Report on the feedback received from NELA participants

We would like to thank all those who responded to the two questionnaires sent out in October and November 2014 regarding the National Emergency Laparotomy Audit, dataset, information, process and Quality Improvement initiatives locally. The questionnaires are available on the NELA website for information.

We received over 100 responses, including many positive comments on the audit and a great deal of useful suggestions on improvements participants would like to see implemented..

All the feedback has been reviewed and the Project Team hopes to have already addressed some of the difficulties raised regarding the data collection. Over the next few months we will continue to make improvements to the audit that will both enhance quality improvement measures and facilitate data collection locally.

Summary & Project Team response:

In terms of how and what data is returned to sites, many said they would want to see; run charts, graphs, a dashboard, more regular data feedback, comparisons against national data– highlighting some of the more important audit measures. ***Response: Over the next few months we will be testing and then introducing a Quality Improvement (QI) dashboard on the web tool. This will allow users to access their own up-to-date data via run charts and graphs. It will provide comparisons against standards and national data. This will hopefully assist quality improvement measures being carried out locally.***

- Assistance with data completeness and data collection was also highlighted by many respondents.
  Response: Alongside the QI element of the dashboard, the team will also be introducing features on the web tool that will allow Local Administrators to check complete and incomplete cases, data completion rates, specific case issues etc.

- A large proportion of users responded that they would like to see extra data items added to the audit rather than removing any existing ones. 80% of respondents felt that no items should be removed; 25% actually said they wanted to see additional items added. The latter usually related to additional questions to clarify existing answers.
  Response: This audit can only ask questions that relate specifically to the standards of care for Emergency Laparotomy. There have been some minor changes to the dataset for year two in an attempt to reduce the burden of data collection as well as clarify some of the existing questions.

- The survey showed that over 80% of users have disseminated the Organisational Audit report, findings and recommendations.
  Response: An action plan to assist hospital sites in ensuring they are meeting the recommendations laid out in the NELA Organisational Report and if not, what actions need to be taken to achieve these aims has been produced. A set of slides and notes for NELA

Local Leads to present to their colleagues on the findings of the Organisational Audit and the objectives of the NELA Patient Audit is also available.

- Respondents asked for documents that assist in the running of the audit to be made available.
  Response: The documents section on the NELA website is constantly updated with information. We recommend that audit participants regularly check this page: http://nela.org.uk/NELADocs

- The Project Team were pleased that the majority of respondents reported that they have found carrying out the audit and using the online web tool 'easy'. There were some barriers to the audit highlighted by users and a request for assistance.
  Response: NELA is a multidisciplinary audit which requires input from all elements of hospital staff. We have made available a 'top tips' form on the NELA website that describes how many sites are making data collection work in their hospital, how they are engaging colleagues and raising awareness of the audit and how to improve data entry levels.

- We received some positive comments regarding QI initiatives taking place at local participating sites. We are making all the responses we have received available in the aim of sharing good practice.

- Examples of hospital pathways and documents that exist for emergency patients are also available to view on the NELA website: http://nela.org.uk/Pathway-Examples

The responses from the Quality Improvement initiatives are shown in full below for information.

Quality Improvement Initiatives

Summary:

Q1 - Do you have an integrated care pathway for the care of the emergency laparotomy patient? If so, we would like to make this available to other hospitals in order to drive quality improvement. Would you be willing to share it?

- 4 sites with a pathway that they've shared. This is available on the NELA website
- 1 site with a pathway that they have not shared
- 4 sites with generic surgical pathways, not specific to Emergency Laparotomy

Q2 - If you have a pathway for the enhanced recovery of the Emergency General Surgical patient, are you willing to share it?

- Pathways that have been shared by participating sites have been made available on the NELA website.

Q3 - Have you implemented any CQUIN targets relating to emergency laparotomy or NELA?

- Cardiac output monitoring. Intra-Operative Fluid Management (IOFM) strategies in the form of Oesophageal Doppler monitor or LiDCO monitor is used.

Q4 - If you carry out multidisciplinary Mortality and Morbidity reviews (M&M), we would be interested in how this works in your hospital.

- All deaths are independently reviewed and discussed monthly by the multidisciplinary team. Includes General, Vascular and Urology teams.
- Data and current practice/outcomes fed back to anaesthetists and surgeons via Governance meetings once or twice a year.

Q5 - Do you currently feedback any data to clinicians as part of a Quality Improvement plan?

