

Pediatric Trauma

Update



TOPP Committee formed

The trauma committee has recently changed its name to the TOPP committee, the Trauma Operational Process and Performance Committee. The name and the goals of this committee mimic the standards set by the American College of Surgeons.

The multidisciplinary TOPP committee includes representatives from all phases of care given to injured patients – pre-hospital personnel, physicians, nurses, administrators, radiology, lab, OR, Pedi-Flite, project managers, respiratory therapy, injury prevention, rehabilitation and HIM.

The goal of the TOPP committee is to address, assess and correct global trauma program and system issues. Minutes must reflect the review of operational issues, and when appropriate, the analysis and proposed corrective actions. This process must identify problems and must demonstrate loop closure. In our quest to become a Level 1 trauma center, we have learned the No. 1 failure from a trauma center is lack of a strong PIP process with problem resolution. Simply put, we need to identify and correct any barriers that prevent us from delivering the best care.

Call Us

To transfer a patient with emergent needs, call Le Bonheur's Transfer Center at 901-287-4408 or 888-899-9355. For appointments or non-critical referrals, call our Resource and Referral Center at 901-287-7337.

A Letter from the Director



Every year, Le Bonheur Children's cares for more than 13,000 children involved in major or minor traumas. As our region's comprehensive trauma center, Le Bonheur is a valuable resource for

pediatric trauma victims.

Because we provide the best option of care for these children, Le Bonheur is enhancing our focus on our trauma program and working to become a designated American College of Surgeons (ACS) Level 1 Trauma Center.

Because you are an integral part of the team caring for trauma patients, we are launching a quarterly newsletter to keep you informed on what we're doing to improve trauma care. *Pediatric Trauma Update* will include up-to-date information on Le Bonheur's treatment, research and prevention efforts in the field of pediatric trauma.

As trauma medical director, I'm excited about opportunities the new Le Bonheur

building will provide us. When it opens in September, the new hospital will have a dedicated operating room for trauma and orthopedics, allowing us to care for those patients sooner and more efficiently. Our new Emergency Department will also have four trauma rooms designed to provide advanced resuscitative care, bedside ultrasound, portable X-ray, advanced airway carts and more.

Caring for the pediatric trauma patient requires people and resources across a large continuum, including multiple surgical and medical subspecialties, nursing and ancillary support, pre-hospital care, rehabilitation services, child and family support services, and community resources.

We look forward to finding better ways to provide care for our children. Stay tuned to future newsletters for stories and information about how Le Bonheur is serving as a leader in the field of pediatric trauma care.

James "Trey" Eubanks, MD
Medical Director of Trauma
Le Bonheur Children's Medical Center

Meet the Trauma Program Support Team

Le Bonheur has formed a new trauma program support team. Pictured on back row, from left, are trauma registrar Kathryn Stewart, EMT, CSTR; Quality Project Manager Debbie Hannah, RN, BSHS; program manager Diana Eckroth, RN, BSN, CPEN and medical director James "Trey" Eubanks, MD. Pictured on front row, from left, are trauma coordinator Keri Scott, RN, BSN; and administrative director Laura Miller, MHA.



