NELA Patient Audit Dataset

Version Control

Version	Date	Changes
2.0	24/11/2014	Changes made to dataset for 2nd year. This form to be used for admissions from 1st December 2014; Q2.2, 3.5, 6.3 wording amended New Q2.2i, 3.16a & 6.24a Q2.6 no longer required
2.1.1	02/04/2015	Still in hospital at 60 days answer option added to question 7.7
2.1.2	02/07/2015	Wording edited for question 2.9
3.1	01/12/2015	Changes made to dataset for 3rd year. This form to be used for admissions from 1st December 2015; Q2.4, 3.1 & 6.1 wording amended New answer options for Q5.2, 5.3a/b/c/d, 5.5 & 7.3 Time controls changed to 15 minute intervals
3.1.1	21/03/2016	Q1.9 wording edited

This is the final NELA proforma. All data entry will be carried out through an online data collection web tool. The web tool will be accessible via pc, tablets and mobiles

This audit is a continuous prospective audit with real time data collection. It is expected that clinical teams enter the data real time rather than retrospectively.

For queries, please contact info@nela.org.uk

Web tool for data entry: https://data.nela.org.uk/

This form is for information purposes only.

1.	**Demographics and Admission**	
1.1	NHS Number	
1.2	Pseudo-anonymisation	Computer generated
1.3	Local patient id/hospital number	
1.4	Date of birth	
1.4	Age on arrival	*Age will automatically be calculated on web tool*
1.5	Gender	○Male / ○Female
1.6	Forename	
1.7	Surname	
1.8	Postcode	
1.9	Date and time the patient first arrived at the hospital/A&E.	
1.10	What was the nature of this admission?	○Elective / ○Non-elective

2	**Pre-op** **If the patient is returning to theatre as an emergency following previous elective surgery, all answers should relate to the emergency laparotomy, not the previous elective surgery.**	
2.1	Date and time first seen by consultant surgeon following admission/referral	Date _____(DD/MM/YYYY) ○ Date not known Time_____ (HH:MM) ○ Time not known ○ Not Seen
2.2	Date and time that the decision was made to operate *If this is unavailable please enter date and time that this patient was first booked for theatre for emergency laparotomy*	Date _____(DD/MM/YYYY) ○ Date not known Time_____ (HH:MM) ○ Time not known
2.2i	Which date and time is recorded?	○ Decision to operate ○ First booked for theatre
2.3	Consultant responsible for surgical care at the time the decision was made to operate (this may be different to the operating consultant)	
2.4	Was the decision to operate made by consultant surgeon?	○ Yes ○ No ○ Not known
2.5	Did this clinician personally review the patient at the time of this decision?	○ No ○ Yes ○ Unknown
2.6	What was the date and time that the patient was first booked for theatre? NOT REQUIRED FOR ADMISSIONS AFTER 1/12/14	Date _____(DD/MM/YYYY) ○ Date not known Time_____ (HH:MM) ○ Time not known
2.7	Was an abdominal CT scan performed in the pre-operative period as part of the diagnostic work-up?	○ No ○ Yes ○ Unknown
2.8	If performed, was this CT reported pre-operatively by a consultant radiologist?	○ No ○ Yes ○ Unknown

2.9	Date and time first seen by consultant anaesthetist prior to entry into operating theatre/anaesthetic room (not theatre suite)	Date _____(DD/MM/YYYY) ○ Date not known Time_____ (HH:MM) ○ Time not known ○ Not Seen
2.10	What was the date and time of the first dose of antibiotics following admission?	Date _____(DD/MM/YYYY) ○ Date not known Time_____ (HH:MM) ○ Time not known ○ Not Administered

