internal organs, casted limbs, lateralized organs), or when patients/families refuse site marking. Procedures performed on the wrong site can result in unnecessary procedures, prolonged exposure to anesthesia, a return to procedural room for corrective procedure, and increased length of stay.

Fundamental Issue

The procedural environment is complex, and often there is a disconnect between how work is imagined versus how work is done. Adherence to a robust alternative site marking policy is essential to mitigate risks. When wrong-site events occur, Child Health PSO has found that the organization's alternative site marking policies were not followed and/or they lack the following:

- Policy that clearly addresses current best practices/protocols for all situations when alternative site marking processes are required.
- Process to escalate situations where site marking is challenging to further refine and strengthen alternate site marking processes.
- Standardized timeout process that elicits engagement among the entire surgical team to ensure identification and marking of correct anatomical surgical site(s) (e.g., multiple repositioning of patient during procedure/surgery).
- Process to validate actual practice compared to established policies/protocols for the verification of correct surgical site.
- Standard processes to communicate preference of procedure/operating room setup based upon proceduralists' physical preference (e.g., right/left hand dominance).
- Organizational culture that supports high-reliability principles.

Actions to Mitigate Risk of Similar Harm at Your Hospital

Effective Alternate Site Marking Practices

- Identify settings where surgeries/procedures can occur (e.g., bedside, emergency department, ambulatory care, operating room) and may require an alternative site marking process.
- Identify surgeries/procedures involving sites that are anatomically impossible or impractical to mark.
- Conduct an assessment (e.g., GEMBA walk) to evaluate actual practice compared with written policies and procedures in applicable settings.
- Establish simulated training activities for alternative site marking surgeries/procedures.
- Develop job aides and real-time reminders for caregivers when sites are anatomically impossible or impractical to mark, or patient/family refuses marking.

Considerations for Alternative Site Marking Policy

- Review procedural site marking policies to ensure alternative site marking processes are included for situations when it is technically or anatomically impossible/impractical to mark the site, or patient/family refuse site marking.
 - Identify methods to ensure procedural site is visible after draping.

What can I do with this alert?

- Forward to the recommended target audiences for evaluation.
- Include in your Daily Safety Brief.
- Create loop-closing processes for evaluating risks and implementation of strategies to decrease the possibility of repeat harm.
- Provide feedback to the Child Health PSO on what is working and what additional information would be of value.

Leverage your PSO membership
Learn from each other to reduce patient harm and Serious Safety Events.

Target Audiences

- Surgical Leaders
- Nursing Leaders
- Medical Leaders
- Clinical Leaders
- Organizational Leaders
- Clinical Educators
- Patient Safety
- Quality Improvement
- Legal/Risk Management
- Emergency Department
- Urgent Care
- Specialty Care Services
- Ambulatory Care
- Primary Care

- Specify who (e.g., proceduralist, dentist) is responsible for marking all operative site(s) or diagram(s).
- Use visual marking methods accessible to the entire procedural team:
 - *Eye and eye muscle(s) procedure* – Mark a diagram to indicate the eye on which the procedure will be conducted. Another consideration for lateral eye surgeries is to mark over the eyebrow, on the cheek, or as designated by the proceduralist.
 - *Dental procedure* – Mark site on a diagram to clearly identify which teeth are present, decayed (including surfaces), or anomalies after performing an oral examination and reading intra-and extraoral films, if available, prior to tooth preparation or extraction.
 - *Spine surgery* – Verify site intra-operatively by radiographic markers (e.g., osseous landmark or disk) to confirm the site.
- Ensure the use of timeouts throughout the procedure(s). Considerations include:
 - *First timeout (immediate pre-operative verification)*: Use to identify correct patient, procedure (visual inspection of operative consent), site (visual inspection of the site marking) with the anesthesia provider, circulating RN and patient/family.
 - *Second timeout*: Use to identify correct patient, proceduralist, operative site(s), anticipated risks, special equipment including implants prior to incision.
 - *Additional timeout(s)*: Use for patients having two or more procedures, procedures on multiple sites, or if the proceduralist changes.
 - Sites should be marked with attending proceduralist's initials, along with the number that correlates with the procedures on the consent. For example, the first procedure listed on the consent will correlate to the procedure listed first on the OR schedule, and will be marked on the patient "proceduralist's initials 1".
 - *Final timeout (case debriefing at the conclusion of the procedure)*: Use to communicate key issues such as verified counts, specimen labeling, and/or potential recovery concerns.
- Establish standardized process/protocol for situations when patient family refuse site marking.
 - Proceduralist should determine disposition of case (i.e., cancel, proceed).
 - If proceeding,
 - Patient/family refusal should be noted in medical record by the proceduralist as reason for not marking site.
 - Proceduralist remains with the patient from confirmation of the procedure and site until procedure is complete.

Supporting Resources (Note: Some resources may require a subscription to access.)

Association of periOperative Registered Nurses (AORN), "[Using an Alternative Site Marking Form to Comply With the Universal Protocol](#)", Norton E, CNOR, AORN Journal, First published: April 27, 2011

Mulloy DF, Hughes RG. Wrong-Site Surgery: A Preventable Medical Error. In: Hughes RG, editor. Patient Safety and Quality: An Evidence-Based Handbook for Nurses. Rockville (MD): Agency for Healthcare Research and Quality (US); 2008 Apr. Chapter 36.
<https://www.ncbi.nlm.nih.gov/books/NBK2678/?report=reader#!po=35.7143>

Speak Up Poster (2012). The Joint Commission. (The Universal Protocol). Retrieved from https://www.jointcommission.org/assets/1/18/UP_Poster.pdf.

The Joint Commission, "[National Patient Safety Goals Effective January 2019](#)", "Introduction to the Universal Protocol for Preventing Wrong Site, Wrong Procedure, and Wrong Person Surgery™", Hospital Accreditation Program, UP.01.01.01-UP.01.03.01, p. 14-17

Has a patient experienced an event at your organization that could happen in another hospital?

- Child Health PSO members should submit event details into the [Child Health PSO portal](#).
- Contact Child Health PSO Staff to share risks, issues to assess, and mitigation strategies with member hospitals.

More than 60 children's hospitals are actively engaged with Child Health PSO. We currently are enrolling new members.

Contact Us

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