ANZELA-QI pilot audit

- Co-led by Royal Australasian College of Surgeons (RACS) and Australian and New Zealand College of Anaesthetists (ANZCA) with collaboration from:
  - General Surgeons Australia
  - New Zealand Association of General Surgeons
  - Australian Society of Anaesthetists
  - New Zealand Society of Anaesthetists
  - Australasian College for Emergency Medicine
  - College of Intensive Care Medicine
Aims of the ANZELA-QI pilot

• To agree an Australian and New Zealand EL data set and test it

• To focus on Quality Improvement from the outset by providing hospitals with frequent data reports showing performance against KPIs

• Provide EL data to support a funding application for a five year definitive project
## ANZELA-QI time lines

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>June 2017</td>
<td>ANZCA NSW &amp; Westmead Hospital meetings</td>
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<tr>
<td></td>
<td>Keynote - Dave Murray, NELA clinical lead</td>
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<td>July &amp; August 2017</td>
<td>RACS and ANZCA Councils sign off Business Case</td>
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<td>August 2017</td>
<td>Working Group meeting, Perth</td>
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<td>September 2017</td>
<td>Working Group meeting, Sydney</td>
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<td>November 2017</td>
<td>RACS/ANZCA, Peri-operative meeting, Manly</td>
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<td>March 2018</td>
<td>National HREC ethics approval</td>
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<tr>
<td>April 2018</td>
<td>REDCap database license granted</td>
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<tr>
<td>May 2018</td>
<td>RACS/ANZCA ASC</td>
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The rationale: limited EL data

- No published Australian or New Zealand data prior to 2017

- Publications
  - 1 published prospective multi-hospital audit
  - 1 retrospective single hospital audit
  - 1 retrospective administrative data state audit

- Other data
  - 2017 & 2018 ASC abstracts and presentations
  - Two year national administrative data from the Independent Hospital Pricing Authority
The basics

• Pilot database REDCap (Vanderbilt University)
  • Accessible from any web enabled device
• Australia - National HREC ethics approval (not Tasmania and NT)
  • granted in March 2018
  • waiver of consent
  • Site Specific Approval (governance) required
• New Zealand - National HDEC ethics approval
  • each participating site will require local ethics approval
• Organisation audit in preparation in Australia and underway in NZ
  • Private hospitals, IHPA and AIHW differ …..
• Pilot hospitals
  • Approx. 50 expressed an interest at present
ANZELA-QI versus NELA - differences

• Inclusion/exclusion criteria
  - Emergency Laparotomy not just bowel surgery
• Quality Improvement focus from outset
• Futility of surgery
  • Frailty score (Canadian)
  • Goals of Care documentation
• Include patients who die without an EL & those with acute abdomens but not operated on
• Transfers: 25% to 30% in Australia versus ~3% in NELA
• Private sector: ~15% in Australia
Evidence based ‘bundle of care’ introduced at 4 hospitals:

- Early Warning Score
- Early antibiotics
- Operation < 6 hours
- Post-op ICU
- Goal Directed Care

Following introduction:

- Adjusted mortality reduced 15.6% -> 9.6%
- 5.97 lives extended beyond 30 days per 100 patients treated

Fig. 1: Cumulative sum analysis before and after implementation of the emergency laparotomy pathway quality improvement care (ELPQuiC) bundle at site 1, b site 2, c site 3 and d site 4.

Huddart et al, BJS, 2014
NINE KEY STANDARDS CURRENTLY SUBJECT TO RAG-RATING

- CT scan reported before surgery.
- Risk of death documented preoperatively.
- Arrival in theatre within a timescale appropriate to urgency.
- Preoperative review by a consultant surgeon and a consultant anaesthetist when P-POSSUM risk of death ≥5%.
- Consultant surgeon and consultant anaesthetist both present in theatre when P-POSSUM risk of death ≥5%.
- Consultant surgeon present in theatre when P-POSSUM risk of death ≥5%.
- Consultant anaesthetist present in theatre when P-POSSUM risk of death ≥5%.
- Admission directly to critical care after surgery when P-POSSUM risk of death >10%.
- Assessment by a care for the older person specialist for patients aged 70 years and over.
Pre-operative risk assessment

- Options
  - P-POSSUM
  - SORT
  - NSQUIP
  - NELA
  - and 19 others ...

Key issue is that a risk assessment is done
Frailty and Goals of Care

SECTION 1 BASELINE INFORMATION

Primary issues:
Significant co-morbidities: 
In the event that the patient is unable to speak for themselves, who would they wish to speak to? 
This is known as the ‘Person responsible’.

