

ED Quality Framework Project

Initial findings

Introduction

The Australasian College for Emergency Medicine (ACEM) had identified that there was no consistent description or quality standards to inform or benchmark quality across emergency departments (EDs). It consequently developed the ACEM ED Quality Framework. At the same time the Emergency Care Institute (ECI) identified that EDs were struggling to adequately resource and undertake quality compliance and improvement activities on a planned, regular basis.

Implementing quality improvement processes, ensuring compliance with standards and best practice and monitoring quality takes time and resourcing. The ECI has therefore provided such a resource by funding 23 Quality Support Officer (QSO) positions (0.5 FTE) across selected EDs in NSW to implement the ED Quality Framework Project for 12 months throughout 2013 and 2014.

Their role is to coordinate, facilitate, and undertake administrative functions in order that the clinicians in the department can 'do quality' efficiently and effectively. The QSOs were tasked with supporting the following work in their EDs:

- Establish multi-disciplinary quality teams in the ED
- Implement the ACEM Quality Framework
- Facilitate two state-wide quality projects:
 - » Sensible Test Ordering Project (STOP)
 - » Standardised Death Review
- Provide support and assistance in quality activities to support attainment of the Quality Framework and the quality objectives of the ED.

Already, in a short space, of time these positions have made their value obvious.

Benefits of the QSO

1. Focus on quality

The QSO positions have been able to give a focus to quality and to ensure that quality processes are formalised and structured in each department e.g. re-invigorating quality management teams.

2. Time and capacity

Attaining and maintaining quality compliance in this environment is challenging. It takes time – time to collect data, time to audit charts, time to plan and act on findings, time to discuss and reflect on practice, time to research available evidence, time to implement change strategies, and time to sustain successful strategies. This much needed time is often difficult to quarantine in such busy environments where direct patient needs take priority. Having a dedicated resource, even for only 0.5FTE, provides some of that time and capacity.

3. Real time audit and review resulting in action

Many of the QSO positions have done an enormous amount of work pulling together a vast amount of practice auditing. This has meant that the time spent auditing is now focussed and resulting in demonstrable improvements in process and outcomes.

4. Support to clinicians in measuring changes

QSOs have been able to support clinicians with clinical projects, e.g. time to analgesia, time to antibiotics, orientation manuals, appropriate use of trauma teams, reduction in haemolysis. These projects have resulted in improvements to access, appropriateness, effectiveness, efficiency, costs, staff morale and most importantly patient safety.

5. Large cost and time savings realised

The quantifiable cost saving achieved through improved pathology and test ordering alone in some sites to date have shown that the QSO's can be at least cost neutral to the department.

ED Quality Framework Project Goals

The project has the following goals:

- To implement the ACEM ED Quality Framework
- To ensure a functioning Quality Management Team in the ED
- To implement the Sensible Test Ordering Project to improve the appropriateness of pathology and radiology or imaging test ordering in EDs
- To standardise Death Review processes and ensure they meet best practice in the ED
- To coordinate and facilitate quality audits and improvement activities identified by each ED Quality Management Team.

Conclusion

Achieving quality outcomes takes more than a commitment and a desire, it takes time to collect and analyse data, research best practice, manage change strategies and monitor and report. The ED QSOs have demonstrated that having a dedicated support resource assists the multi-disciplinary teams within EDs to achieve their quality aims.

The case studies included in this report highlight some of the specific projects being undertaken at the sites at the mid-term point in the project. In a short space of time some of these projects are already demonstrating significant outcomes. Further progress over the remainder of the project will see more demonstrable outcomes.

Further impacts of the QSO role and outcomes from the various projects will be captured in the full term evaluation. QSO's will repeat the self-assessment against the ACEM Quality Framework and progress as a result of the project will be tracked.

