

Sepsis Alert Process--The Past Transforms the Future

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Problem: Sepsis has a high mortality rate and is costly to treat. The goals of the Sepsis Alert Process were to improve identification of the septic patient, implement aggressive volume resuscitation, and improve antibiotic administration time.

Evidence: One health care institution developed a standardized order form that incorporated evidence-based interventions from the Institute for Health Care Improvement. Examples of recommendations for care of the septic patient included aggressive volume resuscitation and timely administration of antibiotics. The literature revealed that delayed antibiotic therapy increased mortality by 10 - 15%.

Strategy: Mortality and length of stay (LOS) decreased over the next 3 years by 9.2% and 4.3 days, respectively, with use of the form. However, three problem areas surfaced: 1. Inadequate volume resuscitation. 2. Delayed administration of antibiotics. 3. Delayed time to transfer from Emergency Department (ED) to Critical Care (CC). The average door-to-antibiotic time at the institution was 5.75 hours. Transfer time from ED to CC was 5.6 hours. Nurses, physicians, Performance Improvement Specialist, Clinical Nurse Specialist, and Pharmacist met to identify key processes of care.

Practice Change: The Sepsis Alert Process was the answer. Steps in the process included: Patient assessed by ED nurse; sepsis protocol initiated; physician notified; volume infused; blood cultures drawn; antibiotic given; Sepsis Alert called; patient transferred to CC.

Evaluation: Baseline data were collected to determine effectiveness of the process. Weekly meetings were held to identify opportunities for improvement.

Results: Preliminary results demonstrated improved volume resuscitation, door-to-antibiotic time decreased to 65 minutes, and transfer from ED to CC decreased to 110 minutes.

Recommendations: Collaboration between 2 departments resulted in early identification of the septic patient and improved implementation of interventions. The future goal is implementation of the Sepsis Alert Process throughout the institution.

Lessons Learned: Implementation of a practice change is challenging. However, identification of nurse and physician champions greatly increases the chance for success and improves patient outcomes.

Bibliography:

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