PRACTICE GUIDELINE

Effective Date: **7-1-05** Manual Reference: **Deaconess Trauma Services**

TITLE: PERFORMANCE IMPROVEMENT PLAN

PURPOSE

Deaconess Hospital's Trauma Performance Improvement (PI) plan is to measure, evaluate, and improve the process and effectiveness of care rendered to the injured patient including medical oversight of pre-hospital providers, resuscitation, inpatient care, and inter-hospital transfer. This includes a multidisciplinary effort to monitor, assess, and improve both the processes and outcomes of care to the injured. The long-term goal is to decrease death and disability by reducing inappropriate variation in care through progressive cycles of performance review.

IDENTIFICATION OF PATIENT POPULATION

Criteria for determining which patients undergo monitoring and evaluation of care is correlated with the American College of Surgeons and hospital-specific indicators. See Trauma Registry Process Guideline for inclusion criteria.

STRUCTURE

The Performance Improvement consists of internal and external monitoring and evaluation of care provided by EMS, medical, nursing, and ancillary personnel, as well as hospital departments, services, and programs. Monitoring is ongoing and systematic; opportunities to reduce inappropriate variation in care are sought, and strategies to improve care are documented in the registry. The effectiveness of corrective action is evaluated through continuous reassessment and monitoring utilizing an ongoing performance improvement process.

RESPONSIBILITIES

The Trauma Medical Director, Trauma Outreach Medical Director, Trauma Performance Improvement Medical Director, Director of Patient Care Services, Trauma Program Manager, Trauma Data Quality Coding Coordinator(s), Trauma Clinical Operations Supervisor, Trauma Performance Improvement Nurse, and EMS Coordinator(s) address performance issues, which involve multiple services and departments. The Trauma Medical Director(s) leads the Trauma PI process through case reviews, participation in Multidisciplinary Trauma Rounds and review of variances, indicators, complications and complaints. The Trauma Medical Director will review events and determine corrective action if applicable.

The Trauma Clinical Operations Supervisor and Trauma Performance Improvement RN abstract data from selected patients' chart concurrently, they identify and report complications, variances in care, complaints and opportunities for improvement from time of patient injury (EMS Care) through rehab. These issues are reported to the Trauma Medical Director/Trauma Program Manager and the Trauma Service team for concurrent

follow-up needs. Each chart is screened again by the Trauma Data Quality Coding Coordinator(s) after discharge as appropriate.

The Trauma Data Quality Coding Coordinator(s) is responsible for report writing, and utilizing the Trauma Registry as the core source of information. He/she enters data into Trauma Base (Trauma Registry), State of Illinois Registry, and State of Indiana Registry assigns AIS codes, ICD-10 Codes and validates / enters E-codes for all injured patients who meet inclusion criteria. Issue, judgment, and action are documented in the patient's trauma registry information by the Trauma Care Coordinator, Trauma Performance Improvement RN, Trauma Program Manager, and Trauma Data Quality Coding Coordinator(s).

Trauma cases are screened for physician review by the Trauma Program Manager, Trauma Clinical Operations Supervisor, and the Trauma Performance Improvement RN. Cases with complications, variances, or complaints may be reviewed by the Trauma Medical Director(s), Director of Patient Care Services, Trauma Program Manager, Trauma Clinical Operations Supervisor, Trauma Performance Improvement RN, and Trauma Data Quality Coding Coordinators as appropriate, then if warranted, forwarded to the Trauma Peer Review M&M committee. Trauma Services collaborates with the Deaconess Hospital's Quality Improvement Liaison in screening mortalities, variances in care, and at risk cases. This communication between departments stimulates ideas and processes to ensure quality patient care. A representative from the Performance Improvement department attends the monthly Trauma Peer Review M & M committee meeting and reports back to the Medical Staff Quality Council if necessary.

The Trauma Operational Committee consists of a multidisciplinary team representing all phases of care provided to the injured patient including pre-hospital care. A representative from each of the designated trauma care areas is encouraged to attend and participate. These participants include: EMS, ICU, Medical Surgical, Orthopedic and Neurological Floors, Administration, ED liaison, Trauma Surgeon (TMD) and Trauma Services.

The Trauma Peer Review Committee meets monthly. This meeting is physician led, confidential, and peer protected. Peer physician representation includes Trauma Surgery, Vascular Surgery, Pediatric Intensivist, Emergency Medicine, Pulmonary Critical Care Medicine, Anesthesia, Radiology, Neurosurgery, Orthopaedic Surgery, and other appropriate physician sub-specialists. Cases that require further follow-up or action are referred to the Deaconess Medical Staff Executive Council or other department sections as necessary. Internal CME is available for Physicians at this meeting due to educational content, case reviews, and EBP reviews when indicated.

