Form 1: Patient characteristics

Record ID

_____

Time/date form started - hidden field

_____

Confirm patient eligibility
Does this patient meet the following criteria?

Include patients:

Aged 16 to 39 Right iliac fossa pain Under the care of the general surgery team Exclude patients:

Previous appendicectomy
Current pregnancy Under the care of another specialty (i.e. urology or medicine) And your centre has R&D and caldicott approval to upload these data

_____

Age in years at presentation or admission

Patients under 16 and over 39 are not eligible for inclusion in CLARITY

_____
(Years (whole years at the time of presentation or admission))

Patient characteristics

Enter patient characteristics on initial presentation or admission, these may be found recorded in:

Paper notes Emergency department notes Electronic charts and observations Electronic patient records Height and weight based calculations (i.e. gentamicin charts)

Sex at birth

◯ Male
◯ Female

At presentation or admission, was the patient known to be pregnant?

◯ No
◯ Yes
(For example, known to be pregnant prior to attending hospital)

WARNING - PATIENTS KNOWN TO BE PREGNANT BEFORE PRESENTATION TO HOSPITAL ARE NOT ELIGIBLE FOR INCLUSION IN CLARITY

Patient height, cm

_____

Patient weight, kg

_____

Body Mass Index (BMI)

_____

Patient smoking status	◯ Never smoked ◯ Current smoker ◯ Ex-smoker (< 6 weeks) ◯ Ex-smoker (> 6 weeks but < 1 year) ◯ Ex-smoker (> 1 year)
Clinical Frailty scale Full Clinical frailty scale available at: https://www.dal.ca/sites/gmr/our-tools/clinical-frailty-scale.html	◯ 1-3 (Very fit / managing well) ◯ 4-6 (Vulnerable or frail) ◯ 7-9 (Severe frailty or terminally unwell)
WHO performance status	◯ Asymptomatic - Fully active, able to carry on all predisease activities without restriction ◯ Symptomatic but completely ambulatory - Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature. For example, light housework, office work ◯ Symptomatic, < 50% in bed during the day - Ambulatory and capable of all self care but unable to carry out any work activities. Up and about more than 50% of waking hours ◯ Symptomatic, >50% in bed, but not bedbound - Capable of only limited self-care, confined to bed or chair 50% or more of waking hours ◯ Completely disabled. Cannot carry on any self-care. Totally confined to bed or chair
Previous abdominal surgery Any procedure requiring incision in abdominal wall and through into the peritoneum or retroperitoneum. Can include any abdominal, urological, renal, gynaecological or c-section procedure	◯ No ◯ Yes - Has had any open surgery ◯ Yes - Has had previous laparoscopic or robotic surgery only

Comorbidities / long-term health conditions	☐ None ☐ Stroke ☐ Coronary artery disease ☐ Heart failure ☐ Peripheral arterial or vascular disease ☐ Heart valve disorders ☐ Arrhythmia ☐ Venous thromboembolic disease ☐ Hypertension ☐ Diabetes mellitus ☐ Chronic obstructive pulmonary disesase ☐ Asthma ☐ Transient ischaemic attack ☐ Solid organ cancers ☐ Haematological cancers (i.e, leukaemia or lymphoma) ☐ Metastatic cancers ☐ Dementia ☐ Depression ☐ Bipolar disorder ☐ Peptic ulcer disease ☐ HIV/AIDS ☐ Osteoarthritis ☐ Chronic liver disease ☐ Inflammatory bowel disease ☐ Chronic kidney disease
What is the NYHA classification for heart failure? Classification system found here.	◯ I - No limitation of physical activity. ◯ II - Slight limitation of physical activity. Comfortable at rest. ◯ III - Marked limitation of physical activity. Comfortable at rest. ◯ IV - Unable to carry on any physical activity without discomfort. Symptoms of heart failure at rest.
Stage of chronic kidney disease	◯ I - eGFR >90 ml/min, but other tests have detected signs of kidney damage ◯ II - eGFR 60 to 89 ml/min, but other tests have detected signs of kidney damage ◯ IIIA - eGFR 45 to 59 ml/min ◯ IIIB - eGFR 30 to 44 ml/min ◯ IV - eGFR 15 to 29 ml/min ◯ V - eGFR < 15 ml/min
Type of diabetes mellitus	◯ Type I ◯ Type II (diet controlled) ◯ Type II (medication controlled) ◯ Type II (insulin controlled)
Active cancer and/or cancer treatment	◯ No - no currently active cancer or ongoing treatment ◯ Yes - ongoing treatment with curative intent ◯ Yes - ongoing treatment with life-prolonging (palliative) intent ◯ Yes - ongoing treatment for symptomatic relief / end of life care

Form 2: Initial investigations and treatment

Initial investigations and treatment

This should be within the first few hours from the first assessment - this may be by the general surgical team, emergency department or other specialty.

