Processes

Chapter 8 – Proportion of patients reviewed within 14 hours of hospital admission by a consultant surgeon (PM1)

Standards -

All emergency admissions must be seen and have a thorough clinical assessment by a suitable consultant as soon as possible but at the latest within 14 hours from the time of arrival at hospital – NHS 7 day services

Numerator – Number of patients admitted as an emergency where consultant surgeon review time complete and reviewed at or within 14 hours of admission.

Denominator – Number of patients admitted as an emergency where consultant surgeon review time complete.

Webtool Data Fields –

1.9 Date and time the patient first arrived at the hospital/A&E

1.10 What was the nature of this admission?

2.1 Date and time first seen by consultant surgeon following admission/referral

Note –

Any patients that were an elective admission are excluded from this analysis

Any patients where time of consultant review is incomplete are excluded from this analysis

Chapter 9 (1) - Proportion of patients that received a pre-operative abdominal CT scan (PM7)

Standards -

The delivery of quality clinical care is dependent on access to supporting facilities. Rapid access to CT imaging, U/S scanning and laboratory analyses are critical to the efficient diagnosis, resuscitation and prioritisation of these patients. ASGBI EGS

Numerator – Number of patients that received a pre-operative CT scan

Denominator – Number of patients that underwent an emergency laparotomy

Webtool Data Fields –

2.7 Was an abdominal CT scan performed in the pre-operative period as part of the diagnostic work-up?

Chapter 9 (2) Proportion of pre-operative abdominal CT scans reported pre-operatively by a consultant radiologist. (PM8)

Standards -

Hospitals which admit patients as emergencies must have access to both conventional radiology and CT scanning 24 hours per day, with immediate reporting. NCEPOD EA

Consultant-directed diagnostic tests and completed reporting will be available seven days a week, within 1 hour for critical patients (i.e. those for whom the test will alter their management at the time). NHS 7 Day Services

Numerator – Number of patients where the CT scan was reported by a consultant radiologist

Denominator – Number of patients that underwent an emergency laparotomy

Webtool Data Fields-

2.8 If performed, was this CT reported pre-operatively by a consultant radiologist?

Chapter 10 - Proportion of patients who have a documented pre-operative objective assessment of risk of mortality. (PM9)

Standards -

(All elective high risk patients should be seen and fully investigated in pre-assessment clinics). Arrangements should be in place to ensure more urgent surgical patients have the same robust work up. NCEPOD KTR

Patients must be actively involved in shared decision making and supported by clear information from healthcare professionals to make fully informed choices about treatment and ongoing care that reflect what is important to them. This should happen consistently, seven days a week. NHS 7 Day Services

We recommend that objective risk assessment become a mandatory part of the pre-operative checklist to be discussed between surgeon and anaesthetist for all patients. This must be more detailed than simply noting the ASA score. RCS HR

Patients with a predicted mortality ≥5% should be managed as 'high risk'. RCS HR

Numerator – Number of patients documented as being low, high, highest risk or risk not documented.

Denominator – All patients that underwent an emergency laparotomy

Webtool data fields –

3.1 What risk of death was the patient documented as having?

Chapter 11 (1) - Elapsed time between admission and first dose of antibiotics in patients with suspected peritonitis (PM2)

Standards -

Those with septic shock require immediate broad-spectrum antibiotics with fluid resuscitation and source control. RCS HR

Providers are expected to screen for sepsis all those patients for whom sepsis screening is appropriate, and to rapidly initiate intravenous antibiotics, within 1 hour of presentation, for those patients who have suspected severe sepsis, Red Flag Sepsis or septic shock. CQUIN 2015/2016

…administer broad-spectrum antimicrobials as early as possible, and always within the first hour of recognising severe sepsis and septic shock together with other appropriate measures. RCS HR

Measure – Time elapsed (in hours) between admission and antibiotic administration in patients that were admitted as an emergency, judged to require surgery within 6 hours of decision to operate and had their emergency laparotomy due to an indication of peritonitis within 24 hours of admission.

Webtool data fields –

1.10 What was the nature of this admission?

2.2 Date and time that the decision was made to operate

2.10 What was the date and time of the first dose of antibiotics following admission?

3.22 What was global impression of the urgency of surgery at the time of booking the case?

5.2 What is the indication for surgery?

Note –

Patients were excluded from this analysis where:

-they were an elective admission

-they were operated on later than 24 hours after admission

-where they were in an urgency category of requiring surgery > 6 hours after decision to operate.

-they did not have a recorded indication of peritonitis

-they had incomplete date/time data for administration of antibiotics

-they had incomplete date/time data for decision to operate.

Chapter 11 (2) - Elapsed time between decision to operate and entry into operating theatre in patients with suspected peritonitis (PM5)

Standards –

Trusts should ensure emergency theatre access matches need and ensure prioritisation of access is given to emergency surgical patients ahead of elective patients whenever necessary as significant delays are common and affect outcomes. RCS HR AUDIT

Those with septic shock require immediate broad-spectrum antibiotics with fluid resuscitation and source control. RCS HR

Measure - Time elapsed (in hours) between decision to operate and entry into operating theatre in patients that were admitted as an emergency, judged to require surgery within 6 hours of decision to operate and had their emergency laparotomy due to an indication of peritonitis within 24 hours of admission.

Webtool data fields –

1.9 Date and time the patient first arrived at the hospital/A&E

1.10 What was the nature of this admission?

2.2 Date and time that the decision was made to operate

3.22 What was global impression of the urgency of surgery at the time of booking the case?

4.1 Date and time of entry in to operating theatre/anaesthetic room (not theatre suite)

5.2 What is the indication for surgery?

Note –

Patients were excluded from this analysis where:

-they were an elective admission

-they were operated on later than 24 hours after admission

-where they were in an urgency category of requiring surgery > 6 hours after decision to operate.

-they did not have a recorded indication of peritonitis

-they had incomplete date/time data for decision to operate.

-they had incomplete date/time data for entry into operating theatre

Chapter 11 (3) – Elapsed time between admission and entry into operating theatre in patients with suspected peritonitis (PM6)

<u>Standards</u> –

Trusts should ensure emergency theatre access matches need and ensure prioritisation of access is given to emergency surgical patients ahead of elective patients whenever necessary as significant delays are common and affect outcomes. RCS HR AUDIT

Those with septic shock require immediate broad-spectrum antibiotics with fluid resuscitation and source control. RCS HR

<u>Measure</u> - Time elapsed (in hours) between admission and entry into operating theatre in patients that were admitted as an emergency, judged to require surgery within 6 hours of decision to operate and had their emergency laparotomy due to an indication of peritonitis within 24 hours of admission.

<u>Webtool data fields</u> –

1.9 Date and time the patient first arrived at the hospital/A&E

1.10 What was the nature of this admission?

3.22 What was global impression of the urgency of surgery at the time of booking the case?

4.1 Date and time of entry in to operating theatre/anaesthetic room (not theatre suite)

5.2 What is the indication for surgery?

<u>Note</u> –

Patients were excluded from this analysis where:

-they were an elective admission

-they were operated on later than 24 hours after admission

-where they were in an urgency category of requiring surgery > 6 hours after decision to operate.

-they did not have a recorded indication of peritonitis

-they had incomplete date/time data for entry into operating theatre

Chapter 12 – Timeliness of arrival into operating theatre (PM5)

Standards -

Trusts should ensure emergency theatre access matches need and ensure prioritisation of access is given to emergency surgical patients ahead of elective patients whenever necessary as significant delays are common and affect outcomes. RCS HR

Hospitals accepting undifferentiated patients requiring immediate life and/or limb-preserving surgery are equipped and staffed 24/7 to manage the likely range of surgical emergencies. RCS USC

All hospitals admitting emergency general surgical patients should have a dedicated, fully staffed, theatre available at all times for this clinical workload. ASGBI EGS

Adequate emergency theatre time is provided throughout the day to minimise delays and avoid emergency surgery being undertaken out of hours when the hospital may have reduced staffing to care for complex postoperative patients. RCS USC

Trusts should ensure emergency theatre access matches need and ensure prioritisation of access is given to emergency surgical patients ahead of elective patients whenever necessary as significant delays are common and affect outcomes. RCS HR