- Ensuring POSSUM estimate of mortality is done for all EL patients.
- Antibiotics within 1 hour of sepsis diagnosis.
- Clinicians get annual data prior to appraisal. Dashboard for Intranet created with monthly numbers. Run charts of EPOCH data.

Q6 - Are there any other initiatives or improvements that you have carried out?

- Implemented Bowel Care pathway.
- ELPQuIC.
- All patients potentially requiring EL have CT within 2 hours and a report within an hour.
- Post-op risk stratification in ITU using troponin tests to predict who needs to stay longer.
- Dedicated daytime on-site consultant cover during the daytime on the acute SAU and Emergency Theatres.
- New sepsis management pathway.
- Installation of a blood gas machine.
- Workshop and one to one trainings for anaesthetists to improve use of cardiac output monitor (ODM) intraoperative
- Audit on management of postoperative pain following EL
- Audit on sepsis management. Results fed back to A&E and Surgical Dept.

Full responses:

Q1 - Do you have an integrated care pathway for the care of the emergency laparotomy patient? If so, we would like to make this available to other hospitals in order to drive quality improvement. Would you be willing to share it?

- We are currently trying to finalise our EL pathway. We would be interested in seeing other centre's efforts before rolling ours out!
- We have supported implementation of the pathway with meetings (including induction for new starters), clinical leadership by individual consultants, and an integrated reporting mechanism that analyses every case and interfaces with the Trust incident reporting mechanism - feedback

is provided by individual case reports merging clinical features (including CT scanning and operation) and performance of against key features of our pathway (the reports identify all clinicians).

Q2 - If you have a pathway for the enhanced recovery of the Emergency General Surgical patient, are you willing to share it?

- We don't have a specific ER EGS pathway, but continue to do work on our Elective pathway. Again, it would be good to see a specific Emergency pathway.

Q3 - Have you implemented any CQUIN targets relating to emergency laparotomy or NELA?

- We were using the LIDCO rapid for cardiac output monitoring in EL until this CQUIN was withdrawn.
- Cardiac output monitoring, CQUIN target for 104-14. Various modalities of invasive and non-invasive monitoring available.
- Intra-Operative Fluid Management (IOFM) strategies in the form of Oesophageal Doppler monitor or LiDCO monitor is used. We have a named Consultant Anaesthetic Lead to facilitate & drive IOFM training & usage across the trust for relevant cases.
- Using ODM cardiac output monitor for intra-operative fluid management in emergency laparotomy patients. Target we are aiming for is 100% compliance. This target was already in place for elective colorectal surgery.
- We have a detailed pathway with a clear timeline and clinical objectives. I suspect the only one of our targets included in CQUIN is use of IOFM - we have this as a recommendation in our in-theatre package. Currently we have 100% usage in "high risk patients".

Q4 - If you carry out multidisciplinary Mortality and Morbidity review (M&M), we would be interested in how this works in your hospital.

- All deaths independently reviewed and discussed monthly by multidisciplinary team. Learning points disseminated at audit days.
- We have a monthly General Surgical M&M review attended by Consultants and juniors. There is a standardised Trust proforma for each case
- We have a monthly ICU M&M review attended by Consultants and juniors. There is a standardized proforma for each case
- We have a monthly M&M for the General, Vascular and Urology teams. All mortalities are easily identified from a database, morbidities are discussed as remembered- they are prospectively added to a standardized presentation available on the General Surgical Server
- Data and current practice/outcomes are fed back to anaesthetists and surgeons via Governance meetings once or twice per year.
- All mortality cases are centrally collected through the 'PAS' patient admission programme. This records all discharges and consequently picks up the mortalities. These are then entered onto a mortality database (trust wide). Cases are then discussed in the monthly mortality and morbidity meeting which in general surgery involves all GI, breast and vascular surgeons.
- There is currently no common multidisciplinary platform to address M&M. Currently, predicted M&M for each surgeon's activity in this trust gets calculated, every month, by Informatics using

the CRAB system (Copeland Risk Adjusted Barometer). The figures get fed back to the respective surgeon. However CRAB scores do not get discussed openly amongst peers in any forum.

- We are currently carrying out a case note review on every patient and formulating a report which is distributed to all clinicians involved in this type of care within Anaesthesia and Surgery. This is supported by routine incident reporting for failure to achieve the objectives of our pathway

Q5 - Do you currently feedback any data to clinicians as part of a Quality Improvement plan?

- Yes – targeting one area at time. Started with ensuring P-Possum estimate of mortality is done for all EL patients. At Clinical Governance and surgical/anaesthetic teaching sessions, presented run chart showing our current performance and explaining the benefits of calculating P-Possum. I collate the data (NELA lead).
- Next QI area will be antibiotics within 1h of diagnosis of sepsis. Combining our efforts with critical care outreach drive to implement sepsis 6 bundle throughout Trust, but especially in A/E, surgery and medical admission units.
- Yes, ITU achievements are regularly feedback. Monthly mortality by Consultant / Specialty and Area of Hospital are also fed to each Consultant. Our M&M findings are circulated by our governance lead.
- Every clinician gets annual data emailed to them prior to their appraisal.
- Yes data is fed back to surgical teams, initially using data from ELPQuIC, now using NELA data. Dashboard for Intranet being created with monthly updates.
- We produce run charts of EPOCH data. At present the first EPOCH interventions started in July 2014. We have 6 months of control data and 2 months of data since implementation. The run charts for the 8 months have been presented at the Surgical Directorate meeting (Sept 2014). We aim to have a joint surgical/anaesthetic audit meeting 28 Nov 2014.
- We have a 6 monthly joint meeting Anaesthesia/ICM/General surgery to discuss data and possible QI projects. Current QI projects include increasing the use of invasive monitoring and lactate measurement intra-op and intra-op cardiac output monitoring. Also increasing admission rate to HDU/ICU if pre-op mortality >5%.
- 1. Summary of 3-6 months NELA patient's data is presented in the joint surgical and Anaesthetic audit meetings.
  2. The data is collected by both anaesthetist and surgeons.
  3. To increase the awareness among other specialties especially physicians – a presentation was done in Hospital Grand round meeting.
  4. At the start of data collection hospital intranet had displayed information about the NELA audit
  5. A NELA sticker has been designed to be put on front of the case notes to allow easy identification and to serve as a reminder to surgeons to complete data on the database.

Q6 - Are there any other initiatives or improvements that you have carried out?

- We are starting to address all of the perceived shortcomings that have come to light since the Organisational Audit Report was published.
- We have implemented Bowel Care pathway in our ITU where we have our majority emergency laparotomies from.

- ELPQuIC, as documented in previous documents. Sadly the surgical teams are not currently using this effectively. This is being addressed through the Trust management hierarchy.
- Sticker on anaesthetic chart for end of surgery care bundle for emergency laparotomies detailing POSSUM, lactate, temp, destination, reversed.
- 12 hour on site surgical consultant present 7 days per week (0800 – 2000 hours)
  A consultant delivered CEPOD list for emergency cases.
- Recent agreement from radiology that all patients potentially requiring emergency laparotomy have a CT within 2hrs and a report within an hour.
- Recent change in practice in postoperative care in that it is now routine for patients to go to HDU following surgery.
- Enhanced recovery in emergency surgery and ITU Development of care pathway. Waits for CT/theatre. We are also working on post-op risk stratification in ITU using troponin tests to predict who need to stay longer
- National Emergency Laparotomy Audit – October 2014
  Over the last 6 months, Consultant Surgeons now have a dedicated daytime on-site cover for about 10 hours (Monday to Friday) on the acute SAU (Surgical Assessment Unit) and Emergency Theatres. Out-of-hours emergency attendance into hospital is as required (non-residential) by the on-call Consultant Surgeon. This working pattern by a named "SAU Consultant" has improved emergency surgical care provision in the perioperative setting, without compromising scheduled elective activity for the day by the on-call Consultant Surgeon. We are developing a new sepsis management pathway that will include emergency surgical patients.
- From the anaesthetic point of view we have recently installed a blood gas machine for the emergency theatres and most of us are aware of the need for the accurate data collection.
- 1. To improve the use of cardiac output monitor (ODM) intraoperatively – a workshop and one to one training to anaesthetists has been arranged.
  2. An audit on management of postoperative pain after emergency laparotomy is currently been undertaken. Even though this is not part of NELA data collection, providing effective pain relief for these patients is vital in reducing morbidity and length of stay.
  3. An audit of sepsis management in patients entered on database was carried out in the initial phase of data collection. Results were fed back to A&E and Surgical department. This audit is on-going to improve sepsis management.