This may be found recorded in:

Paper notes
Electronic patient records Order request information on investigations Referral or handover documents

Source of presentation	◯ Emergency Department ◯ GP ◯ GP out of hours or urgent care centre ◯ Referred from another inpatient speciality ◯ Referred from another hospital ◯ Self-attender ◯ Other (please specify)
Describe other source of presentation	_____
Time of first symptom onset When was the time of first onset of right iliac fossa / abdominal pain? This may be several days prior to presentation to hospital	_____
Time of presentation at hospital? When did the patient first present to hospital for assessment (i.e. to A&E or Surgical Assessment Unit) or was referred from another hospital specialty for assessment?	_____
Has the patient attended previously with RIF pain over the last 24 months?	◯ Yes ◯ No
Did the patient have any of the following investigations performed prior to assessment / admission to the surgical team for the same symptoms? (tick all that apply) For example, a CT scan performed in the emergency department	☐ No pre-assessment or pre-admission imaging ☐ USS abdomen ☐ USS reproductive organs ☐ CT ☐ MRI
Date of initial ultrasound imaging	_____

Initial ultrasound findings	☐ No abnormality detected ☐ Appendicitis ☐ Appendix not visualised ☐ Normal appendix ☐ Ovarian cyst (follicular) ☐ Ovarian cyst (non-follicular) ☐ Ovarian torsion ☐ Tubuloovarian abscess ☐ Ectopic pregnancy ☐ Non diagnostic / not tolerated ☐ Other finding (Imaging requested before surgical referral or review)

WARNING
You have selected the appendix was normal / not visualised and then indicated there was appendix pathology. This is impossible, please correct the error.

Date of initial CT cross sectional imaging	_____
Initial CT scan findings	☐ No abnormality detected ☐ Appendicitis ☐ Appendix not visualised ☐ Normal appendix ☐ Ovarian cyst (follicular) ☐ Ovarian cyst (non-follicular) ☐ Ovarian torsion ☐ Tubuloovarian abscess ☐ Ectopic pregnancy ☐ Colitis (infective) ☐ Colitis (ischaemic) ☐ Colitis (inflammatory), including ulcerative colitis or inflammatory bowel disease ☐ Colorectal cancer ☐ Cholecystitis ☐ Renal stone ☐ Pyelonephritis ☐ Appendix mucocele ☐ Appendix carcinoid ☐ Inguinal hernia ☐ Femoral hernia ☐ Incisional hernia ☐ Other finding (Imaging requested before surgical referral or review)

WARNING
You have selected the appendix was normal / not visualised and then indicated there was appendix pathology. This is impossible, please correct the error.

Date of initial MRI cross sectional imaging	_____

Initial MR scan findings	☐ No abnormality detected ☐ Appendicitis ☐ Appendix not visualised ☐ Normal appendix ☐ Ovarian cyst (follicular) ☐ Ovarian cyst (non-follicular) ☐ Ovarian torsion ☐ Tubuloovarian abscess ☐ Ectopic pregnancy ☐ Colitis (infective) ☐ Colitis (ischaemic) ☐ Colitis (inflammatory), including ulcerative colitis or inflammatory bowel disease ☐ Colorectal cancer ☐ Cholecystitis ☐ Renal stone ☐ Pyelonephritis ☐ Appendix mucocele ☐ Appendix carcinoid ☐ Inguinal hernia ☐ Femoral hernia ☐ Incisional hernia ☐ Other finding (Imaging requested before surgical referral or review)
Appendicitis findings on initial CT/MRI/USS	◯ Simple appendicits - appendiceal inflammation without faecolith or perforation or collection ◯ Simple appendicitis with faecolith - appendiceal inflammation with faecolith, no perforation or collection ◯ Complex appendicitis - localised peritonitis-appendiceal inflammation with local collection or bubbles ◯ Severe Complex appendicitis - with diffuse peritonitis/appendix mass, diffuse collections, free gas or phlegmon

WARNING
You have selected the appendix was normal / not visualised and then indicated there was appendix pathology. This is impossible, please correct the error.

Symptoms and signs at presentation

These should be recorded at the time of presentation / time of admission to hospital on first assessment

This may be found recorded in:

Electronic patient records Paper notes Referrals

Clinical symptoms (tick all that apply)	☐ None ☐ Nausea ☐ Vomiting ☐ Anorexia ☐ Loose stools ☐ RIF pain ☐ Pain migrates to RIF
Right iliac fossa tenderness on examination	◯ Yes ◯ No
Clinical examination findings (tick all that apply)	☐ No tenderness ☐ Tender but no guarding ☐ Localised guarding ☐ Generalised guarding ☐ Rebound tenderness ☐ Rovsing's +ve
Rebound tenderness or guarding severity	◯ None ◯ Mild ◯ Moderate ◯ Severe

Observations and blood tests at presentation

These should be recorded at the time of presentation / time of admission to hospital

This may be found recorded in:

Electronic patient records Laboratory and patient results systems Paper notes Observation charts

Highest recorded temperature on presentation (degrees celsius)	_____
Was a urine dip performed and documented? This could be prior to surgical review	☐ No - Not performed ☐ Yes - Normal urine dip ☐ Yes - HCG negative ☐ Yes - HCG positive ☐ Yes - Nitrites ☐ Yes - Leucocytes ☐ Yes - Blood

WARNING - YOU HAVE SELECTED POSITIVE AND NEGATIVE B-HCG URINE TEST
This is not possible - please amend

Bloods on presentation

White Cell Count (WCC)
_____ x10^9/L

Neutrophil Count
_____ x10^9/L
C-Reactive Protein (CRP) _____ mg/L

First surgical assessment

This refers to the first time the patient was assessed by the general surgical team following presentation to a surgical assessment centre or referral (i.e. from Emergency Department)

This may be found recorded in:

