

Form "EAST Multicenter Study Proposal"

Study Title	MORTALITY ANALYSIS OF TRAUMA PATIENTS REPATRIATED TO NON-TRAUMA MANAGED CARE INSTITUTIONS
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Co-primary investigator	ARON DEPEW, MD The Model Trauma Care System Plan is responsible for a 15% to 30% decrease in mortality of injured patients, since it was first introduced in 1992. Injured patients are preferentially triaged to designated trauma centers, regardless of their insurance provider or economic means.
Use this area to briefly (1-2 paragraphs only) outline the burden of the problem to be examined	However, with the recent inception of the Affordable Healthcare Act in 2009, more than 90% of all insured Americans are now enrolled in plans with some form of managed care, or Health Maintenance Organizations (HMO). The financial viability an HMO is based on "...reducing unnecessary health care costs through a variety of mechanisms,..." Among these include a concerted effort by HMO's to repatriate the care of their injured members away from designated trauma centers, back to their home institutions. Because their care is transferred to a non-trauma center, their outcomes, including mortality, is no longer tracked by trauma quality initiative registries.
Primary aim	To tract mortality of trauma patients who have been repatriated to non-trauma center HMO facilities.
Secondary aims	To evaluate risk adjusted outcomes (observed-expected) mortality ratios based on the statistically accepted standards of the Trauma Quality Improvement Program (TQIP) methodology.
Inclusion Criteria	All adult trauma patients (age \geq 18) admitted to a designated trauma center, and subsequently transferred to a non-trauma center because of their insurance carrier.
Exclusion Criteria	Pediatric trauma patients, or any trauma patient transferred to another facility for higher level of care.
Therapeutic Interventions	None. Prospective observational study only.
Primary Outcome	ANY mortality of trauma patients repatriated to non-trauma HMO hospital within 3 months after transfer.
Secondary Outcomes	Risk adjusted outcomes (observed-expected) mortality ratios based on the statistically accepted standards of the Trauma Quality Improvement Program (TQIP) methodology.

Demographics - Age, ethnicity/race, sex, body mass index

List specific variables to be collected & analyzed

Illness factors - Injury Severity Score (ISS), Trauma and Injury Severity Score (TRISS), International Classification of Diseases (ICISS), blunt/penetrating, APACHE II score (if known), and co-morbidities (as measured as components of the Charlson score).

Outline the data collection plan and statistical analysis plan succinctly

Outcomes - Hospital length of stay prior to transfer, level of care prior to transfer (intensive care unit, floor, emergency department, convalescent unit)

Public Death Records will be reviewed to identify any trauma patient transferred to a non-trauma center HMO hospital (up to 3 months after transfer). Identified patients will then have their date of death cross referenced to the date of their initial injury, and also to the date of their transfer. Risk adjusted outcomes (observed-expected) mortality ratios based on the statistically accepted standards of the Trauma Quality Improvement Program (TQIP) methodology will then be used to analyze this data.

Outline consent procedures here, if applicable

N/A - retrospective chart review with de-identified data collection

Succinctly outline a risk/benefit analysis

This is no benefit for the subjects studied; however, information learned from this analysis has potential to benefit future patients in helping to understand the risks/benefits of secondary trauma care in non-trauma centers, and possible policy changes regarding repatriation of trauma patients to non-trauma center HMO hospitals.

1. The mortality benefit of direct trauma center transport in a regional trauma system: a population-based analysis. TA Stukel; D Gomez; B Zagorski; De Mestral C The journal of trauma and acute care surgery, 2012 Jun; 72(6): 1510-5; discussion 1515-7
2. Reliability adjustment: a necessity for trauma center ranking and benchmarking. ZG Hashmi; JB Dimick; DT Efron; ER Haut; EB Schneider. The journal of trauma and acute care surgery, 2013 Jul; 75(1): 166-72
3. Long-term survival after major trauma in geriatric trauma patients: the glass is half full. MD Grossman AffiliationU Ofurum; CD Stehly; J Stoltzfus. The journal of trauma and acute care surgery, 2012 May; 72(5): 1181-5
4. Magnet hospitals are a magnet for higher survival rates at adult trauma centers. Evans T.; Rittenhouse K.; Horst M.; Osler T.; Rogers A. Journal of Trauma and Acute Care Surgery, v77 n1 (2014 01 01): 89-94
5. The impact of specialist trauma service on major trauma mortality. TH Wong; W Lumsdaine; BM Hardy; K Lee; ZJ Balogh. The journal of trauma and acute care surgery, 2013 Mar; 74(3): 780-4
6. Managed Care Programs. National Library of Medicine
7. HealthDecisions.org. America's Health Insurance Plans. 2007-07-08

Include a brief listing of key references