

Transforming the Trauma System

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PROJECT DESCRIPTION: Individual health systems provide various services and allocate different resources for patient care. In this study, we investigate optimal care delivery models for health systems through standardizing, consolidating services of tertiary services within the organization, and optimizing resources for the overall patient care so as to 1) increase quality and timeliness of care, 2) maximize financial performance, 3) decrease practice variability across the organization, and 4) Empower leaders with improved decision making.

PROGRESS TO DATE: Some projects we have carried out 1) Practice variance reduction, 2) ED optimal clinical and patient workflow, 3) Systems advances and critical care transformation, and 4) Transforming the trauma care system. Briefly: Practice variance: Studied patterns of care service, performed DRG length of study analysis in multiple sites. Methodologies can be applied to any clinical sites to understand practice variances. Outcome: With 10% cut-off, LOS improvement for top 20 DRGs allows for 16 bed savings for one year. Optimizing ED care delivery: Process mapping, systems simulation and optimization to identify potential intervention points for systems improvement. Outcome: Identify recommendations where stated goals can be achieved. Actions: Processes consolidation, optimal resource allocation, and service streamline. Progress of trauma study was summarized in milestones.

HOW THIS PROJECT IS DIFFERENT: This work involves not a single hospital but the entire statewide trauma care network.

POTENTIAL MEMBER COMPANY BENEFITS:

- o Systems modeling and economic decision analysis of the statewide trauma care is critical for measuring, optimizing, and transforming the systems performance.
- o Decision engines can allow for objective
 - Cost-effectiveness analysis of statewide response that equalizes trauma care utilization and optimizes patient outcome.
 - Analysis of portfolio of expansions that best serve the regional needs

- o Georgia Trauma Care Network Commission and GA State Department leaders can make better financial and policy decisions for statewide advances

MILESTONES ACHIEVED TO DATE:

- o Study of current Georgia EMS and trauma system
- o Evaluation of statewide trauma care strategic plans of several states (identify best practice).
- o Systems modeling and development of decision engines
 - System simulator
 - Service expansion analyzer
- o Comparison of multiple scenarios