Surgical patients often require complex management and delay worsens outcomes. The adoption of an escalation strategy which incorporates defined time-points and the early involvement of senior staff when necessary are strongly advised. RCS HR

Patients with an intraabdominal pathology and organ dysfunction should be operated on within 6hrs of onset of organ dysfunction. RCS HR

Time to operate within 2hrs of decision to operate for high risk group. RCS HR

For non-high-risk group definitive operation within same working day from time of decision to operate. RCS HR

The time from decision to operate to actual time of operation is recorded in patient notes and audited locally. RCS USC

Numerator – Number of patients that arrived in theatre within the specified time according to their assigned urgency category following decision to operate

Denominator – Total number of patients assigned to that urgency category

Webtool data fields –

NELA - Show workings for Second NELA Report – 01-11-2016

2.2 Date and time that the decision was made to operate

3.22 What was global impression of the urgency of surgery at the time of booking the case?

4.1 Date and time of entry in to operating theatre/anaesthetic room (not theatre suite)

Note – Patients were excluded from this analysis where:

-no urgency category was assigned

-they had incomplete date/time data for decision to operate.

-they had incomplete date/time data for entry into operating theatre.

Chapter 13 (1) – Consultant delivered preoperative care (PM3, PM4) in all patients and those with pre-operative p-possum risk of death of 5% or greater.

Standards -

Each higher risk case (predicted mortality ≥5%) should have the active input of consultant surgeon and consultant anaesthetist. RCS HR

Each patient should have his or her expected risk of death estimated and documented prior to intervention and due adjustments made in urgency of care and seniority of staff involved. RCS HR

All patients admitted as emergencies are discussed with the responsible consultant if immediate surgery is being considered. RCS USC

Surgical patients often require complex management and delay worsens outcomes. The adoption of an escalation strategy which incorporates defined time-points and the early involvement of senior staff when necessary are strongly advised. RCS HR

Each higher risk case (predicted mortality ≥5%) should have the active input of consultant surgeon and consultant anaesthetist. RCS HR

The peri-operative anaesthetic care of ASA3 and above patients requiring immediate major surgery (and therefore with an expected higher mortality) is directly supervised by a consultant anaesthetist. RCS USC

Numerator(1) – Number of patients documented as being seen in person pre-operatively by a consultant surgeon and consultant anaesthetist.

Denominator(1) – Number of patients that underwent an emergency laparotomy

Numerator(2) – Number of patients with a predicted pre-operative p-possum mortality risk of >=5% documented as being seen in person pre-operatively by a consultant surgeon and consultant anaesthetist.

Denominator(2) – Number of patients with a predicted pre-operative p-possum mortality risk of >=5% that undrwent an emergency laparotomy

Webtool data fields –

2.4 Was the decision to operate made by consultant surgeon?

2.5 Did this clinician personally review the patient at the time of this decision?

2.9 Date and time first seen by consultant anaesthetist prior to entry into operating theatre/anaesthetic room (not theatre suite)

3.23 Pre-op P-POSSUM predicted mortality (for numerator (2) and denominator (2))

3.25 Not all P-POSSUM investigations available

Note-

Patients with a pre-operative possum mortality risk of <5% were excluded from analysis (2)

Where not all p-possum investigations were available any missing data items were substituted with the lowest category of risk to give a figure for mortality risk.

Chapter 13 (2) – Consultant delivered intraoperative care (PM10, PM11) in all patients and those with pre-operative p-possum risk of death of 5% or greater.

<u>Standards</u> –

A consultant surgeon (CCT holder) and consultant anaesthetist are present for all cases with predicted mortality ≥10% and for cases with predicted mortality >5% except in specific circumstances where adequate experience and manpower is otherwise assured. RCS USC

Each higher risk case (predicted mortality ≥5%) should have the active input of consultant surgeon and consultant anaesthetist. Surgical procedures with a predicted mortality of ≥10% should be conducted under the direct supervision of a consultant surgeon and a consultant anaesthetist unless the responsible consultants have actively satisfied themselves that junior staff have adequate experience and manpower and are adequately free of competing responsibilities. RCS HR

High risk patients are defined by a predicted hospital mortality ≥5%: they should have active consultant input in the diagnostic, surgical, anaesthetic and critical care elements of their pathway RCS HR

The peri-operative anaesthetic care of ASA3 and above patients requiring immediate major surgery (and therefore with an expected higher mortality) is directly supervised by a consultant anaesthetist. RSC USC

Numerator(1) – Number of patients documented as receiving intraoperative care by a consultant surgeon and consultant anaesthetist.

