Process Changes to Reduce Emergency Room Overcrowding
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**Problem**: Overcrowding in the Emergency Department (ED) causes increased length of stay (LOS),1 increased volume of patients who leave before treatment (LBTx)2 and decreased compliance with Joint Commission’s Core Measures.3 To reduce overcrowding, process changes can be implemented whereby physicians and nurses meet the patient at the point of service (triage) and monitor the patient through the treatment process.

**Evidence**: Point of service patient care improves processes by reducing redundancy in the system, streamlining treatment,4 providing a framework for learning within an organization and improving timely delivery of care.5

**Strategy**: Within a selected community hospital, initial goals were to decrease LOS to less than 120 minutes, increase Core Measure compliance to 100% and decrease LBTx to less than 1.4%; which is the national benchmark set by the Emergency Nurses Association (ENA).6 Stakeholders, including physicians, nurses and emergency room technicians would participate in training and redesign of treatment protocols to reduce overcrowding.

**Practice Change**: Baseline data showed LOS was 252 minutes, Core Measure compliance was 77% and LBTx was 9.1%. Process change began with adoption of Emergency Severity Index (ESI) 5 tier triage7 and training for all stakeholders. At completion of training, patient flow shifted to an acuity focused model and was no longer based on room availability, while initial point of service shifted from RN triage to RN/MD co-triage.

**Evaluation**: The change process began in July, 2008 with education of staff and flow redesign. Feedback based adjustments occurred through August, 2008. Measurements were taken from September through December 2008.

**Results**: LOS decreased to 205 minutes, Core Measure compliance increased to 94% and LBTx decreased to 3.4% from October through December, 2008.

**Recommendations**: Based on these results, 5-tier ESI triage became the treatment standard and the flow redesign was adopted as a permanent process change for patient care in the ED.

**Lessons Learned**: The Plan-Do-Check-Act (PDCA) cycle was used to adjust patient flow, which resulted in achieving initial goals.
Bibliography: