# National Emergency Laparotomy Audit

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| **UPCARE: 1.0 Programme name*** | National Emergency Laparotomy Audit |
| **1.1 Abbreviation** | NELA |
| **1.2 Audit or non-audit** | Audit |
| **1.3 HQIP commissioned*** | Yes |
| **1.4 Programme unique identifier*** | HQIP116 |
| **Contract status** | Ongoing |
| **HQIP AD** | PS |
| **HQIP PM** | NP |
| **1.5 Lead organisation*** | Royal College of Anaesthetists |
| **1.6 Programme homepage*** | https://www.nela.org.uk/ |
| **1.7 Programme summary** | **The National Emergency Laparotomy Audit (NELA) is part of the National Clinical Audit and Patient Outcomes Programme (NCAPOP), overseen by the Healthcare Quality Improvement Partnership (HQIP).**<br><br>NCAPOP is a closely linked set of centrally-funded national clinical audit projects that collect data on compliance with evidence based standards, and provide local trusts with benchmarked reports on the compliance and performance. They also measure and report patient outcomes.<br><br>NELA was one of the top two (of eleven) national clinical audits prioritised for immediate funding in response to HQIP's call for new national audit topic proposals in 2011. It was commissioned following evidence of a high incidence of death, and a wide variation in the provision of care and mortality, for patients undergoing emergency laparotomy in hospitals across England and Wales.<br><br>The aim of the audit is to enable the improvement of the quality of care for patients undergoing emergency laparotomy through the provision of high quality comparative data from all providers of emergency laparotomy.<br><br>The contract for the provision of the NELA was awarded to the Royal College of Anaesthetists (RCoA) in June 2012. The Clinical Effectiveness Unit of the Royal College of Surgeons of England are our partners and will provide important methodological and technical input. NELA is on the list of national audits for inclusion in Trusts' Quality Accounts.<br><br>The NELA project officially began on the 1st December 2012. NELA aims to look at structure, process and outcome measures for the quality of care received by |

patients undergoing emergency laparotomy, and will comprise both Organisational and Patient Audits.

**2.1 Organogram**

https://www.nela.org.uk/downloads/NELA%20Organogram_28%20Feb%202023.pdf

**2.2 Organisations involved in delivering the programme**

**Sub-contractor Organisations:**

- Clinical Effectiveness Unit at the Royal College of Surgeons of England (RCS) - https://www.rcseng.ac.uk/
- Net Solving - https://www.netsolving.com/home

**Main Stakeholder Organisations:**

- Royal College of Anaesthetists (RCoA) - https://www.rcoa.ac.uk/
- Royal College of Surgeons of England (RCS) - https://www.rcseng.ac.uk/
- Net Solving - https://www.netsolving.com/home
- Association of Anaesthetists of Great Britain and Ireland (AAGBI) - https://www.aagbi.org
- Association of Surgeons of Great Britain and Ireland (ASGBI) - asgbi.org.uk
- HQIP - https://www.hqip.org.uk/
- NHS England - https://www.england.nhs.uk/
- Welsh government

**Members of Clinical Reference Group:**

- Age Anaesthesia Association (AAA) - https://www.ageanaesthesia.com/
- Association of Anaesthetists of Great Britain and Ireland (AAGBI) - https://www.aagbi.org
- Association for Perioperative Practice (AfPP) - https://www.afpp.org.uk/home
- Association of Surgeons of Great Britain and Ireland (ASGBI) - asgbi.org.uk
- British Geriatric Society (BGS) - https://www.bgs.ac.uk/
- Emergency Laparotomy Network (ELN) - https://www.networks.nhs.uk/nhs-networks/emergency-laparotomy-network
- Intensive Care Society (ICS) - https://intensivecarenetwork.com/
- Intensive Care National Audit & Research Centre (ICNARC) - https://www.icnarc.org/
- Faculty of Intensive Care Medicine (FICM) - https://www.ficm.ac.uk/
- Royal College of Anaesthetists (RCoA) - https://www.rcoa.ac.uk/
- Royal College of Emergency Medicine (RCEM) - https://www.rcem.ac.uk/
- Royal College of Nursing (RCN) - https://www.rcn.org.uk/
- Royal College of Radiologists (RCR) - https://www.rcr.ac.uk/
- Royal College of Surgeons of England (RCS) - https://www.rcseng.ac.uk/
- PAFIG and Lay representation