“Our department now sees quality as exciting – not a must do but a want to do. That’s because things can now be planned and get finished. Staff get to see the results. They want to be involved now”

QSO Workshop, 2 August 2013

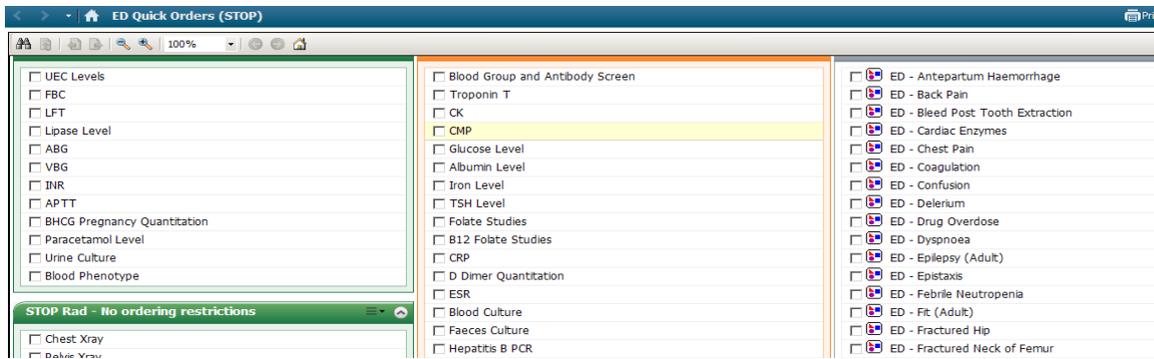
Case Study: Sutherland ED

The issue and approach

On review of pathology ordering in the ED it was identified that there was room for improvement by reducing the number of certain tests ordered and increasing the number of other tests in line with the traffic light system. The team wanted to change the clinical order sets on FirstNet to remind staff of the traffic light system when ordering tests for patients, and wanted to see a larger decrease in the number of inappropriate tests being ordered every month.

As part of the project diagnostic phase the reasons why too many inappropriate tests were being ordered were investigated and possible solutions were canvassed. It was identified that those changes would need to come from EMR. Strong engagement from the Executive and collaboration with the EMR administrators was required to progress required changes in the timeframe.

Figure 1. Example screenshot of test ordering and clinical order sets



Outcome

EMR implemented changes for medical staff beginning the 27th July 2013. Education sessions for both medical and nursing were conducted. Data for August 2013 shows there was a decrease in the numbers of unnecessary tests ordered and this has occurred in the face of increased presentations as shown in Figure 2. Figure 3 shows the percentage change in each of the tests ordered. The most significant changes have occurred with ESR, D-Dimer, Cholesterol and urine MC&S.

Figure 3: Percentage change in tests ordered (Jun-Aug 2013)

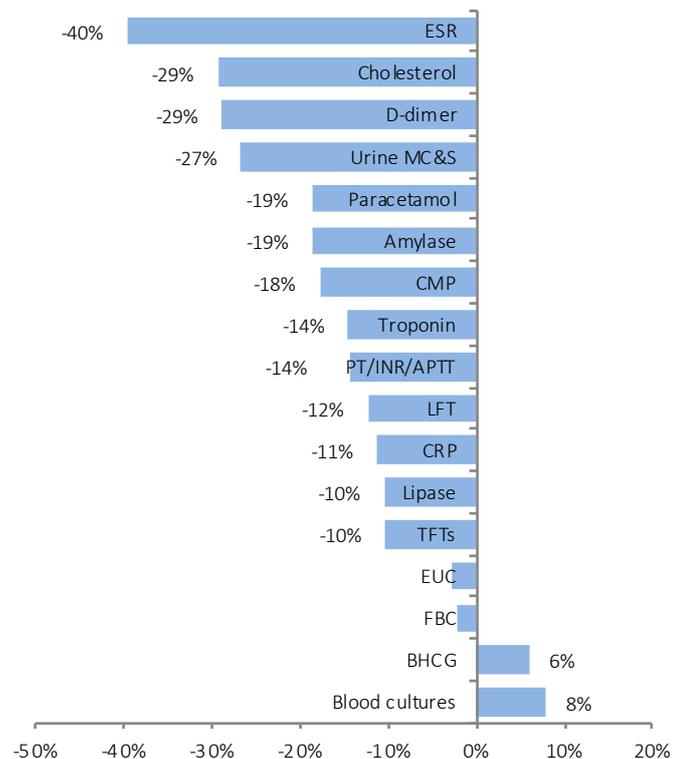
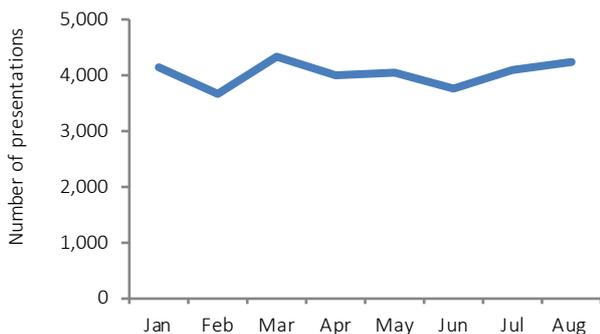