3	**Pre-op Risk stratification**	
3.1	What risk of death was the patient documented as having?	○ Lower (<5%) ○ High (5-10%) ○ Highest (>10%) ○ Not documented
3.2	If documented, how was this assessment of risk made? (Please select all that apply)	□ Risk prediction tool (e.g. P-POSSUM) □ Clinical Judgement □ Surgical APGAR □ Physiologicial criteria □ Other e.g. hospital policy
3.3	What was the **ASA** score?	○ 1: No systemic disease ○ 2: Mild systemic disease ○ 3: Severe systemic disease, not life-threatening ○ 4: Severe, life-threatening ○ 5: Moribund patient
3.4	What was the pre-operative Serum Creatinine micromol/l	○ Not performed
3.5	What was the pre-operative Blood lactate – may be arterial or venous (mmol/l)	○ Not performed
	P-POSSUM calculation	
	For questions 3.6 to 3.22 please enter values closest to time of booking for theatre in order to calculate P-POSSUM. Answers should reflect chronic *and* acute pathophysiology.	
3.6	Serum Sodium concentration (mmol/l)	
3.7	Serum Potassium concentration (mmol/l)	
3.8	Serum Urea concentration (mmol/l)	
3.9	Serum Haemoglobin concentration (g/dl)	
3.10	Serum White cell count (x10∧9 / l)	
3.11	Pulse rate(bpm)	
3.12	Systolic blood pressure (mmHg)	
3.13	Glasgow coma scale	
3.14	Select an option that best describes this patient's **ECG**	○ No abnormalities ○ AF rate 60-90 ○ AF rate >90/ any other abnormal rhythm/paced rhythm/ >5VE/min/ Q, ST or T wave abnormalities
3.15	Select an option that best describes this patient's **cardiac signs** and chest xray appearance	○ No failure ○ Diuretic, digoxin, antianginal or antihypertensive therapy ○ Peripheral oedema, warfarin Therapy or CXR: borderline cardiomegaly

		○ Raised jugular venous pressure or CXR: cardiomegaly
3.16	Select an option that best describes this patient's **respiratory history** and chest xray appearance	○ No dyspnoea ○ Dyspnoea on exertion or CXR: mild COAD ○ Dyspnoea limiting exertion to < 1 Flight or CXR: moderate COAD ○ Dyspnoea at rest/rate > 30 at rest or CXR: fibrosis or consolidation
3.16a	Patient was ventilated prior to emergency laparotomy *Online web tool will automatically calculate Physiology severity score*	○ Yes ○ No
3.17	Select the **operative severity** of the intended surgical intervention (see help box for examples)	○ Major ○ Major+
3.18	Including this operation, how many operations has the patient had in the 30 day period prior to this procedure?	○ 1 ○ 2 ○ >2
3.19	Based on your clinical experience of the intended surgery, please estimate the likely ***intra*operative blood loss** (ml)	○ <100 ○101-500 ○ 501-999 ○ >=1000
3.20	Please select a value that best describes the likely degree of **peritoneal soiling**	○ None ○ Serous fluid ○ Localised pus ○ Free bowel content, pus or blood
3.21	What severity of malignancy is anticipated to be present?	○ None ○ Primary only ○ Nodal metastases ○ Distant metastases
3.22	Please select **urgency** of surgical intervention *(see help notes for additional information, including equivalent Possum categories)* *Online web tool will automatically calculate Operative severity score*	○ 3. Expedited (>18 hours) ○ 2B. Urgent (6-18 hours) ○ 2A. Urgent (2-6 hours) ○ 1. Immediate (<2 hours)
3.23	Pre-op P-POSSUM predicted **mortality**	Calculated ☐
3.24	Pre-op POSSUM predicted **morbidity**	Calculated ☐
3.25	Not all P-POSSUM investigations available	

4	**Intra-op**	
4.1	Date and time of entry in to operating theatre/anaesthetic room (not theatre suite)	Date _____(DD/MM/YYYY) Time_____ (HH:MM) ☐ Time not known
4.2	Senior surgeon grade	○ Consultant ○ Post-CCT fellow ○ SAS grade ○ Research Fellow / Clinical Fellow ○ Specialty trainee / registrar ○ Core trainee / SHO

		○ Other
4.2a	If consultant: Name/GMC of operating consultant	(Please select consultant)
4.3	Senior anaesthetist grade	○ Consultant ○ Post-CCT fellow ○ SAS grade ○ Research Fellow / Clinical Fellow ○ Specialty trainee / registrar ○ Core trainee / SHO ○ Other
4.3a	If consultant: Name/GMC of anaesthetist	(Please select consultant)
4.4	How did you provide goal directed fluid therapy?	○ Not provided ○ Cardiac output monitor ○ Other

5	**Procedure**	
5.1	Is this the first surgical procedure of this admission, or a Complication of previous surgery within the same admission?	○ First surgical procedure after admission ○ Surgery for complication of 0 previous surgical procedure within the same admission
5.2	What is the indication for surgery? (Please select all that apply)	○ Peritonitis ○ Perforation ○ Abdominal abscess ○ Anastomotic leak ○ Intestinal fistula ○ Phlegmon ○ Pneumoperitoneum ○ Necrosis ○ Sepsis ○ Small bowel obstruction ○ Large bowel obstruction ○ Volvulus ○ Internal hernia ○ Pseudo-obstruction ○ Intussusception ○ Incarcerated hernia ○ Haemorrhage ○ Ischaemia ○ Colitis ○ Abdominal wound dehiscence ○ Abdominal compartment syndrome ○ Acidosis ○ Iatrogenic injury ○ Foreign body ○ Planned relook