**Patient and Families Involvement Group (PAFIG)**

- NELA's PPI group, comprised of volunteers with either lived experience of emergency laparotomy, or carers for those who have undergone emergency laparotomy

**2.3 Governance arrangements**

The NELA Project Board represents at managerial level, the business, user and supplier interests of the project. The Project Board members are the decision makers and responsible for the commitment of resources to the project, such as personnel, funding and equipment.

The Project Board oversees strategic direction and is responsible for monitoring all aspects of delivery of the project by the Project Team and sub-contractors, and is accountable to the stakeholder organisations. The Project Board meets 6-monthly and receives direct reports on the delivery of the project from members of the Project Team. The Project Board is accountable to the RCoA.

The NELA Clinical Reference Group (CRG) ensures that all relevant clinical professional and specialty stakeholders have direct input into the design and conduct of the audit. The CRG consists of representatives from partner organisations as well as other stakeholders including patients. The CRG acts in an advisory capacity to the Project Team, providing specialty specific advice, and lay advice as appropriate. The CRG reviews the audit design regularly and also reviews drafts of any reports and recommendations issued.

Project Board members can be found here: https://www.niaa.org.uk/article.php?newsid=756

Minutes from project board meetings are publicly available and can be found here: https://www.niaa.org.uk/Project-Board-Minutes

Clinical Reference Group members can be found here: https://www.niaa.org.uk/NELA_ClinicalReferenceGroup#pt

Project Team members can be found here: https://www.niaa.org.uk/NELA_Team#pt

Annual reports are quality checked by members of the project team and approved by the project board prior to undergoing additional quality assurance by HQIP per standard reporting procedures. The CRG help the project team identify and define standards of care and associated metrics. They also review and guide the annual dataset development. Standards/metrics and dataset are reviewed and approved by the Project Board.

**2.4 Stakeholder engagement**

NELA engage key stakeholders as representatives on our Clinical Reference Group (CRG). As emergency laparotomy is a multidisciplinary procedure, the membership of the CRG is intentionally broad to ensure we have representation across the entire pathway. The CRG provide specialty-specific advice on matters including the NELA dataset, annual report, and standards/metrics.

The NELA Project Board are engaged in overall governance of the project.

The NELA project team meet biannually with HQIP. This ensures appropriate oversight of the project and HQIP serve as liaisons between NELA and the Welsh government/NHS England.

In addition, NELA has convened a patients and families advisory group to represent the voice of the patient. This group aims to meet biannually.

**2.5 Conflict of interest policy**

The policy and register of declaration and conflicts of interest for the programme is published at www.healthaudit.org/COI. All DOI are collected in advance of meetings and decisions regarding whether a COI exists and appropriate actions are made by the Chair. Any new DOI are also requested at each meeting as a standing agenda item. All DOI and COI are comprehensively documented in a publicly available register

**3.1 Quality improvement goals**

The NELA data driven healthcare quality improvement (QI) 3 year aims are:
• Maintain and contribute to further reduction of national 30 day mortality below 8.7%
• Maintain and contribute to further reduction in length of stay below 15 days
• Ensure that 100% patients have longer term outcomes reported
• Increase administration of antibiotics within 1 hour of all patients who are diagnosed with sepsis to 90%
• Increase timely access to theatres for all appropriate patients to 90% arriving within the appropriate timeframe
• Increase appropriate input by peri-operative teams experienced in the management of older patients, 80 or over, or 65 and frail, to 90%
• Where possible, extend the audit to assess the quality of care delivered to patients considered for EL but in whom the surgery was not subsequently performed.

