Abstract:
The elimination of wrong procedure, wrong site, and wrong patient events is a primary patient safety goal of medical institutions. Emergency departments are fast-paced, high-acuity environments in which frequent changes of personnel, consultations from a variety of other hospital services, and the need for urgent diagnostic and therapeutic procedures occur. The objective of this article is to illustrate the value of the timeout process for invasive procedures occurring in pediatric patients in the emergency department setting. Case studies will demonstrate the potential pitfalls that can result if a timeout process is not in place.

Keywords:
timeout; emergency department; invasive procedure; children

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What if a Pilot was Too Busy for the Checklist? Emergency Department Safety and the Timeout Process

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The prevention of wrong procedure, wrong site, and wrong patient events is a fundamental patient safety goal for medical institutions. These occurrences have been characterized as "sentinel events" by the Joint Commission and as "never events" by National Quality Forum and the US Centers for Medicare and Medicaid Services. *Sentinel events* are defined as patient care occurrences involving death or serious physiologic or psychologic injury or the risk thereof. The Joint Commission requires health care institutions to report sentinel events and to conduct a root cause analysis. In addition to reporting to oversight and accreditation agencies, there is an increasing expectation that these events should be reported publically. The terminology, *never event*, implies that these serious medical errors are preventable and should never occur. Insurers, including Centers for Medicare and Medicaid Services will legitimately refuse reimbursement to hospitals and physicians for any care associated with a never event.

Emergency departments (EDs) are fast paced and, at times, chaotic, environments involving numerous handoffs, frequent personnel changes, consultations with a variety of hospital specialty

services, and the need for diagnostic and therapeutic procedures. These factors, combined with high patient acuity, create meaningful risk for errors and adverse patient events. This article will explore the value of the timeout process for procedures occurring in pediatric patients in the ED setting (Figure 1). Case studies will demonstrate the potential pitfalls that can result if a timeout process is not in place. Each of the provided examples of wrong side procedures could have been avoided by use of the timeout checklist.

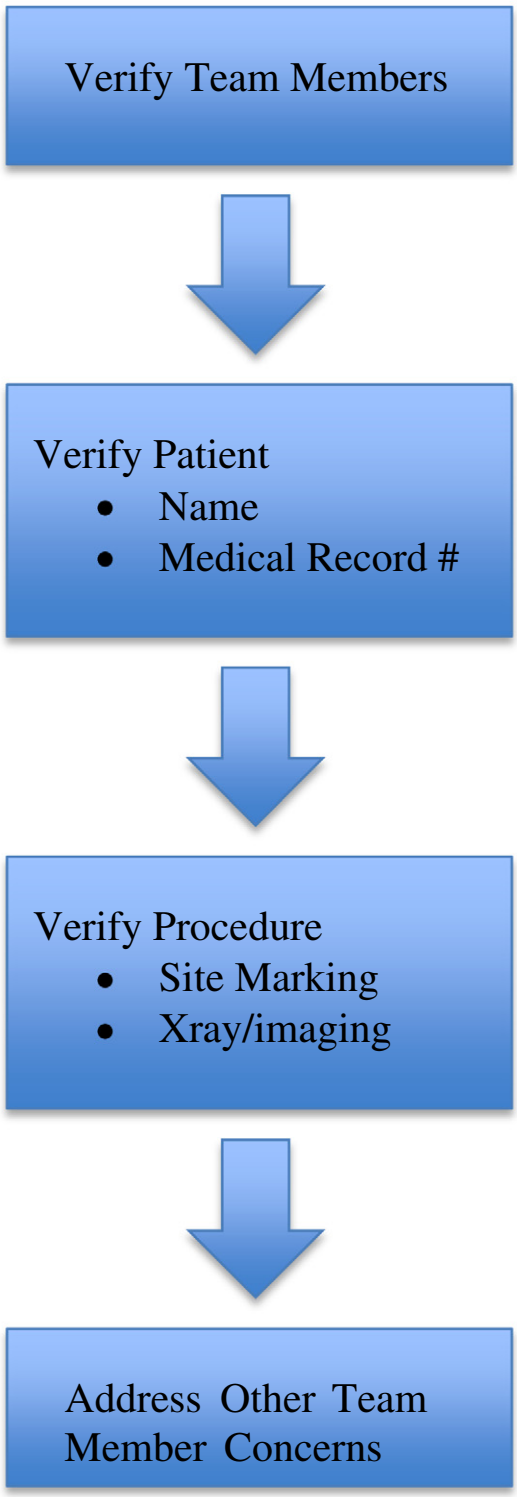

Figure 1. Emergency department timeout process.

CASE 1

A 14-year-old adolescent boy presents to the ED in moderate respiratory distress. His foster parent explains that his breathing became more labored approximately 1 hour ago. She explains that this has never happened previously during the time he has been in her custody. His medical history is significant for severe developmental delay resulting in limited mobility. He is nonverbal and gastrostomy tube fed. On examination, he was tall, thin, and contracted. He was afebrile, with a heart rate of 110 beats per minute, a blood pressure of 110/90 mm Hg, a respiratory rate of 40 breaths per minute, and a pulse oximetry in room air of 85%. He was placed on oxygen with minimal improvement. He had a chest x-ray, which demonstrated a large right pneumothorax with minimal midline shift. Consent was requested from the Department of Child and Family Services, but eventually, the condition was deemed life threatening requiring an emergent procedure. The nurse collected the required equipment and placed it in the room on the bedside table, while the physician was seeing other patients. An ED tech who had just come onto his shift was asked to assist in the procedure because the nurse was busy with a new admission. After preparing the site and injecting numbing medication, the physician placed a percuteous chest tube without complication. The patient had minimal improvement in his condition. A chest x-ray was obtained and demonstrated a large right pneumothorax with a left well-expanded lung and left chest tube.

CASE 2

A 5-year-old Hispanic girl presents to the ED with her parents who are concerned because their daughter has had fevers for 2 days and is now complaining of pain in her left leg. The parents who speak limited English continue on to explain that she is now limping while walking. On physical examination, the patient is ill appearing with a fever to 102°F. Her left knee is warm with minimal discoloration and swelling and has limited range of motion and pain with flexion. On x-ray, there is no obvious fracture, but an ultrasound demonstrates a joint effusion. Orthopedics was consulted, and the