Name(s):

Gender:

Date:

Time:

Signature:

SECTION 2 GOAL OF CARE

All life sustaining treatment – with treatment ceiling

- For Rapid Response (HER/RET Cells)
- For CPR
- For ICU

Life extending intensive treatment – with treatment ceiling

- Not for CPR

- For Rapid Response
- For ventilatory support, including intubation
- Specify maximum level of support
- For ICU/HDU admission

Active ward based treatment – with symptom and comfort care

- Not for CPR

- For Rapid Response
- For ventilatory support (limited to symptom control)
- Specify maximum level of support
- Admissions criteria (e.g., mini-mental, MMSE)

Optimal comfort treatment – including care of the dying person

- Not for Rapid Response

- For ventilatory support
- For intubation
- For ICU

All patients can have Rapid Response based on ‘Ward Criteria’ or to ‘ Summon Clinical

SECTION 3 SUMMARY OF DISCUSSION(S)

Goals of Patient Care have been discussed with:

Patient: 

Yes

No

Person Responsible: 

Yes

No

Family/carer(s): 

Yes

No

Name(s) of those present at this discussion:


Is the patient able to fully participate in this discussion? 

Yes

No

Comments:

What is the patient’s likely response to CPR and critical intervention?

Patient preferences (needs, values and wishes):

Decision rationale for agreed Goals of Patient Care (please tick one only):

- Patient preferences
- Shared decision-making

Other information:

Doctor’s name (please print): 

Signature:

Date:

Time:

Consultant’s review completed: 

Name (please print):

Signature:

Date:

Time:

SECTION 4 EXTENDED USE

Consultant endorsement for extended use beyond this admission for 12 months until:

This includes patient transportation to another facility or home following the current admission.

Consultant’s comments:

Consultant’s name (please print):

Signature:

Date:

Time:

IMPORTANT: Please ensure that every revision of this form is filed in the latest section of the patient’s medical record.

national consensus statement: essential elements for safe and high-quality end-of-life care
Acute abdomen, no surgery

What is the true denominator?

PELA

• 6.5% 30-day mortality
• proportion ≥80 years and risk ≥10% less than NELA
• 43% of all presenting with an acute abdomen and who die did not have an EL

WAASM data (2 years)

• 4% of all acute abdomens die without an EL
• 6% die after an EL
Some practical tips

• The universal experience is that data to that point should be collected/completed in theatre

• Most will enter the hospitals system via ED and a sepsis assessment should be undertaken there

• If a pre-operative risk assessment is more likely to be prospectively completed if it is embedded in the theatre booking process

• Post-operative rounds are ideal to check all the data has been collected

• Full case ascertainment will require the hospital PI to check theatre lists each week to ensure all EL have been captured.
Important issues

• Data collected to hospitals level only

• No clinician data being collected

• Benchmarking with peer hospitals on an identifiable basis

• No Qualified Privilege

• Aggregated data open for research
  • Trainee Research Collaborative
Run chart
The third Patient Report of the National Emergency Laparotomy Audit (NELA)
December 2015 to November 2016

Proportion of NELA hospitals achieving 80% of KPI’s

- Critical care admission (risk ≥10%)
- Timely arrival in theatre
- Critical care admission (risk ≥5%)
- Consultants present (risk ≥5%)
- CT reported pre-op
- Risk of Death documented
- Consultant review pre-op (risk ≥5%)

NELA I  NELA II  NELA III
Average National Weighted Activity Unit (NWAU) cost of an Emergency Laparotomy in Australian public hospitals

Estimated national EL cost >$400 million pa
Bed day cost ~$30 million
What will ANZELA-QI provide?

- Reports against the KPIs, published by identified hospital and in cohorts
- The reports will facilitate sharing of experiences and learnings with other similar hospitals
- Access to the bi-national dataset for other research projects (subject to an approval process)
Specifically for New Zealand

- CADENZAA
- Will report the NZ data back to RACS Adelaide
- Will leverage strong IT platforms
- Build QI into the system
- Full collaboration with ANZELA-QI
What next?

1. Email RACS your expression of interest in becoming a pilot hospital.
2. Once RACS have new pilot sites added to national ethics, each site needs to coordinate local governance approval (SSA). Then login to ANZELA-QI can be given by RACS.
3. The website will be the central place for all pilot hospital resources.
4. Forms/templates will be available to collect data locally ahead of ethical approval to provide it to ANZELA-QI.

More information at www.surgeons.org/anzela-q
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