5.3.a	Main procedure	○ Peptic ulcer – suture or repair of perforation ○ Peptic ulcer – oversew of bleed ○ Gastrectomy: partial or total ○ Gastric surgery - other ○ Small bowel resection ○ Resection of Meckel's diverticulum ○ Colectomy: left (including sigmoid colectomy and anterior resection) ○ Colectomy: right (including ileocaecal resection) ○ Colectomy: subtotal or panproctocolectomy ○ Hartmann's procedure ○ Colorectal resection - other ○ Abdominal wall closure ○ Abdominal wall reconstruction ○ Adhesiolysis ○ Reduction of volvulus ○ Enterotomy ○ Stricturoplasty ○ Drainage of abscess/collection ○ Evacuation of haematoma ○ Debridement ○ Exploratory/relook laparotomy only ○ Haemostasis ○ Intestinal bypass ○ Laparostomy formation ○ Repair of intestinal perforation ○ Repair or revision of anastomosis ○ Repair of intestinal fistula ○ Resection of other intra-abdominal tumour(s) ○ Stoma formation ○ Stoma revision ○ Washout only ○ Removal of foreign body ○ Not amenable to surgery
5.3.b	Second procedure (at same laparotomy)	○ Peptic ulcer – suture or repair of perforation ○ Peptic ulcer – oversew of bleed ○ Gastrectomy: partial or total ○ Gastric surgery - other ○ Small bowel resection ○ Resection of Meckel's diverticulum ○ Colectomy: left (including sigmoid colectomy and anterior resection) ○ Colectomy: right (including ileocaecal resection) ○ Colectomy: subtotal or panproctocolectomy ○ Hartmann's procedure ○ Colorectal resection – other ○ Splenectomy ○ Abdominal wall closure ○ Abdominal wall reconstruction ○ Abdominal hernia repair ○ Adhesiolysis ○ Reduction of volvulus
5.3.c	Third procedure (at same laparotomy)	
5.3.d	Fourth procedure (at same laparotomy)	

		○ Enterotomy ○ Stricturoplasty ○ Drainage of abscess/collection ○ Evacuation of haematoma ○ Debridement ○ Haemostasis ○ Intestinal bypass ○ Laparostomy formation ○ Repair of intestinal perforation ○ Repair or revision of anastomosis ○ Repair of intestinal fistula ○ Resection of other intra-abdominal tumour(s) ○ Stoma formation ○ Stoma revision ○ Removal of foreign body
5.4	Procedure approach	○ Open ○ Laparoscopic ○ Laparoscopic assisted ○ Laparoscopic converted to open
5.5	Operative findings: (Please select all that apply) *If unsure whether this patient is eligible for NELA please refer to help box*	○ Abscess ○ Anastomotic leak ○ Perforation – peptic ulcer ○ Perforation – small bowel/colonic ○ Diverticulitis ○ Intestinal fistula ○ Adhesions ○ Incarcerated hernia ○ Volvulus ○ Internal hernia ○ Intussusception ○ Stricture ○ Pseudo-obstruction ○ Gallstone ileus ○ Meckel's diverticulum ○ Malignancy – localised ○ Malignancy – disseminated ○ Colorectal cancer ○ Gastric cancer ○ Haemorrhage – peptic ulcer ○ Haemorrhage – intestinal ○ Haemorrhage – postoperative ○ Ulcerative colitis ○ Other colitis ○ Crohn's disease ○ Abdominal compartment syndrome ○ Intestinal ischaemia ○ Necrotising fasciitis ○ Foreign body ○ Stoma complications ○ Abdominal wound dehiscence ○ Normal intra-abdominal findings
5.6	Please describe the peritoneal contamination present (select all that apply)	○ None or reactive serous fluid only ○ Free gas from perforation +/- minimal contamination

		○ Pus ○ Bile ○ Gastro-duodenal contents ○ Small bowel contents ○ Faeculent fluid ○ Faeces ○ Blood/haematoma
5.7	Please indicate if the contamination was;	○ Localised to a single quadrant of the abdomen ○ More extensive / generalised

