Trauma Centre Accreditation as a Tool for Focussed Performance Improvement

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Context

Netcare Milpark Hospital was accredited as a Level I Trauma Centre by the Trauma Society of South Africa (TSSA) in March 2011 and re-verified as a Level I Trauma Centre in February 2014. According to international benchmarking standards for a Level I Trauma Centre, we focussed this section of our Performance Improvement / Quality Assurance on the Resuscitation Times indicators.

Problem

As a Level I Trauma Centre we are continuously aiming to improve the outcome of our trauma (injured) patients. We understood what the specific international benchmark standards were but were not sure how compliant we were to these standards and how to improve on these expectations. Monitoring and peer review processes were started as part of the weekly Trauma Outcome Review (TOR) meetings and monthly Trauma Morbidity & Mortality and Trauma Programme meetings.

Assessment of problem and analysis of its causes

As part of the accreditation process to be accredited as a Level I Trauma Centre, evidence of Performance Improvement has to be presented to the TSSA during the three-yearly verification process. We realised that although the times are documented on the P1 Resuscitation document, that there was no platform where these times per individual trauma surgeon as well as the average times of the trauma team, were evaluated and reviewed on a continuous performance improvement basis.

Intervention

With reference to the Guidelines for Accreditation of Trauma Centres by TSSA and the Resources for the Optimal Care of the Injured Patient (American College of Surgeons 2006) the following international benchmarking standards with regards to Resuscitation Times were monitored:

- Response Times of Trauma Surgeons (≤ 10 minutes)
- Resuscitation Times – start of resuscitation efforts to the end of the primary survey (≤ 30 minutes)
- Total Resuscitation Times – start of resuscitation efforts to the time the patient leave the Emergency Department (≤ 60 minutes).

These international benchmarking times have proved to have a significant influence on the improvement of patient outcomes. We implemented continuous educational sessions to the Multi-disciplinary team on the importance of teamwork in order to improve these times.

In February 2014 electronic clocks were installed at all resuscitation bays at Netcare Milpark Emergency Department. The countdown timer is started the moment an injured patient enters the resuscitation room, which added to:

- Improved accuracy of Resuscitation Times
- Total Resuscitation Times – start of resuscitation efforts to the time the patient leave the Emergency Department (≤ 30 minutes)
- Improved Resuscitation Times
- Improved patient outcomes

Strategy for change

In order to continuously focus and improve on the identified Resuscitation Times Plan-Do-Study-Act (PDSA) cycles were performed, evaluated and re-implemented to ensure measurement of outcomes

Lessons learnt

The Performance Improvement and Quality Assurance processes focussed on the reduction of resuscitation times at Netcare Milpark Level I Trauma Centre through the implementation of the following processes:

- Measurement of Accurate Times: activation of the countdown clocks upon arrival of the injury patient leading to accurate documentation and constant focus on the “running” time.
- Review Process: following the Performance Improvement Pathway of the Trauma Programme at Netcare Milpark Trauma Centre we were able to measure, evaluate and review this process in order to identify and correct the causes for the delay in not achieving our goals (times) according to the international set standards and continue with the drive to constantly maintain already achieved goals.

Message for others

Evidence exists to proof that the effective monitoring of specific times in the management of an injured patient has a significant influence and can improve the outcomes of patients. Accurate documentation, a structured Performance Improvement process (Documentation – TOR – M&M and Trauma Management Review Meetings) contribute to achieving the improvement of the time standards and thus ultimately improve patient outcomes.