Figure 2 Number of presentations to Sutherland ED



ED Quality Framework Project

Case Study: Wyong ED

The issue

With limited resources, Medical Officers in the ED had limited ability to conduct quality projects in their areas of interest.

Approach

We have commenced a compulsory quality project program for Interns rotating through the department. The project subject is identified by senior medical staff, and then with their guidance, and the support of the QSO and Clinical Nurse Consultant, the interns embark on the project. At the completion of their rotation, the Interns present the project to the Department.

Outcome

We are currently working with the first rotation of Interns. The project for this rotation is appropriateness of D-Dimer testing and the interns are currently collecting baseline data. Templates have been designed to provide a general project plan, timeline, and a data collection form (including data dictionary to ensure consistency of data collected by a group). It is envisaged this will promote effective and timely projects, and to aid in the sustainability of ongoing intern quality projects. In addition, a resource folder will be kept in the department with previous projects, including the individual processes, to provide further guidance for the interns.

Case Study: Bankstown ED Mantra

Bankstown ED wanted to improve morale and remind people about the role of quality in the ED. The team asked staff to think of a mantra for the department and a wards person came up with the winning mantra: 'As we work as a team we build unity and pride'. It might not have been the largest initiative implemented but it got people thinking, questioning and involved"

Further Information

To view further case studies and find out more about the project please visit the [ED Quality Framework](http://www.ecinsw.com.au/ED_QF_Project) section of the ECI website: http://www.ecinsw.com.au/ED_QF_Project

Alternatively, please contact the ECI team:

Sally McCarthy Medical Director
Vanessa Evans Network Manager
Sophie Baugh Special Projects Manager

"The ED embraced the ED Quality Framework Initiative with more enthusiasm than was ever expected. Staff who previously were not interested in participating in any extra duties within the department, were all of a sudden doing audits in their own time, encouraging their colleagues to improve their practice while working hard to improve their own. The Quality Team brought about a unity between medical staff, nurses, clerical staff, cleaners and allied health that had never been seen before. This was a worthwhile project that provided an increased awareness of Quality in the ED, which will hopefully be continually sustained"

QSO

Case Study: Sydney Children's Hospital

Issue and approach

There was no formal death or critical event review group or forum.

A mortality review panel was established to monitor and review cases resulting in the death of a patient.

Outcome

Since the implementation of the panel four ED staff are now RCA trained. The panel reviews the case and determines a number of recommendations, which are presented to ED staff. A quarterly summary of cases is prepared, including review, action and follow up, and circulated for Directors of the Critical Care Program and the Director of Clinical Governance. Two examples of practice change as a result of the reviews include

- change in process to the way emergency drugs for intubation are drawn up
- management of palliative care patients in emergency.