6	**Post-op Risk stratification**	
6.1	What risk of death was the patient documented as having?	○ Lower (<5%) ○ High (5-10%) ○ Highest (>10%) ○ Not documented
6.2	How was this assessment of risk made? (Please select all that apply)	☐ Risk prediction tool (e.g. P-POSSUM) ☐ Clinical Judgement ☐ Surgical APGAR score ☐ Physiologicial criteria ☐ Other, e.g. hospital policy
6.3	Blood lactate – may be arterial or venous (mmol/l)	☐ ☐ Not performed
	Post-operative P-POSSUM calculation Please enter values closest to the end of surgery if available, otherwise pre-op figures will be used where appropriate (can be from ABGs or lab investigations). Answers should reflect chronic ***and*** acute pathophysiology.	
6.4	Serum Sodium concentration (mmol/l)	☐
6.5	Serum Potassium (mmol/l)	☐
6.6	Serum Urea (mmol/l)	☐
6.7	Haemoglobin concentration in g/dl	☐
6.8	White cell count (x10∧9/l)	☐
6.9	Pulse rate (bpm)	☐
6.10	Systolic BP (mmHg)	☐
6.11	Glasgow coma score	☐
6.12	Describe ECG findings	○ No abnormalities ○ AF rate 60-90 ○ 'AF rate >90/ any other abnormal rhythm/paced rhythm/ >5VE/min/ Q, ST or T wave abnormalities'
6.13	Describe Cardiac history / CXR appearance	○ No failure ○ Diuretic, digoxin, antianginal, antihypertensive therapy ○ Peripheral oedema, warfarin Therapy or CXR: borderline cardiomegaly ○ Raised jugular venous pressure or CXR: cardiomegaly
6.14	Describe Respiratory history / CXR appearance	○ No dyspnoea

	Physiology severity score:	○ Dyspnoea on exertion or CXR:mild COAD ○ Dyspnoea limiting exertion to <1 Flight or CXR: moderate COAD ○ Dyspnoea at rest/rate >30 at rest or CXR: fibrosis or consolidation Calculated ☐
6.15	What was the operative severity? (see help box for examples)	○ Major ○ Major+
6.16	Including this operation, how many operations has the patient had in the 30 day period prior to this procedure?	○ 1 ○ 2 ○ >2
6.17	Please select this patient's measured intraoperative blood loss (ml)	○ <100 ○ 101-500 ○ 501-1000 ○ >1000
6.18	Please select the option that best describes this patient's degree of peritoneal soiling	○ None ○ Serious fluid ○ Local pus ○ Free bowel content, pus or blood
6.19	What was the level of malignancy based on surgical findings	○ None ○ Primary only ○ Nodal metastases ○ Distant metastases
6.20	What is the NCEPOD urgency? *(see help notes for additional information, including equivalent Possum categories)* *Online web tool will automatically calculate Operative severity score*	○ 3. Expedited (>18 hours) ○ 2B. Urgent (6-18 hours) ○ 2A. Urgent (2-6 hours) ○ 1. Immediate (<2 hours)
6.21	Post-op P-POSSUM predicted **mortality**:	Calculated ☐
6.22	Post-op POSSUM predicted **morbidity**:	Calculated ☐
6.23	Not all P-POSSUM investigations available	○
6.24	Where did the patient go for continued post-operative care following surgery?	○ Ward ○ Level 2 HDU ○ Level 3 ICU ○ Died prior to discharge from theatre complex
6.24a	At the end of surgery, was the decision made to place the patient on an end of life pathway?	○ Yes ○ No
6.25	Is the patient on a vasopressor/ inotrope?	○ No ○ Yes

7	**Post-op**	
7.1	Total length of post-operative ITU stay (days) *see help box for additional information'*	☐ Number required
7.2	Total length of post-operative HDU stay (days) *see help box for additional information*	☐ Number required
7.3	Was the patient assessed by a specialist from Elderly Medicine in the post-operative period?	○ No ○ Yes ○ Unknown
7.4	Within this admission, did the patient return to theatre in	○ No ○ Yes ○ Unknown

	the post-operative period following their initial emergency laparotomy?	
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)	○ No ○ Yes ○ Unknown
7.6	Histology	○ Crohn's disease ○ Diverticulitis ○ Ischaemia ○ Malignancy ○ Peptic ulcer disease ○ Ulcerative colitis ○ Not applicable/Not available at time of discharge ○ Other
7.7	Status at discharge	○ Dead ○ Alive ○ Still in hospital at 60 days
7.8	Date discharged from hospital	(DD/MM/YYYY) Date required