The Trauma Program Manager coordinates action planning and documentation between the trauma program and the hospital-wide PI program. Trauma Operational Committee and Trauma Peer Review M&M Committee meet monthly. System and process related issues are reviewed at the Trauma Operational Committee. Provider related morbidity and mortality issues as well as select complications are reviewed at Trauma Peer Review

M&M Committee. The Trauma Service's Department is responsible for data processing, analyzing, and reporting variances to the Trauma Operational and Medical Committees. As necessary, cases of educational merit are discussed with EMS, physicians, nurses and ancillary personnel and education credit given in compliance related to patient privacy regulations and peer protection requirements.

Trauma Services utilizes a three tiered system for trauma patient review. Each chart is screened to ensure patient care was delivered appropriately and timely (DVT prophylaxis, GI prophylaxis, c-spine clearance, timelines of treatments-OR, CT, ED, admitting orders, admitting MD, etc.) using a standard form/database. All deaths receive a Level 2 review completed by the Trauma Medical Director(s) and are presented at Trauma Peer Review Committee meeting for a level 3 review.

Level 1 Review:

The first level of review is an initial screening completed by the Trauma Data Quality Coding Coordinators, Trauma Clinical Operations Supervisor, Trauma Performance Improvement RN, and/or the Trauma Program Manager on all trauma patients entered into the registry. All events that are identified and resolved in the Level 1 Review will be tracked for periodic review and analysis until event resolution occurs. Events that require further investigation will be submitted for Level 2 review.

Level 2 Review:

This secondary review is performed by the Trauma Program Manager, Trauma Clinical Operations Supervisor, or Trauma Performance Improvement RN and by the Trauma Medical Director to determine if variances or complications could have been prevented or had a negative impact on the patient. A Level 2 Review includes variations in care not resolved in a Level 1 review. This secondary review is completed on all medicine admissions with an ISS > 15, all transfers, all pediatric patients with an ISS > 15, mortalities, and other cases that are referred to the PI program due to variances, etc. All events that are able to be resolved in the Level 2 review will be tracked for periodic review and analysis until event resolution occurs. If the Trauma Medical Director feels the case is controversial or there was an opportunity for improvement that cannot be resolved with a level 2 review, a timeline of the event will be established and the case will be submitted for Level 3 review.

Level 3 Review:

All charts requiring a Level 3 review will be presented at Trauma Peer Review M&M Committee for discussion with the Peer group and an action plan will be developed as appropriate. All mortalities and transfers are reviewed at Trauma Peer Review M&M Committee. If the TMD is unable to determine the classification of a mortality or appropriateness of a transfer, then Peer Review members discuss and will decide the classification. If the Peer Committee decision is inconclusive, the case will be referred to Medical Staff Quality Committee or Surgery Peer Review process for event resolution.

DATA COLLECTION AND INFORMATION SOURCES

Data is collected concurrently during the hospitalization. The abstraction is finalized within 45 to 60 days of discharge. The data is abstracted from the patient's medical record and other sources as listed below. The following information sources are utilized to evaluate the effectiveness of care and for monitoring of the hospital's trauma program:

- Pre-hospital care reports
- Hospital medical record (EPIC record including scanned paper documents)
- Referring hospital records if applicable
- Autopsy findings
- Hospital trauma registry data
- External benchmarking data, i.e., NTDB, TQIP
- Indiana Donor Network (IDN) information related to organ/tissue donors
- Complaints from all sources

Deaconess Hospital's Quality Department communicates information related to trauma care from the Emergency Medicine Committee and the Department of Surgery Committee to the Trauma PI program and to the Medical Staff Quality Committee. The Quality Department Liaison has regular attendance at Trauma Peer Review. Information related to PIPs is communicated between the Hospital Quality Department and trauma PIPs as needed (i.e. Trauma case review findings, case referrals, and corrective action plans from the trauma PI program)

ASPECTS OF REVIEW & KEY ACTIVITIES

ACS, State of Illinois, State of Indiana, TQIP, and Deaconess Hospital indicators are used for trending variances, benchmarking performance, identifying cases for committee review, as well as offering an alternative for evaluating processes, outcomes, and consistency of care.

Injured patients who meet criteria for review are screened for quality indicators, reviewed for variances, morbidity, and mortality. Any provider related morbidity or mortality is reviewed for presentation at Trauma Peer Review M&M Committee. Physicians are invited to participate to facilitate event resolution during individual case reviews or at the time of case presentation at Trauma Peer Review M&M Committee.

CREDENTIALING

Refer to the Trauma Team Attending Credentials Guideline.

VOLUME TRENDING

The trauma population at Deaconess Hospital is identified on a daily basis by screening the Emergency Department admission report, direct admission report, and activation log. The trauma patients serve as the denominator for enabling the trauma program to monitor resource and service utilization, morbidity and mortality rates, and other significant factors. The incidence of complications and variances in care are used to establish the need to develop practice guidelines.

PROCESS MEASURES

Process indicators are used to measure, evaluate, and improve system performance (i.e. OR start times, PACU staff arrival time, etc.). Process expectations are developed from committee consensus, hospital policies, practice guidelines or protocols, and by requirements of the Resources for Optimal Care of the Injured Patient (2014) and Illinois rules and regulations. The Trauma Program is focused on timeliness of care, standardization of care, documentation, etc.

OUTCOME MEASURES

Deaconess Hospital's Trauma Services measures the outcome of trauma care including morbidity, mortality, length of hospital and intensive care unit stay, cost, and patient satisfaction. Complications and injury related deaths are identified and evaluated for preventability and appropriateness of care. Outcome measures are reported at Trauma Peer Review M&M Committee and Trauma Operational Committee. Outcome measures that are specific to physician groups are reported at their specific departmental meetings and in physician report cards, which are reviewed by the Trauma Medical Director. Outcomes measures are reviewed and discussed during annual evaluation completed by the Trauma Medical Director for the trauma panel members.

EVALUATION

Morbidities and mortalities are evaluated as to whether their occurrence is disease, provider, or system related. A disease related morbidity or mortality is an anticipated sequela of a disease, medical illness, or injury. A provider associated complication results from delays and errors in treatment provided by EMS, nurses, physicians or other hospital personnel. The case review categorizes errors in technique, judgment, treatment, etc. and is used to determine preventability. As of February 1, 2011, mortalities are classified by Trauma Medical Director using language set forth by the American College of Surgeons listed below is the old and new classifications for clarity.

Old Nomenclature	**Nomenclature as of February 1, 2011**
Preventable	Unanticipated mortality with opportunity for improvement
Non-Preventable	Mortality without opportunity for improvement
Possibly Preventable	Anticipated mortality with opportunity for improvement

CORRECTIVE ACTION

The Trauma Operational Committee &/or Trauma Peer Review M&M Committee determine an action plan to reduce variation in care, improve care, or correct identified problems. Corrective strategies may be carried out using any or all of the following mechanisms: modification of hospital policies, trauma guidelines, protocols, professional education for staff, counseling of involved personnel, credentialing, delineation of privileges, and periodic review until event resolution occurs. Periodic review will occur for a timeframe until data trends show improvement. Once event resolution has occurred (i.e. data has improved, or a one-time occurrence has been followed up on appropriately) periodic review is completed.

REMONITORING

Periodic Review provides a method for assuring the effectiveness of corrective action. Corrective action, follow up and evaluation of event resolution are reflected in the Trauma Operational Committee and Trauma Peer Review M&M Committee minutes.

INJURY PREVENTION

The primary focus of the injury prevention program is based upon the top two mechanisms of injury as identified by the Trauma Registry. Additional injury prevention efforts are based on community need and community request. Programs and informational materials are provided to participants at no cost. Injury prevention programs are guided towards patient safety and preventing injuries from occurring.

DOCUMENTATION

The comprehensive PI program includes accurate and confidential documentation of ongoing monitoring, corrective action, progress, and re-evaluation. Information is handled in a strictly confidential manner. Trauma Services abides by hospital policy in regards to confidentiality agreements and breaches of confidentiality. This is addressed in hospital orientation for all hospital personnel.

The essential aspects of control to protect patient information include the following measures:

1. Use of a locked file for all relevant information
2. Shredding of all copies of PI documentation
3. Computer generated PI documentation (medical minutes and case reviews) may only be accessed via user ID and password protection (through windows log on).
4. Peer review documentation (minutes, audits) is collected and shredded after each medical meeting.

PERFORMANCE IMPROVEMENT MINUTES AND REPORTS

Identified issues and resolutions are recorded in Peer and Operational minutes, which are Peer Protected and are not distributed to maintain patient confidentiality, or in the PIPs section of Trauma Base if an isolated variation in care occurs. Identified events are delegated to the appropriate medical service or hospital representative for management of the issues and to promote positive change. Confidentiality is maintained via a confidential letter or email, or direct communication with the providers involved. Adherence to the hospital confidentiality agreement is maintained while summaries are distributed to department chiefs or nursing directors for further resolution.

REFERENCES:

- Resource for Optimal Care of the Injured Patient: 2014
- Trauma guideline: Trauma Team Attending Credentials
- Trauma guideline: Trauma Team Resuscitation Role Assignments
- Hospital Quality Improvement Plan and Organizational Charts
- Trauma guideline: Trauma Registry
- Trauma Outcomes and Performance Improvements Course, 2015 edition
- Society of Trauma Nurses, Optimal Course, 2015 edition

REVIEWED DATE	REVISED DATE
JAN 06	JAN 08
JAN 07	FEB 09
MAY 11	MAY 11
AUG 15	JAN 12
AUG 17	APR 12
JAN 18	JULY 14
JAN 19	AUG 16