Electronic patient records Paper notes Observation charts

When was the patient first assessed or reviewed by the emergency surgical team?	_____
Grade of surgical team members conducting pre-admission assessment?	☐ Foundation Doctor ☐ Core Trainee ☐ Fellow / staff grade (junior) ☐ Speciality registrar (ST3+) ☐ Fellow / staff grade (senior) ☐ Post-CCT fellow ☐ Consultant ☐ ANP ☐ Physicians Associate ☐ Other
Other grades of surgical team members	_____
Was appendicitis risk scoring performed?	☐ No ☐ Yes - AIRS risk score ☐ Yes - Alvarado risk score ☐ Yes - Adult Appendicitis (AAS) score ☐ Other
AIRS risk score	_____ (Minimum is 0, maximum score 12)
Alvarado risk score	_____ (Minimum is 0, maximum score 10)
Adult Appendicitis (AAS) score	_____ (Minimum is 0, maximum score 19)
Result of risk scoring	◯ Low-risk ◯ Moderate-risk ◯ High-risk

What investigations were requested as a result of this assessment or review?
Please note - this does not refer to investigations requested as part of outpatient or ambulatory management - record these in the next form

- ☐ None
- ☐ Blood tests
- ☐ Urine dip
- ☐ Ultrasound reproductive organs
- ☐ Ultrasound abdomen / pelvis
- ☐ Standard CT scan without IV contrast
- ☐ Standard CT scan with IV contrast
- ☐ Low dose CT scan without IV contrast (including CT KUB)
- ☐ Low dose CT scan with IV contrast
- ☐ MRI
- ☐ Other

(CT and MRI refer to scans including the abdomen)

Which other investigations were requested as a result of this assessment or review?

_____

Imaging at time of presentation / surgical assessment

These details refer to how scans were requested, discussed and the subsequent results.

This can be at the time of surgical assessment

This may be found recorded in:

Electronic patient records Paper notes Radiology requests or reports

You indicated no imaging was requested by the surgical team

If this is not correct, please amend in this form (form 2)

If imaging was requested, was this discussed with radiology?

- ◯ Not discussed and request rejected
- ◯ Not discussed but scan done
- ◯ Discussed and request rejected
- ◯ Discussed and scan done

Was the indication for imaging clearly stated on the request with a differential diagnosis and why the imaging would change management

- ◯ No - no differential diagnosis or explanation as to how would change management
- ◯ Yes - differential diagnosis stated but no explanation as to how would change management
- ◯ Yes - how would change management stated but no mention of differential diagnosis
- ◯ Yes - differential diagnosis stated with explanation as to how would change management

Time and date patient received ultrasound scan

_____

Ultrasound findings

- ☐ No abnormality detected
- ☐ Appendicitis
- ☐ Appendix not visualised
- ☐ Normal appendix
- ☐ Ovarian cyst (follicular)
- ☐ Ovarian cyst (non-follicular)
- ☐ Ovarian torsion
- ☐ Tubuloovarian abscess
- ☐ Ectopic pregnancy
- ☐ Appendix mucocele
- ☐ Appendix carcinoid
- ☐ Non diagnostic / not tolerated
- ☐ Other finding

WARNING
You have selected the appendix was normal / not visualised and then indicated there was appendix pathology. This is impossible, please correct the error.

Time and date patient received abdominal CT scan

_____

CT scan findings

- ☐ No abnormality detected
- ☐ Appendicitis
- ☐ Appendix not visualised
- ☐ Normal appendix
- ☐ Ovarian cyst (follicular)
- ☐ Ovarian cyst (non-follicular)
- ☐ Ovarian torsion
- ☐ Tubuloovarian abscess
- ☐ Ectopic pregnancy
- ☐ Colitis (infective)
- ☐ Colitis (ischaemic)
- ☐ Colitis (inflammatory), including ulcerative colitis or inflammatory bowel disease
- ☐ Colorectal cancer
- ☐ Cholecystitis
- ☐ Renal stone
- ☐ Pyelonephritis
- ☐ Appendix mucocele
- ☐ Appendix carcinoid
- ☐ Inguinal hernia
- ☐ Femoral hernia
- ☐ Incisional hernia
- ☐ Other finding

WARNING
You have selected the appendix was normal / not visualised and then indicated there was appendix pathology. This is impossible, please correct the error.

Time and date patient received abdominal MRI scan

_____

MRI scan findings	☐ No abnormality detected ☐ Appendicitis ☐ Appendix not visualised ☐ Normal appendix ☐ Ovarian cyst (follicular) ☐ Ovarian cyst (non-follicular) ☐ Ovarian torsion ☐ Tubuloovarian abscess ☐ Ectopic pregnancy ☐ Colitis (infective) ☐ Colitis (ischaemic) ☐ Colitis (inflammatory), including ulcerative colitis or inflammatory bowel disease ☐ Colorectal cancer ☐ Cholecystitis ☐ Renal stone ☐ Pyelonephritis ☐ Appendix mucocele ☐ Appendix carcinoid ☐ Inguinal hernia ☐ Femoral hernia ☐ Incisional hernia ☐ Other finding
Appendicitis findings on CT around time of surgical review	◯ Simple appendicits - appendiceal inflammation without faecolith or perforation or collection ◯ Simple appendicitis with faecolith - appendiceal inflammation with faecolith, no perforation or collection ◯ Complex appendicitis - localised peritonitis-appendiceal inflammation with local collection or bubbles ◯ Severe Complex appendicitis - with diffuse peritonitis/appendix mass, diffuse collections, free gas or phlegmon
WARNING You have selected the appendix was normal / not visualised and then indicated there was appendix pathology. This is impossible, please correct the error.	
Grade reported or verified by (select highest)	◯ Radiology trainee ST2-3 ◯ Radiology trainee ST4-5 ◯ Registrar / fellow (unknown grade) ◯ Consultant (internal) ◯ Consultant (external) ◯ Reporting radiographer or ultrasonographer
Initial surgical decision	
Date and time of initial decision by surgical team	_____

Initial decision by surgical team	◯ Admit under surgery - suspected appendicitis - operative management ◯ Admit under surgery - suspected appendicitis - radiological drainage ◯ Admit under surgery - suspected appendicitis - non-operative management ◯ Admit under surgery - alternative diagnosis ◯ Refer to other speciality ◯ Outpatient or ambulatory investigation ◯ Discharge to community - no follow-up
Were antibiotics commenced?	◯ No - not indicated ◯ Yes - started oral antibiotics ◯ Yes - started IV antibiotics ◯ No - already taking oral antibiotics ◯ No - already on IV antibiotics
Date and time of first antibiotic dose	_____

Form 3: CLARITY and ambulatory care

CLARITY intervention details

These fields will only appear if your hospital is allocated to the CLARITY intervention arm of the study. Here, please upload your CLARITY checklist or steps taken during patient assessment. This is important, so the effectiveness of the CLARITY intervention can be fully evaluated.

This may be found recorded in:

Electronic patient records Paper notes CLARITY Checklist file at your centre

Was appendicitis risk scoring documented using the CLARITY checklist?

- ◯ No - not documented
- ◯ Yes - documented on CLARITY paper checklist
- ◯ Yes - documented in electronic notes or CLARITY paper checklist not available for scanning

Please upload the anonymised CLARITY checklist
Please ensure you include the REDCap record ID number on the uploaded document.

The REDCap record ID for this patient is: [record_id] Do not upload any identifiable information, including hospital numbers.

_____

CLARITY

Checklist

Step completed?
Step 1: Risk Stratification

a) What is the calculated risk score?

_____ _____ _____
b) Based on your clinical assessment, is appendicitis likely? medium/high risk only _____ _____
Step 2: Care Pathway

Is the patient on an appropriate care pathway?

_____ _____
Step 3: Selective Imaging

Was low dose CT used selectively?

For cases of clinical concern or upon reattendance refer to medium risk column _____ _____
Step 4: Management

Did the CT show evidence of appendicitis?

_____ _____ _____

Abbreviations: AIRS - Appendicitis Inflammatory Response Score; AAS - Adult Appendicitis Score; LDCT - Low dose computed tomography.

Ambulatory management

This refers to the first time the patient was assessed by the general surgical team following presentation to a surgical assessment centre or referral (i.e. from Emergency Department)

This may be found recorded in:

Electronic patient records Paper notes Observation charts

Did the patient receive outpatient or ambulatory follow-up?	◯ Yes ◯ No
Date of ambulatory follow-up	_____
Were any ambulatory investigations performed?	☐ None ☐ Blood tests ☐ Urine dip ☐ Ultrasound reproductive organs ☐ Ultrasound abdomen / pelvis ☐ Standard CT scan without IV contrast ☐ Standard CT scan with IV contrast ☐ Low dose CT scan without IV contrast (including CT KUB) ☐ Low dose CT scan with IV contrast ☐ MRI ☐ Other (CT and MRI refer to scans including the abdomen)
Was a urine dip performed and documented?	☐ No - Not performed ☐ Yes - Normal urine dip ☐ Yes - HCG negative ☐ Yes - HCG positive ☐ Yes - Nitrites ☐ Yes - Leucocytes ☐ Yes - Blood

WARNING - YOU HAVE SELECTED POSITIVE AND NEGATIVE B-HCG URINE TEST
This is not possible - please amend

Ambulatory scan findings	☐ No abnormality detected ☐ Appendicitis ☐ Appendix not visualised ☐ Normal appendix ☐ Ovarian cyst (follicular) ☐ Ovarian cyst (non-follicular) ☐ Ovarian torsion ☐ Tubuloovarian abscess ☐ Ectopic pregnancy ☐ Colitis (infective) ☐ Colitis (ischaemic) ☐ Colitis (inflammatory), including ulcerative colitis or inflammatory bowel disease ☐ Colorectal cancer ☐ Cholecystitis ☐ Renal stone ☐ Pyelonephritis ☐ Appendix mucocele ☐ Appendix carcinoid ☐ Inguinal hernia ☐ Femoral hernia ☐ Incisional hernia ☐ Other finding (Imaging requested for or at the time of ambulatory review)
Appendicitis findings on CT around time of ambulatory review	◯ Simple appendicits - appendiceal inflammation without faecolith or perforation or collection ◯ Simple appendicitis with faecolith - appendiceal inflammation with faecolith, no perforation or collection ◯ Complex appendicitis - localised peritonitis-appendiceal inflammation with local collection or bubbles ◯ Severe Complex appendicitis - with diffuse peritonitis/appendix mass, diffuse collections, free gas or phlegmon
Specify other finding	_____
Bloods on ambulatory assessment White Cell Count (WCC) _____ x10^9/L Neutrophil Count _____ x10^9/L C-Reactive Protein (CRP) _____ mg/L	
Decision by surgical team at outpatient or ambulatory follow-up	◯ Discharge to community - no follow-up ◯ Admit under surgery - suspected appendicitis - operative management ◯ Admit under surgery - suspected appendicitis - radiological drainage ◯ Admit under surgery - suspected appendicitis - non-operative management ◯ Admit under surgery - alternative diagnosis ◯ Admit to other specialty ◯ Further outpatient investigation

Time and date of admission to hospital from ambulatory care	_____

Form 4: Clinical management

Clinical management and surgery

This refers to any intervention for any condition underlying the clinical presentation during the admission.
This may be found recorded in:

Paper notes
Electronic patient records Operation notes
Prescription charts

Did the patient receive an operation within 30 days of admission / assessment?
For any indication - not just appendicitis

- ◯ Yes
- ◯ No

When was the decision made to operate?

_____

Was non-operative management attempted?

- ◯ No - initial decision for operative management
- ◯ Yes - nonoperative management initially attempted but then failed
- ◯ Yes - nonoperative management successful (Within 30 days of presentation)

WARNING!
You have stated patient had successful non-operative management but have also selected that the patient had an operation within 30-days of presentation.

This could be possible (for example patient had appendicitis, then surgery for a different condition). Please check this is not a data entry error.

When did the patient fail non-operative or radiological management?

_____

Intraoperative details

If the patient had an operation please record the operative details, including non-appendicectomy procedures.

This may be found recorded in:

Electronic patient records Paper notes Anaesthetic charts

Patient ASA grade

See here for definitions

- ◯ Grade I - Healthy person
- ◯ Grade II - Mild systemic disease
- ◯ Grade III - Severe systemic disease
- ◯ Grade IV - Severe systemic disease that is a constant threat to life
- ◯ Grade V - A moribund person who is not expected to survive without the operation

(If obese cannot be grade I)

Knife to skin time

_____

Primary operation performed

- ◯ Appendix: Emergency excision of appendix
- ◯ Appendix/Caecum: Caecal or ileocaecal resection
- ◯ Colon: Excision of right hemicolon
- ◯ Colon: Extended excision of right hemicolon
- ◯ Abdomen: Diagnostic laparoscopy with no other procedure
- ◯ Small bowel: Excision of Meckel's diverticulum
- ◯ Abdomen: Laparotomy with no other procedure
- ◯ Abdomen: Division of adhesions of peritoneum
- ◯ Abdomen: Repair of anterior abdominal wall
- ◯ Oesophagus: Excision of oesophagus
- ◯ Oesophagus: Repair of oesophagus
- ◯ Oesophagus: Other open operations on oesophagus
- ◯ Stomach: Total excision of stomach
- ◯ Stomach: Partial excision of stomach
- ◯ Stomach: Connection of stomach to jejunum
- ◯ Stomach: Operations on ulcer of stomach
- ◯ Stomach: Other repair of stomach
- ◯ Stomach: Other open operations on stomach
- ◯ Duodenum: Operations on ulcer of duodenum
- ◯ Duodenum: Other open operations on duodenum
- ◯ Small bowel: Excision of small bowel
- ◯ Small bowel: Bypass of small bowel
- ◯ Small bowel: Reduction of intussuception without excision
- ◯ Small bowel: Formation of ileostomy
- ◯ Small bowel: Closure of perforation
- ◯ Small bowel: Other open operations on small bowel
- ◯ Colon: Total excision of colon and rectum
- ◯ Colon: Total excision of colon
- ◯ Colon: Excision of transverse colon
- ◯ Colon: Excision of left hemicolon
- ◯ Colon: Excision of sigmoid colon
- ◯ Colon: Other excision of colon
- ◯ Colon: Reduction of intussuception/volvulus without excision
- ◯ Colon: Formation of any colonic stoma
- ◯ Colon: Other open operations on colon
- ◯ Rectum: Excision of rectum
- ◯ Rectum: Fixation of rectum for prolapse
- ◯ Rectum: Other open operations on rectum
- ◯ Liver: Partial excision of liver
- ◯ Liver: Repair of liver, including liver packing
- ◯ Liver: Other open operations on liver
- ◯ Gallbladder: Excision of gall bladder
- ◯ Gallbladder: Other open operations on gall bladder
- ◯ Bile duct: Repair of bile duct
- ◯ Bile duct: Incision of bile duct
- ◯ Bile duct: Other open operations on bile duct
- ◯ Pancreas: Excision of head of pancreas
- ◯ Pancreas: Open drainage of lesion of pancreas
- ◯ Pancreas: Other open operations on pancreas
- ◯ Spleen: Total excision of spleen
- ◯ Spleen: Other open operations on spleen
- ◯ Aorta/vessels: Any primary abdominal vascular operation
- ◯ Kidney: Total excision of kidney
- ◯ Kidney: Partial excision of kidney
- ◯ Kidney: Open repair of kidney
- ◯ Kidney: Other open operations on kidney
- ◯ Ureter: Repair of ureter
- ◯ Ureter: Other open operations on ureter
- ◯ Bladder: Repair of bladder
- ◯ Bladder: Other open operations on bladder
- ◯ Uterus: Abdominal excision of uterus
- ◯ Uterus: Other open operations on uterus
- ◯ Ovary: Bilateral excision of ovary / tube
- ◯ Ovary: Unilateral excision of ovary / tube
- ◯ Ovary: Other open operations on ovary / tube