Denominator(1) – Number of patients underwent an emergency laparotomy

Numerator(2) – Number of patients with a predicted pre-operative p-possum mortality risk of >=5% documented as receiving intraoperative care by a consultant surgeon and consultant anaesthetist.

Denominator(2) – Number of patients with a predicted pre-operative p-possum mortality risk of >=5% that underwent an emergency laparotomy

<u>Webtool data fields</u> –

3.23 Pre-op P-POSSUM predicted mortality (for numerator (2) and denominator (2))

3.25 Not all P-POSSUM investigations available

4.2 Senior surgeon grade

4.3 Senior anaesthetist grade

<u>Note</u>-

Patients with a pre-operative p-possum mortality risk of <5% were excluded from analysis (2)

Where not all p-possum investigations were available any missing data items were substituted with the lowest category of risk to give a figure for mortality risk.

Chapter 14 – Proportion of patients receiving goal directed fluid therapy (PM 12)

Standards – nil

Numerator – Number of patients documented as receiving some form of goal directed fluid therapy

Denominator – Number of patients that underwent an emergency laparotomy

Webtool data fields –

4.4 How did you provide goal directed fluid therapy?

Chapter 15 – Direct Postoperative admission to critical care (PM 14) in all patients, those with post-operative p-possum risk of death of 5-10% and those with a post-operative p-possum risk of death of greater than 10%

Standards –

Patients with a predicted mortality ≥5% should be managed as 'high risk'. RCS HR

All high risk patients should be considered for critical care and as a minimum, patients with an estimated risk of death of ≥10% should be admitted to a critical care location. RCS HR

Intensive care requirements are considered for all patients needing emergency surgery. There is close liaison and communication between the surgical, anaesthetic and intensive care teams perioperatively with the common goal of ensuring optimal safe care in the best interests of the patient. RCS USC

The outcome of high-risk General Surgical patients could be improved by the adequate and effective use of critical care in addition to a better preoperative risk stratification protocol. ASGBI PS

Given the high incidence of postoperative complications demonstrated in the review of high risk patients, and the impact this has on outcome there is an urgent need to address postoperative care NCEPOD KTR

All patients with a predicted mortality of ≥10% should be admitted to a level 2 or 3 critical care area after surgery and all patients should have an updated management plan which incorporates haemodynamic and blood gas parameters, on-going antibiotics, nutrition and thromboembolic prophylaxis. RCS HR

Numerator (1) – Number of patients directly admitted to a critical care area post-operatively

Denominator (1) – Number of patients that had an emergency laparotomy

Numerator (2) – Number of patients with a predicted post-operative p-possum mortality risk of 5-10% directly admitted to a critical care area post-operatively

Denominator (2) – Number of patients that had an emergency laparotomy with a predicted post-operative p-possum mortality risk of 5-10%

Numerator (3) – Number of patients with a predicted post-operative p-possum mortality risk of >10% directly admitted to a critical care area post-operatively

Denominator (3) – Number of patients with a predicted post-operative p-possum mortality risk of >10% directly that had an emergency laparotomy

Webtool data fields –

6.21 Post-op P-POSSUM predicted mortality

6.23 Not all P-POSSUM investigations available

6.24 Where did the patient go for continued post-operative care following surgery?

6.24a At the end of surgery, was the decision made to place the patient on an end of life pathway?

Note-

Patients with a post-operative p-possum mortality risk of <5% and >10% were excluded from analysis (2)

Patients with a post-operative p-possum mortality risk of <10% were excluded from analysis (3)

Where not all p-possum investigations were available any missing data items were substituted with the lowest category of risk to give a figure for mortality risk.

