Emergency Laparotomy
Peri-operative Care Pathway

This pathway should be used for the care of **ALL patients planned to under go emergency laparotomy.**
This is designed to provide guidance and improve peri-operative care of these high risk emergency patients.

Pre-operative Assessment and Preparation
To be completed by the surgeon providing the initial care

NHS No: ☐☐☐ ☐☐☐ ☐☐☐☐

HOSPITAL No: ☐☐☐☐☐☐☐

D.O.B: ☐☐ ☐☐ ☐☐☐☐

PATIENT NAME: .....

ADDRESS: .....

.....

Date of admission: ☐☐ ☐☐ ☐☐☐☐

Admitting speciality: .....

Admitting consultant: .....

Surgical consultant: .....

Weight (kg) ..... Height cm ..... BMI .....

Summary of the policy for emergency laparotomy care

- **Expected risk of death should be pre-operatively estimated, informed, documented and used to plan the care (Use www.riskprediction.org.uk for calculation).**
- Risk status of a patient is defined on the basis of predicted mortality as Low (<5%), Medium (5-10%), High (>10%)
- **Age>60, ASA≥3 and the patients who are critically ill should be considered as high risk.**
- Once identified as high risk optimisation of the patient should be commenced immediately using oxygen and IV fluids and **broad spectrum antibiotics should be administered within 1 hour,** if features of sepsis identified.
- If predicted hospital mortality ≥5%, active input from surgical, anaesthetic and radiological consultants recommended.
- **Consultant surgeon should review the patient with in 1 hour of identification as high risk.**
- Decision to operate should happen with in 2hrs for high risk group and operate within 6 hours, if organ dysfunction develops.
- Patients considered as high risk should be reviewed by a consultant surgeon within 4 hours if the management plan remains undefined and the patient is not responding as expected.
- Patients needing immediate laparotomy should be given priority access to theatre over the elective cases.
- **If predicted mortality of ≥10% direct involvement of a consultant surgeon and consultant anaesthetist is needed during the procedure.**
- Risk of death should be re-assessed by the surgical and anaesthetic teams taking into account the actual operative findings and clinical status of the patient at the end of the surgery (Use www.riskprediction.org.uk for calculation).
- **If estimated risk of death of ≥10%, then the patient should be admitted to a critical care location (HDU/ITU) post-operatively.**
- Elderly patients should have input from elderly care specialist during their post-operative care.

Pre-operative Assessment and Preparation

To be completed by the surgeon providing the initial care

Baseline investigations for all patients:

Arterial Blood Gas (Review lactate)	☐	Blood cultures, if febrile	☐	
FBC, U&Es, LFT, CRP, Amylase, Glucose	☐	Urinalysis / MSU	☐	
Coagulation	☐	ECG	☐	
Group and Save	☐	Cross match	☐	If yes, number of units: .....

Features of High Risk (Any of the below)

Age > 60	☐	Respiratory rate > 25/min	☐
Aged >50 years and;		Heart rate > 125/min	☐
have acute or chronic renal impairment		Systolic BP < 90 mmHg	☐
(serum creatinine >130 µmol/l)	☐	Oliguria (U/O < 0.5mls/kg/hr)	☐
OR have diabetes mellitus (even if only diet controlled)	☐	Lactate > 4 mmol	☐
OR have or are strongly suspected clinically to have any		Suspected bowel perforation OR ischaemia	☐
significant risk factor for cardiac or respiratory disease	☐	Requiring immediate surgery (within minutes)	☐

Immediate Measures

(Ask for senior advice early, if unsure of any of the following measures)

ABCDE assessment	☐	**Oxygen supplementation to maintain SaO2 ≥ 96%**	☐
		IV fluids:	
Large gauge IV access (18G/16G/14G)	☐	**Urinary catheter inserted**	☐
Fluid challenge, Gelofusine 250-500ml bolus	☐	(to be repeated as required, according to re-assessment and response of U/O and BP)	
Maintenance (Hartmann's 1-1.5ml/kg/hr)	☐	(to be administered in addition to the fluid challenge)	

Has the consultant surgeon been informed? Yes ☐ **No** ☐ **(Patient needs consultant review within 1 hour of recognition as high risk)**

If septic,

Blood cultures samples should be sent ☐

IV broad spectrum antibiotics to be administered with in 1 hour of diagnosis Date: ..../..../.... **Time:** ..../....

Other measures

NG tube inserted	☐	VTE risk assessed AND prescribed	☐
Analgesia prescribed AND administered	☐	Fluid balance chart started	☐

Was an Abdominal CT scan performed pre-operatively? Yes ☐ No ☐ CT reported by a consultant radiologist? Yes ☐ No ☐

Patient seen by Consultant Surgeon: Yes ☐ No ☐ Date and time of consultant review .....

Date and Time decided to operate: ..../..../.... (dd/mm/yyyy) ..../.... (hh:mm)

Most senior person making the decision: Consultant ☐ Post CCT non consultant ☐ Specialty trainee/registrar ☐

Pre-operative Risk assessment

Pre-operative P-POSSUM score calculated: Yes ☐ No ☐

if yes, predicted mortality: .....%; predicted morbidity: .....% (Use www.riskprediction.org.uk for calculation)

What risk of death was the patient documented of having? Low (<5%) ☐ Medium (5-10%) ☐ High (>10%) ☐ Unknown ☐

How was the risk assessment performed? Formal risk assessment ☐ Clinical judgement ☐ Other .....