	◯ Diaphragm: Repair of rupture of diaphragm ◯ Diaphragm: Other operations on diaphragm ◯ Other procedure (please specify)
Please specify other procedure	_____
Was an additional procedure performed during this procedure?	◯ No ◯ Yes

Secondary procedure performed

- ◯ Appendix: Emergency excision of appendix
- ◯ Appendix/Caecum: Caecal or ileocaecal resection
- ◯ Colon: Excision of right hemicolon
- ◯ Colon: Extended excision of right hemicolon
- ◯ Abdomen: Diagnostic laparoscopy with no other procedure
- ◯ Small bowel: Excision of Meckel's diverticulum
- ◯ Abdomen: Laparotomy with no other procedure
- ◯ Abdomen: Division of adhesions of peritoneum
- ◯ Abdomen: Repair of anterior abdominal wall
- ◯ Oesophagus: Excision of oesophagus
- ◯ Oesophagus: Repair of oesophagus
- ◯ Oesophagus: Other open operations on oesophagus
- ◯ Stomach: Total excision of stomach
- ◯ Stomach: Partial excision of stomach
- ◯ Stomach: Connection of stomach to jejunum
- ◯ Stomach: Operations on ulcer of stomach
- ◯ Stomach: Other repair of stomach
- ◯ Stomach: Other open operations on stomach
- ◯ Duodenum: Operations on ulcer of duodenum
- ◯ Duodenum: Other open operations on duodenum
- ◯ Small bowel: Excision of small bowel
- ◯ Small bowel: Bypass of small bowel
- ◯ Small bowel: Reduction of intussuception without excision
- ◯ Small bowel: Formation of ileostomy
- ◯ Small bowel: Closure of perforation
- ◯ Small bowel: Other open operations on small bowel
- ◯ Colon: Total excision of colon and rectum
- ◯ Colon: Total excision of colon
- ◯ Colon: Excision of transverse colon
- ◯ Colon: Excision of left hemicolon
- ◯ Colon: Excision of sigmoid colon
- ◯ Colon: Other excision of colon
- ◯ Colon: Reduction of intussuception/volvulus without excision
- ◯ Colon: Formation of any colonic stoma
- ◯ Colon: Other open operations on colon
- ◯ Rectum: Excision of rectum
- ◯ Rectum: Fixation of rectum for prolapse
- ◯ Rectum: Other open operations on rectum
- ◯ Liver: Partial excision of liver
- ◯ Liver: Repair of liver, including liver packing
- ◯ Liver: Other open operations on liver
- ◯ Gallbladder: Excision of gall bladder
- ◯ Gallbladder: Other open operations on gall bladder
- ◯ Bile duct: Repair of bile duct
- ◯ Bile duct: Incision of bile duct
- ◯ Bile duct: Other open operations on bile duct
- ◯ Pancreas: Excision of head of pancreas
- ◯ Pancreas: Open drainage of lesion of pancreas
- ◯ Pancreas: Other open operations on pancreas
- ◯ Spleen: Total excision of spleen
- ◯ Spleen: Other open operations on spleen
- ◯ Aorta/vessels: Any primary abdominal vascular operation
- ◯ Kidney: Total excision of kidney
- ◯ Kidney: Partial excision of kidney
- ◯ Kidney: Open repair of kidney
- ◯ Kidney: Other open operations on kidney
- ◯ Ureter: Repair of ureter
- ◯ Ureter: Other open operations on ureter
- ◯ Bladder: Repair of bladder
- ◯ Bladder: Other open operations on bladder
- ◯ Uterus: Abdominal excision of uterus
- ◯ Uterus: Other open operations on uterus
- ◯ Ovary: Bilateral excision of ovary / tube
- ◯ Ovary: Unilateral excision of ovary / tube
- ◯ Ovary: Other open operations on ovary / tube

	◯ Diaphragm: Repair of rupture of diaphragm ◯ Diaphragm: Other operations on diaphragm ◯ Other procedure (please specify)
Please specify other procedure	_____
Operative approach	◯ Laparoscopic ◯ Laparoscopic-assisted (laparoscopic with incision or port to allow gloved hand into the abdomen) ◯ Laparoscopic converted to open ◯ Open ◯ Robotic ◯ Robotic converted to open
Was the appendix removed during this operation?	◯ Yes - completely ◯ Yes - incompletely (stump remaining) ◯ No - not indicated ◯ No - could not be identified
Operative contamination	◯ Clean (Gastrointestinal (GI) and genitourinary (GU) tract not entered) - diagnostic only. ◯ Clean-contaminated (GI or GU tracts entered but no gross contamination). ◯ Contaminated (GI or GU tracts entered with gross spillage or major break in sterile technique). ◯ Dirty (There is already contamination prior to operation, e.g. faeces or pus).
Peritoneal contamination	◯ None ◯ Serous fluid ◯ Localised pus around appendix or RIF only ◯ Gross contamination - free bowel content (i.e. faeces, pus or blood)
Completed skin closure time	_____

Form 5: 30-day patient outcomes

30-Day patient outcomes

Within 30 days of presentation, with day of presentation taken as day 0. If an outcome occurs outside this timeframe, record it as if it had not happened.