Patients that were documented to have died prior to discharge were excluded from this analysis.

Patients where a decision was made to place them on an end of life pathway post-operatively were excluded from this analysis

Chapter 16 – Assessment by an elderly medicine specialist (PM 15) if aged 70 or older

Standards –

Clear protocols for the postoperative management of elderly patients undergoing abdominal surgery should be developed which include, where appropriate, routine review by an MCOP [Medicine for Care of Older People] consultant and nutritional assessment. NCEPOD Age

Comorbidity, disability and frailty need to be clearly recognised as independent markers of risk in the elderly. This requires skill and multidisciplinary input, including early involvement of Medicine for the Care of Older People. NCEPOD Age

All emergency inpatients must have prompt assessment by a multi-professional team to identify complex or on-going needs, unless deemed unnecessary by the responsible consultant. NHS 7 Day Services

Numerator – Number of patients aged 70 or older that were documented as being reviewed by an elderly care physician in the post-operative period.

Denominator – Number of patients aged 70 or older that underwent an emergency laparotomy

Webtool data fields –

1.4 Age on arrival

7.3 Was the patient assessed by a specialist from Elderly Medicine in the post-operative period?

Note-

Patients aged under 70 were excluded from this analysis

Outcomes

Chapter 17 (1) – Outcomes; Death within 30 days and within 90 days according to ONS data (OM1)

Numerator (1) – Number of patients that died within 30 days of their emergency laparotomy according to ONS data

Denominator (1) – Number of patients that underwent emergency laparotomy

Numerator (2) – Number of patients that died within 90 days of their emergency laparotomy according to ONS data

Denominator (2) – Number of patients that underwent emergency laparotomy

Webtool data fields –

4.1 Date and time of entry in to operating theatre/anaesthetic room (not theatre suite)

Note –

Mortality status and date of death was obtained from independent mortality data held by the Office for National Statistics

Chapter 17 (2) – Outcomes; Length of hospital stay after surgery (OM4)

Measure – Elapsed time (days) between date of surgery and date of discharge from hospital in patients surviving to hospital discharge

Webtool data fields –

4.1 Date and time of entry in to operating theatre/anaesthetic room (not theatre suite)

7.7 Status at discharge

7.8 Date discharged from hospital

Note –

Patients that died in hospital were excluded from this analysis.

Patients where there was a presumed data entry error (ie had a post operative length of stay of <0 days) were excluded from this analysis

Chapter 17 (3) – Outcomes; Return to theatre following initial emergency laparotomy (OM3)

Standards –

The outcome of high-risk general surgical patients could be improved by the adequate and effective use of critical care in addition to a better pre-operative risk stratification protocol. ASGBI PS

Given the high incidence of postoperative complications demonstrated in the review of high risk patients, and the impact this has on outcome there is an urgent need to address postoperative care NCEPOD KTR

Trusts should formalise their pathways for unscheduled adult general surgical care. The pathway should include the timing of diagnostic tests, timing of surgery and post-operative location for patients. RCS HR

Numerator – Number of patients that returned to theatre in the initial post-operative period following their emergency laparotomy

Denominator – Number of patients that underwent an emergency laparotomy

Webtool data fields –

7.4 Within this admission, did the patient return to theatre in the post-operative period following their initial emergency laparotomy?

Chapter 17 (4) – Outcomes; Unplanned admission to critical care (OM2)

Standards –

The outcome of high-risk general surgical patients could be improved by the adequate and effective use of critical care in addition to a better pre-operative risk stratification protocol. ASGBI PS

Given the high incidence of postoperative complications demonstrated in the review of high risk patients, and the impact this has on outcome there is an urgent need to address postoperative care NCEPOD KTR

Trusts should formalise their pathways for unscheduled adult general surgical care. The pathway should include the timing of diagnostic tests, timing of surgery and post-operative location for patients. RCS HR

Numerator – Number of patients that had an unplanned move from the ward to a higher level of care within 7 days of surgery

Denominator – Number of patients that underwent an emergency laparotomy

Webtool data fields –

7.5 Did the patient have an unplanned move from the ward to a higher level of care within 7 days of surgery? (do not include moves from HDU to ITU)