Emergency laparotomy has one of the highest associated rates of death of all types of surgery performed, almost ten times greater than that of major elective gastrointestinal surgery. When NELA was commissioned, emergency perioperative care pathways often fell short of the clinical standards, organisational structures and care processes that benefit most elective patients. NELA data demonstrates that this has improved since the audit commenced. NELA investigates processes of care and outcomes, and aims to highlight if there is variation in these for any specific patient group or for different operations performed. For patients, this means that they can be assured that hospitals and teams who actively participate in NELA activities are continually assessing whether they are providing the best quality care possible, and that there is continuous assurance that care is safe, effective, and timely.

- What are your audit data telling you about the current quality of care?

30-day postoperative mortality has improved from 11.8% when the audit started in 2013, to 8.7% (Year 7 audit, Dec 2019 – Nov 2020). Longer-term patient survival is also reported: Mortality rates are 23% at 1-year after surgery, 29% at 2 years, and 34% at 3 years following surgery, but were substantially higher in high risk groups. Average length of stay has fallen to 15.1 days, from 19.2 days in the first year of reporting (2013). The rate of improvement in these goals has decreased in the last 2 years of the audit.

Process measures that can be influenced by individual behaviour (rates of risk assessment, consultant presence for high risk cases) have seen most improvement. Process measures included in NHS England's Best Practice Tariff (consultant delivered care and admission to critical care for high risk patients) also improved during the period of the tariff.

Care of the elderly and management of sepsis continue to be areas for improvement. Only around a third of those aged 65 or over and frail, or those aged 80 or over, receive multidisciplinary care including early involvement of a geriatrician over the past few years of the audit. While there is a trend toward improvement, much work remains to be done. Similarly, the Year 7 NELA data show little improvement in the time taken to given antibiotics, or the time to take sepsis patients to theatre for surgery. The NELA team will continue to focus on these 2 measures as key areas for improvement in the next year of the audit.

- Do you know what good looks like?

Audit standards are based on recommendations from the Royal College of Surgeons, National Confidential Enquiry into Patient Outcome and Death (NCEPOD) and the National Institute for Health Care Excellence (NICE). The

recommendations for best practice are listed in the Audit's annual report and summarised in the executive summary and as targeted documents for stakeholders, as are examples of best practice in meeting the audit standards as 'Quality Improvement Case Vignettes'.

- What are your stakeholders telling you are the priorities for improvement?

Stakeholders have responded by survey and directly during webinars/meetings conducted as part of the Emergency Laparotomy Collaborative (ELC) via the English Academic Health Science Networks (AHSNs).

They asked for data outputs describing the management of sepsis and more real-time mortality monitoring. In general, they requested easier access to summary data, which we have provided with an update to the NELA QI dashboard. Stakeholders also requested access to data that reported on a regional/geographical basis, rather than only at hospital and national level. We target 85% of patients receiving an element of the key standards of care as an audit target. This has been raised from 80% (in 2018).

**3.3a Methods for stimulating quality improvement***

Improvement collaboratives; Academic Health Science Networks (Health Improvement Networks); Workshops; On-line Quality Improvement guides; Best practice tariff (BPT); National Clinical Audit Benchmarking (NCAB) tool (via CQC)

**3.3b Quality improvement supplemental information**

QI videos: https://www.niaa.org.uk/NELA-QI-Videos#pt

QI workshops: https://www.niaa.org.uk/NELA-QI-Workshops#pt

QI posters: https://www.niaa.org.uk/NELA-QI-Posters#pt

**4a) Please add the most recent date that you have reviewed and updated an online version of UPCARE (Programme section) on your project's website (click into the response to see pop-up guidance).**

09/01/2023

**4b) Please add a hyperlink to UPCARE (Programme section) on your website (click into the response to see pop-up guidance).***

https://www.niaa.org.uk/article.php?newsid=1192