This may be found recorded in:

Paper notes
Electronic patient records Order requests or results
Discharge and clinic letters

Underlying final diagnosis causing symptoms on presentation

- ◯ K35 Appendicitis
- ◯ 00 No disease identified
- ◯ C18 Colorectal Cancer
- ◯ K388 Appendiceal mucocele
- ◯ C7A Appendiceal Carcinoid
- ◯ C181 Adenocarcinoma of Appendix
- ◯ N83 Ovarian cyst (follicular)
- ◯ N39 Urinary Tract Infection (cystitis only)
- ◯ N10 Pyelonephritis
- ◯ N21 Urinary Tract Calculus
- ◯ I71 Aortic Aneurysm
- ◯ I88 Mesenteric Adenitis
- ◯ A09 Infection, Infectious gastroenteritis / colitis
- ◯ A04 Yersinia colitis / gastroenteritis
- ◯ Q43 Inflamed Meckel's Diverticulum
- ◯ A49 Infection: other
- ◯ K50 Colitis/gastroenteritis: Crohns disease
- ◯ K51 Colitis/gastroenteritis: Ulcerative colitis
- ◯ K52 Colitis/gastroenteritis: Other noninfective inc. ischemic bowel
- ◯ K58 Irritable Bowel Syndrome
- ◯ K59 Constipation
- ◯ K599 Functional Bowel Disorder
- ◯ N80 Endometriosis
- ◯ O00 Ectopic Pregnancy
- ◯ O03 Miscarriage
- ◯ O73 Retained Products of Conception
- ◯ D25 Uterine Fibroid
- ◯ N83, Ovarian Torsion
- ◯ N98 Mittelschmerz
- ◯ N98 Menstrual pain
- ◯ N70 Tubuloovarian abscess / salpingitis
- ◯ N74 Pelvic Inflammatory Disease
- ◯ N44 Testicular Torsion
- ◯ K40 Hernia: Inguinal
- ◯ K41 Hernia: Femoral
- ◯ K46 Hernia: Other abdominal hernia
- ◯ K55 Bleeding: small bowel / colon with no malignancy
- ◯ K57 Diverticular disease
- ◯ C56 Ovarian cancer
- ◯ C57 Cancer of Female Reproductive Tract (non-ovarian cancer)
- ◯ C26 Neoplasm: any other malignancy (cancer)
- ◯ D13 Neoplasm: any benign
- ◯ K223 Perforation of oesophagus
- ◯ K274 Peptic ulcer: bleeding
- ◯ K275 Peptic ulcer: perforation
- ◯ K276 Peptic ulcer: bleeding and perforation
- ◯ K277 Peptic ulcer: without bleeding or perforation
- ◯ K631 Stercoral perforation of colon
- ◯ K660 Adhesions: no bowel obstruction
- ◯ K565 Intestinal obstruction: Adhesions
- ◯ K561 Intestinal obstruction: Intussusception
- ◯ K562 Intestinal obstruction: Volvulus
- ◯ K80 Cholelithiasis / cholecystitis (gallstones)
- ◯ K85 Acute pancreatitis
- ◯ Y83 Complication of previous surgical operation / procedure
- ◯ K659 Epiploic appendagitis
- ◯ R29 Musculoskeletal pain
- ◯ 99 Other diagnosis (please specify; please try to avoid using)

Specify other underlying diagnosis	_____
Histopathological assessment	◯ Histopathologically normal appendix ◯ Simple appendicitis (not perforated, no abscess) ◯ Complicated appendicitis no perforation (no perforation, but phlegmon, collection or abscess present) ◯ Complicated appendicitis with perforation (perforated and with phlegmon, collection or abscess) ◯ Adenocarcinoma appendix ◯ Appendiceal mucinousneoplasm ◯ Carcinoid ◯ Mucocele ◯ Crohn's ◯ Ulcerative Colitis ◯ Polyp ◯ Colorectal cancer ◯ Other ◯ No histopathology specimen taken during surgery (PLEASE NOTE - Result may not be available for some time)

WARNING!

You have indicated no specimen for histopathology was taken during surgery

Histopathology examinations may take some time to report results (sometimes several months)

Please ensure this is not a data entry error and adequate time for follow-up is provided

Other histopathological assessment	_____

Mortality, length of stay, critical care, readmission and reintervention

Did the patient die within 30 days of first admission / assessment?	◯ No - Alive ◯ Yes - In hospital ◯ Yes - Out of hospital
Date of discharge	_____
Date of death	_____
Critical care admission (including intensive care and high dependency units)	◯ No ◯ Yes, planned admission from theatre ◯ Yes, unplanned admission from theatre ◯ Yes, unplanned admission from ward
Length of stay in critical care (days)	_____

30-day reoperation or reintervention for any cause (tick all that apply)	☐ No ☐ Yes - return to theatre ☐ Yes - endoscopic reintervention ☐ Yes - interventional radiology reintervention
Date and time patient required reoperation or reintervention?	_____
Did the patient require radiological, percutaneous or endoscopic drainage of their appendix at any point from first admission / assessment?	☐ No - no drainage ☐ Yes - radiologically guided drainage ☐ Yes - non-guided percutaneous drainage ☐ Yes - endoscopically guided drainage
Date and time patient required drainage?	_____
30-day readmission	◯ No ◯ Yes - planned ◯ Yes- unplanned
Date of readmission	_____
Length of stay during readmission (days)	_____

30-Day complications following surgery

This could be any event within 30-days of presentation (not the date of surgery), the event does not have to be directly related to the surgery itself. Please use the other field in the 'other complications' section to record any complications not present here.