Performance Improvement Update

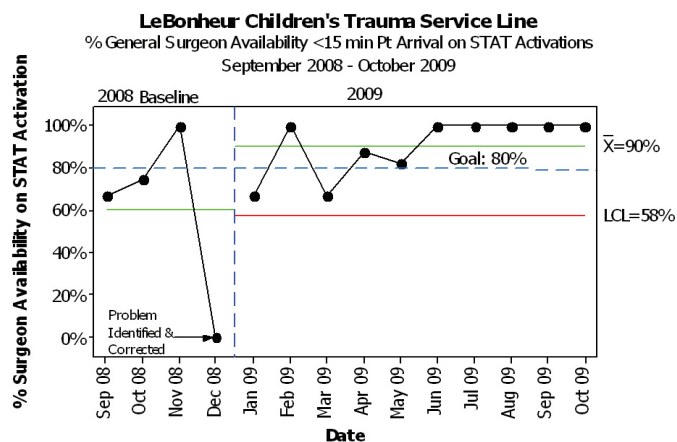
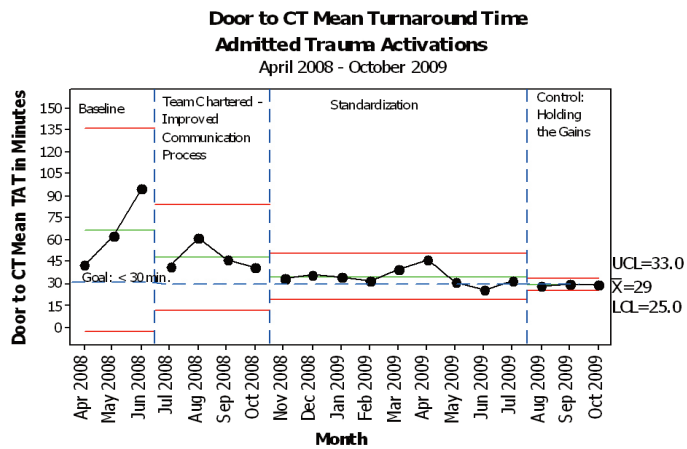
In emergency medicine, the golden hour refers to the first 60 minutes following a traumatic injury, during which there is the highest likelihood that prompt medical treatment will decrease morbidity and mortality and result in improved patient outcomes. Definitive care in the operating room is dependent on the timeliness of obtaining CT scans and other diagnostic testing, all of which rely on efficient and effective patient stabilization.

The primary objective for the CT Turn Around Time (TAT) project was to improve processes so that 80% of admitted patients with a Glasgow Coma Score of <15 who meet trauma activation criteria, are transported to the CT suite within 30 minutes of arrival to Le Bonheur Children's ED.

Results: The baseline data from April to June 2008 revealed a CT TAT average of 66.8 minutes. None of

the patients in the baseline had a door to CT time of less than 30 minutes. Improvements focused on communication and standardization of the trauma activation process, resulting in a reduction of the mean TAT from 66.8 minutes to 30 minutes. While these efforts have been successful in reducing the average TAT, we continue improvement efforts to meet this goal 80% of the time. One challenge is limited resources in the current ED to accommodate multiple trauma patients concurrently. Expanded operations in the new facility will address some of this. Improvement work continues to improve these results.

Prompt availability of the general surgeons during STAT trauma activations is another key to successful patient outcomes. The baseline mean availability within 15 minutes of patient arrival was 60%. The mean through October 2009 was 90%.



2009 Admitted Trauma Stats

Admitted Traumas	1,001
Admissions to PICU	121
Alert Activations	89
Stat Activations	84
Total Hospital Days	4,278
PICU Vent Days	813

Trauma Activations Criteria

TRAUMA STAT	TRAUMA ALERT
Traumatic arrest/CPR @scene	Intubated and <4 hrs after injury
Shock requiring ongoing fluid resus (age specific hypotension)	Shock that stabilized w/IVF
Ventilation/airway compromise	Intracranial hematoma w/mass effect
GCS <8 or PTS <8	GCS 9-12
Penetrating head, neck, chest, torso injury	GSW w/o extremity (except BB or pellet)
Proximal amputations	Blunt abdominal trauma
Burns >30% total BSA (2nd & 3rd degree)	Severe hypothermia
Spinal Cord injury w/paralysis	Open or multiple fractures of extremities
Team Leader Discretion	Suspected C or T-spine injuries
	Team Leader Discretion

Le Bonheur has a two-tiered activation system to notify providers of a patient's condition prior to the patient's arrival. This system allows for getting the appropriate staff to the patient's bedside in a timely manner. Trauma alerts are the lower level of activations and trauma stats are the higher level (more severe). Additional staff respond to the trauma stats, such as general surgery, pharmacy, blood bank, security and a chaplain.

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