3 RECOMMENDATIONS

The recommendations from the Second Patient Report remain equally relevant this year. These have been built upon in this year's Report to reflect new patient and organisational data and further opportunities to improve patient care and outcomes.

Improvements over the last two years have predominantly been seen in areas involving a change in individual clinicians' and teams' behaviour, and for this they must be congratulated. However, collaborative effort from all individuals at all organisational levels, in particular consultant surgeons and consultant anaesthetists, supported by executive teams, is still required to bring about the change necessary to prioritise emergency care.

Clinicians, hospital managers and commissioners should work together in three main areas:

1 Setting ambitions

NELA results should be reported at board level, and appropriate organisational quality improvement (QI) objectives defined and monitored. There should be a clear commitment at board level to meet published standards of care. This should be backed up with appropriate time and resources to support clinical teams in collecting contemporaneous and accurate NELA data, and for quality improvement activities based on these.

It is clear that there has been significant organisational change across the NHS since 2013. There is no 'best way' of organising emergency laparotomy services associated with achieving better standards: each hospital must tailor services to meet local challenges. NELA data allow commissioners, providers and clinicians to assess and monitor the impact of organisational change, to determine if standards of care are being met, and to plan future changes to further develop and sustain improvements.

2 Understanding and reducing variation in care quality

Process measures are sensitive indicators of performance, and serve to highlight where specific actions are required to bring about improvements in care. Clinicians, hospital managers, and commissioners should examine their local data and results, determine why standards are met for some of their patients but not others, and seek to achieve more consistent delivery of high-quality care. They should use NELA data to monitor care over time to assess the impact of any changes. Over time, the RAG-rating boundary percentages will be increased in order to encourage delivery of ever-better care. The development of a Best Practice Tariff (to be introduced in April 2019) should help deliver improved care.

3 Reducing mortality and improving outcomes

Clinicians, hospital managers, and commissioners must examine their hospital's 30-day postoperative mortality and length-of-stay figures. By reviewing variation between hospitals in how care is delivered to patients and by benchmarking against standards, hospitals can identify opportunities for improvement that may contribute to improved outcomes. The National Quality Board (NQB) has recently published the first edition of National Guidance on Learning from Deaths for Trusts. The National Mortality Case Record Review Programme[1] is also providing support to improve the capacity and capability of in-hospital mortality reviews. These guidelines and documents should be adhered to when examining patient deaths.

The following more granular recommendations are grouped by audience and aimed at addressing the key themes identified in this NELA Patient Report. Specific recommendations are also highlighted in the relevant chapters.

Commissioners

1 Commissioners should ensure that there is adequate commissioning of:

- capacity to provide consultant-delivered care, multidisciplinary specialist input, and reliable access to other services, such as CT scanning and reporting, throughout the whole patient journey, regardless of the time of the day or the day of the week (Chapters 9.2, 9.3, 9.4 and 11.1)
- theatre capacity to prevent delays for patients requiring emergency bowel surgery, particularly those requiring surgery within two hours (Chapter 10.2)
- critical-care capacity to match high-risk caseload, such that all high-risk emergency laparotomy patients can be cared for on a critical care unit after surgery (Chapter 10.3) – expected critical care capacity can be modelled from NELA data
- care of older people services to provide input for older patients (Chapter 11.2)
- formal networks to support smaller hospitals in providing acute diagnostic and interventional radiology and endoscopy services.

Hospital chief executives and medical directors

In order to deliver high-quality care that meets standards to high-risk emergency patients, attention should be directed at organisational change in the following areas, working towards

2 Ensuring that care is delivered by consultant anaesthetists and consultant surgeons for high risk emergency laparotomy patients 24 hours per day, seven days per week. Rotas, job plans and staffing levels for surgeons and anaesthetists should reflect this. (Chapters 9.2, 9.3, 9.4).

3 Ensuring that older patients undergoing emergency laparotomy receive care from geriatricians to the same extent as older patients undergoing hip-fracture repair, where it has been shown to improve outcomes. Consideration should be given to how to fund an increased input from geriatricians and care of the older person teams.

4 Developing policies and supporting training in the use of individual patient risk assessment to guide allocation of resources (e.g. critical care) appropriate to the patient's needs (Chapters 9.1, 10.3). Policies constitute a clear statement of intent to deliver care that meets standards, and are associated with delivery of better care.

5 Providing emergency theatre capacity that is sufficient to enable patients to receive emergency surgical treatment, particularly those who need surgery within two hours. Prioritisation of time-sensitive emergency surgery can be facilitated by policies for the deferral of elective activity (Chapters 10.1, 10.2).

6 Adhering to national standards for postoperative critical care admission. This may require an increase in critical care capacity so that emergency and elective care can continue in parallel (Chapter 10.3).

7 Supporting and facilitating local NELA Leads and perioperative teams to improve care, by ensuring adequate time and resources to support accurate data collection, review adverse patient outcomes and to feed this back to clinical teams and hospital management (including at Board level). Such resources include access to individuals with audit and quality improvement skills throughout the organisation, allocated (job-planned) time to support data collection and analysis, and protected time for presentation of data in departmental meetings.

8 Ensuring that clinical coding of procedures is accurate, and embedding links between clinical-coding departments and clinicians to improve this (Chapter 11.3).

Clinical directors and multidisciplinary leadership teams

These recommendations are for every specialty involved in the care of patients undergoing emergency laparotomy.

9 In order to reduce unwarranted variation in care and minimise delays, hospitals should implement appropriate pathways for the care of emergency general surgical patients, starting at the time of admission to hospital or referral by another team. Where pathways of care do already exist, multidisciplinary teams (MDTs) should examine these in the light of audit data to determine their efficacy, and identify where and why standards are still not met. Care pathways help ensure that patients are admitted under the most appropriate specialty, aid communication within the MDT, and allow prioritisation of emergency resources; they aim to ensure that all processes of care are provided for each patient. Standardised pathways of care also facilitate audit and thereby highlight key areas for improvement. Pathways should cover the following areas:

- referral of patients for general surgical review if they have been admitted under non-surgical specialties
- identification of patients with signs of sepsis, and ensuring the prompt prescription and administration of antibiotics – there may be advantages to integrating this into the wider sepsis work ongoing within the NHS
- identification and escalation of patients who would benefit from the early involvement of both consultant surgeons and consultant anaesthetists, to ensure that consistently high-quality care is delivered by expert teams, and to drive the delivery of timely care for patients
- rapid request, conduct, and reporting of CT scans
- routine documented assessment of the risk of complications and death from surgery
- presence intraoperatively of a consultant surgeon and a consultant anaesthetist for high-risk patients with a predicted mortality ≥5%
- consideration of admission to critical care for all high-risk patients with a predicted mortality ≥5%
- identification of patients who would benefit from input from geriatricians in their perioperative care.

10 Risk assessment is a useful guide to clinical decision making, and risk should be calculated for every emergency laparotomy patient. **NELA strongly advises that care must not be provided purely on the basis of a predicted risk score, but that the risk score should be utilised as part of the global assessment of a patient**. It also aids identification and communication of the required pathway of care amongst the multidisciplinary team (Chapter 9.1), and informs discussion with patients and their families.

11 Multidisciplinary teams should hold regular joint meetings to continuously review essential processes of care (for instance, using the NELA Quality Improvement Dashboard) and perioperative morbidity (including unplanned returns to theatre and admissions to critical care) and mortality following emergency laparotomy. This should include formal collaboration with hospital mortality review panels in order to bring about greater understanding of where improvement is needed (Chapters 11.3, 12). Review of mortality following emergency laparotomy should follow NHS England's guidance for trusts, National Guidance on Learning from Deaths.

12 Continuous quality improvement informed by local data should involve monitoring the impact of care-pathway and process changes with time-series data (run charts). The NELA web tool provides automated dashboards that can be used for this purpose. Multidisciplinary teams should ensure that they include members with a good understanding of quality improvement principles such as the 'Model for Improvement'.[2] Consideration should also be given to good data-feedback practices (Chapter 12).

NELA Leads

Without the commitment and enthusiasm of hospital NELA teams and Leads, NELA would not have achieved the high levels of case ascertainment, data completeness and innovative quality improvement initiatives that have improved care for patients undergoing emergency laparotomy. We are grateful to all who have worked to achieve this.

At some hospitals, data entry for many cases was started but not completed. In addition, fields relating to the timing of key points in the patient pathway (e.g. time of consultant surgeon review, decision to operate) were poorly completed by many hospitals (Chapter 5). This may reflect the difficulties associated with completing datasets while also delivering clinical care.

However, collection and feedback of high-quality data are vital to bring about improvements. There are strategies that can be used to collect NELA data so that they become a useful part of the care pathway for patients (Chapter 12). The key to achieving this is to use the NELA data to help teams deliver the high-quality care that they strive to provide, and to feed back results regularly and visually to teams to keep it relevant and useful.

13 NELA is producing a job description for NELA leads that sets out expected roles and behaviours. This job description should be used to ensure NELA work is supported locally. The job description is available here.

14 NELA Leads should review their local data to ensure case-submission and data completeness.

15 NELA Leads should consider designing care pathways that contain NELA data questions as prompts for clinicians to deliver good care to patients.

16 NELA Leads should actively promote completion of P-POSSUM data fields to ensure that risk estimation is accurate and useful. In addition to aiding discussion with patients and their families, completeness of data fields also improves accuracy of risk-adjusted hospital mortality rates (Chapter 6.1).

Professional stakeholder organisations

17 Professional stakeholders, such as Royal Colleges and specialist societies, should collaborate to:

- improve clarity and remove ambiguity in the wording of standards of care; this would be particularly welcome for standards for admission to critical care (Chapter 10.3)
- bring together standards in a single, unified document
- highlight the issues to their members to ensure appropriate engagement
- ensure that there are joint education and training programmes across specialties and disciplines to develop an equipped workforce.

Patients, families and public

This Report highlights the standards of care that patients should expect if undergoing emergency bowel surgery. Patients and public can view their local hospital's reports on MyNHS or the NELA website to understand more about the quality of care being delivered.

18 Patients and families should ask to have the 'risk' of their surgery clearly explained to them by their clinical teams to help them understand the possible outcomes of their emergency bowel surgery.

19 Patients who are identified as high risk should expect consultant-delivered intraoperative care.

20 Patients and their families should expect to receive daily reviews by their surgical teams and to have a clear explanation of the surgery, the timing of their surgery, and the rationale behind clinical decisions made.

21 Patients should expect to be cared for in an appropriately staffed area that can provide the appropriate level of expertise and monitoring after high-risk emergency laparotomy surgery.

A summary of the recommendations from each Chapter is in Appendix 15.4.