NCEPOD classification:

Immediate (within minutes) ☐ Urgent (within hours) ☐ Expedited (within days) ☐

Clinician completing pathway (Print and sign) **Bleep number** **Designation:**

.... **FY//CT/ST3+/SAS**

Intra-operative Care

To be completed by the anaesthetist in addition to the anaesthetic record

Date and time booked for theatre: ..../..../.... (dd/mm/yyyy) ..../.... (hh:mm) **ASA:** 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Patient been reviewed by Consultant Anaesthetist **Yes** ☐ **No** ☐ **if yes,** ..../..../.... (dd/mm/yyyy) ..../.... (hh:mm)

Date and time of entry in to the operating theatre (Not theatre suite): ..../..../.... (dd/mm/yyyy) ..../.... (hh:mm)

Most senior surgeon present: Consultant ☐ Post CCT fellow ☐ SAS grade ☐ Specialty trainee (ST) ☐ Core trainee (CT) ☐

Most senior anaesthetist present: Consultant ☐ Post CCT fellow ☐ SAS grade ☐ Specialty trainee (ST) ☐ Core trainee (CT) ☐

Name of the consultant surgeon? ..... **Name of the consultant anaesthetist?** .....

Is this procedure, first surgical procedure after admission ☐ **OR complication of previous surgery within the same admission** ☐

Indication for the surgery (Please select all that apply):

Anastomotic leak ☐	Intestinal Obstruction ☐	Wound Dehiscence ☐
Colitis ☐	Perforation ☐	Haemorrhage ☐
Abdominal abscess ☐	Ischaemia ☐	Abdominal compartment syndrome ☐
Peritonitis ☐	Intestinal fistula ☐	Planned relook ☐
		Other ☐ .....

Monitoring

(Invasive monitoring recommended for patients >60yrs, ≥ASA 3 and immediate surgery; OR if estimated mortality > 10%)

Arterial Line ☐ Central venous catheter ☐

Goal directed fluid therapy provided? Not provided ☐ Cardiac output monitor ☐ Other ☐

(Routine use of the technique is recommended for emergency laparotomy.)

Operation performed (Please tick all that apply):

Peptic ulcer (suture or repair of perforation ☐ oversew of bleed ☐)	Abdominal hernia repair ☐	Adhesiolysis ☐
Gastric surgery (other) ☐	Drainage of abscess/collection ☐	Haemostasis ☐
Small bowel resection ☐	Intestinal bypass ☐	Splenectomy ☐
Colectomy Right ☐ Subtotal ☐	Laparostomy formation ☐	Stoma formation ☐
Hartmann's procedure ☐	Repair of intestinal perforation ☐	Stoma revision ☐
Colorectal resection ☐	Resection of other intra-abdominal tumours ☐	Abdominal wall closure ☐

Underlying pathology (Please select all that apply):

Anastomotic leak ☐	Perforation (peptic ulcer) ☐	**Haemorrhage:** (Pveptic ulcer ☐ Intestinal ☐ post-operative ☐)
Colitis ☐	Perforation (small bowel/colonic) ☐	Ischaemia ☐
Crohn's ☐	Adhesions ☐	Obstruction ☐
Abscess ☐	Incarcerated hernia ☐	Volvulus ☐
Diverticulitis ☐	Dehiscence ☐	Normal intra-abdominal findings ☐
Malignancy (localised ☐ disseminated ☐)		Other ☐ .....

Please select this patient's measured intraoperative blood loss (ml): <100 ☐ 101-500 ☐ 500-1000 ☐ >1000 ☐

Describe the patient's degree of peritoneal soiling: None ☐ Serous fluid ☐ Localised pus ☐ Free pus, blood and bowel contents ☐

Level of malignancy based on operative findings: None ☐ Primary only ☐ Nodal metastases ☐ Distant metastases ☐

Post-operative Risk assessment

Was the patient classified as high risk at the end of the surgery? Yes ☐ No ☐

How was the risk assessment performed at the end of the procedure?

Formal risk assessment ☐ Clinical judgement ☐ Other .....

P-POSSUM score calculated at the end of the procedure: **Yes** ☐ **No** ☐

if yes, predicted mortality: .....% ; **predicted morbidity:** .....% **(Use www.riskprediction.org.uk for calculation)**

Immediate Post-operative Care

Post-op location:

Level 3 (ICU) ☐ Level 2 (HDU) ☐ Level 1 (Ward) ☐ Extended Recovery/PACU (Overnight stay) ☐

Late Post-operative Phase and Outcome

Level 3 length of stay (round up to whole days) .....
(8 hours = 0, 12hrs = 1 day. 36hrs = 2 days etc)

Level 2 length of stay (round up to whole days) .....
(8 hours = 0, 12hrs = 1 day. 36hrs = 2 days etc; if stayed in recovery overnight, 1 day)

Was the patient assessed by the elderly care specialist in the post-operative period?
Yes ☐ No ☐ Unknown ☐ Not required ☐

Did the patient return to theatre during this admission?
Yes ☐ No ☐ Unknown ☐ Not required ☐

Did the patient get escalated to Level 2 / Level 3 care within 7 days of surgery?
Yes ☐ No ☐ Unknown ☐ Not required ☐

Discharged alive?

Yes ☐ No ☐

Date of discharge: dd/mm/yyyy ...../...../.....