
Title: **The Trauma & Surgery Quality and Patient Safety Program. The Qatar Experience.**
Topic: **Category: Creating a Culture of Quality**
Author: **Peralta R, Abdelrahman H, AlKhadi S, Hepp H, Mollazehi M. Al-Ansari A, Al-Thani H**
Company: **Hamad Medical Corporation**

1) Context: Where was this improvement work done? Describe the unit or department. Describe the staff involved and the client groups. When was it done?

Trauma is the leading cause of death and disability in the young adult population within the Gulf region, including the State of Qatar. Mature trauma centers are associated with decreased mortality by providing high-quality trauma and critical care services on the severely injured patients. Hamad General Hospital (HGH) Emergency Department in Doha, Qatar evaluates more than 1,500 patients a day. The Trauma Section, The Advanced Trauma & Critical Fellowship Program (TCC) in the Department of Surgery, HGH in Doha, Qatar manages a Level I Trauma Center with almost 2,000 trauma activations per year serving as the national referral center for a nation of 2 million.

2) Problem: Describe the specific problem or system dysfunction that you set out to address. How was it affecting patient or client care?

Injury related incidents is the number one cause of mortality in Qatar today, due in part to the influx of thousands of expatriate workers who are not accustomed to the fast pace and built-up environment of a high-income and rapidly developing country.

3) Assessment of problem and analysis of its causes: Describe how you quantified the problem? How did you assess the causes of the problem? How did you involve all the relevant staff at this stage?

A significant number of injured patients will require advanced critical care services and will consume disproportionately high hospital resources in ICUs. Trauma mortality and outcomes are related to the availability of a structured quality and patient safety program and trained physicians in trauma and critical care. The establishment of the Trauma Surgery and Department of Surgery Quality and Patient Safety Program (QPSSP) at Hamad General Hospital (HGH) was expected to improve outcomes and reduce mortality.

4) Engaging staff: Describe how you disseminated the results of your initial analysis and your plans for change to the staff and other groups involved? How were they engaged in recording outcomes?

The QPSSP exemplifies the Spirit of Health Service, by its strong focus on improving patient safety of the severely injured patients by decreasing mortality, reducing medical errors in the Operating Room, surgical ICUs and surgical wards, facilitating communication among our surgical team members as a whole and patient outcomes through the development of key performance indicators, safety measures tools, clinical pathway and by cutting edge training and education of the current and next generation of all clinical medical and nursing staff of the Department of Surgery at HGH.

5) Strategy for change: Describe how your suggested changes arose from your assessment of the problem. How did you implement your proposed changes? What was the impact on staff? How did they have to work differently? What was the timetable for change?

A review of the clinical impact of the QPSSP in conjunction with the advanced post-graduate training of our staff in the trauma service at HGH was conducted prior and after the second year of implementation of the above mentioned programs to evaluate the trauma mortality as a main indicator of health care delivery to the injured patients, using tools from the ICU Resource, Evaluation and Patient Outcomes Rating Tool (ICU Report).

6) Intervention: Outline the changes you implemented to achieve improvement in sufficient detail so that others could reproduce it.

All trauma and critical care staff involved in the direct care of the severe injured patients participates in our trauma quality improvement program and were enrolled in a 12 month advanced structured Trauma and Critical Care Fellowship Program with the aim to train critical care physicians in the provision of consistent high-quality trauma and critical care services.

7) Measurement of improvement: How did you measure the effects of your planned changes? Describe the analytical methods used and the results obtained.

The implementation of the QPSSP in conjunction with the TCC fellowship program in the trauma services at the HGH has resulted in a significant decrease in trauma mortality and hospital length of stay to our injured patients.

8) Effects of changes: Describe the impact of your changes on patient/client care and also on the staff groups involved. How far did these changes resolve the problem that triggered your work? Outline the problems you encountered with the process of changes or with the change itself?

The trauma mortality has decreased from 5% to 3% representing a 40% sustained reduction in the last two years, and a 30% reduction in LOS for our severely injured patients.

9) Lessons learnt: Outline the lessons have you learnt from this work? What would you do differently next time?

The continuous enrollment of our staff in training in quality improvement via the QPSSP and advanced postgraduate training by the TCC fellowship program are the key performance indicator of improved performance and patient safety in our institution.

10) Message for others: Describe the main message from this experience that you would like to convey to others? Discuss what your findings mean for patients and/or systems of care.

Establishing a QPSP in conjunction with a structured TCC Fellowship Program for medical staff providing care for the injured patients, can result in measurable improved clinical outcomes.

11) Please declare any conflicts of interest below: Who has funded your research; any other competing interest which could be connected with your work (for example, advisory roles or business interests). None.