The Clavien-Dindo grading system definitions are found here. This may be found recorded in:

Electronic patient records Paper notes Observation charts

Did the patient sustain any complications within 30-days of operation? This could include: Surgical complications (i.e. Surgical site infection, Anastomotic leak, Bile leak, Haemorrhage, Visceral Injury) Respiratory complications (i.e. Pneumonia, Atelectasis, Pleural effusion, ARDs, Pulmonary embolism) Renal / metabolic complications (i.e. Acute Kidney Injury, Urinary Tract Infection, Urinary Retention, Electrolyte abnormalities) Cardiovascular complications (i.e. Arrhythmia, DVT, Myocardial infarction) Neurological complications (i.e. Stroke, TIA, Head Injury, Delirium) Any other complication (i.e. Falls, Other infection including HAI)	◯ No ◯ Yes (Any complication - not necessarily directly related to operation)
Did the patient sustain any surgical complications? This could include, but not limited to (Surgical site infection, Anastomotic leak, Bile leak, Other infection including HAI)	◯ No ◯ Yes

Surgical complications and Clavien-Dindo grade

	No complication	Grade I	Grade II	Grade IIIa	Grade IIIb	Grade IVa	Grade IVb	Grade V - Death
Abscess	◯	◯	◯	◯	◯	◯	◯	◯
Anastomotic leak	◯	◯	◯	◯	◯	◯	◯	◯
Bile duct injury	◯	◯	◯	◯	◯	◯	◯	◯
Bile leak	◯	◯	◯	◯	◯	◯	◯	◯
Bladder injury	◯	◯	◯	◯	◯	◯	◯	◯
Chylothorax	◯	◯	◯	◯	◯	◯	◯	◯
Clostridium difficile	◯	◯	◯	◯	◯	◯	◯	◯
Enterotomy	◯	◯	◯	◯	◯	◯	◯	◯
Haematoma	◯	◯	◯	◯	◯	◯	◯	◯
Haemorrhage, intraoperative	◯	◯	◯	◯	◯	◯	◯	◯
Haemorrhage, reactionary	◯	◯	◯	◯	◯	◯	◯	◯
Haemorrhage, secondary	◯	◯	◯	◯	◯	◯	◯	◯
Ileus	◯	◯	◯	◯	◯	◯	◯	◯
Ischaemic colitis	◯	◯	◯	◯	◯	◯	◯	◯
Post-operative nausea	◯	◯	◯	◯	◯	◯	◯	◯
Seroma	◯	◯	◯	◯	◯	◯	◯	◯
Intraabdominal visceral injury	◯	◯	◯	◯	◯	◯	◯	◯
Upper GI bleed	◯	◯	◯	◯	◯	◯	◯	◯
Lower GI bleed	◯	◯	◯	◯	◯	◯	◯	◯
Ureteric injury	◯	◯	◯	◯	◯	◯	◯	◯
Wound dehiscence	◯	◯	◯	◯	◯	◯	◯	◯
Wound infection (surgical site infection)	◯	◯	◯	◯	◯	◯	◯	◯

Did the patient sustain any respiratory complications?

◯ No
◯ Yes

This could include, but not limited to (Pneumonia, atelectasis, pleural effusion, ARDs)

Respiratory complications and Clavien-Dindo grade

	No complication	Grade I	Grade II	Grade IIIa	Grade IIIb	Grade IVa	Grade IVb	Grade V - Death
Acute Respiratory Distress Syndrome (ARDs)	◯	◯	◯	◯	◯	◯	◯	◯
Atelectasis	◯	◯	◯	◯	◯	◯	◯	◯
Haemothorax	◯	◯	◯	◯	◯	◯	◯	◯
Pneumothorax	◯	◯	◯	◯	◯	◯	◯	◯
Pleural effusion	◯	◯	◯	◯	◯	◯	◯	◯
Pneumonia, community acquired	◯	◯	◯	◯	◯	◯	◯	◯

Pneumonia, hospital acquired or ventilator associated	◯	◯	◯	◯	◯	◯	◯	◯
Pneumonia, aspiration	◯	◯	◯	◯	◯	◯	◯	◯
Pulmonary embolus	◯	◯	◯	◯	◯	◯	◯	◯
Pulmonary oedema	◯	◯	◯	◯	◯	◯	◯	◯

Did the patient sustain any renal or metabolic complications?

◯ No
◯ Yes

This could include, but not limited to (Acute Kidney Injury, Urinary Tract Infection, Urinary Retention, Electrolyte abnormalities)

Renal or Metabolic complications and Clavien-Dindo grade

	No complication	Grade I	Grade II	Grade IIIa	Grade IIIb	Grade IVa	Grade IVb	Grade V - Death
Acute Kidney Injury (AKI)	◯	◯	◯	◯	◯	◯	◯	◯
Urinary retention	◯	◯	◯	◯	◯	◯	◯	◯
Urinary Tract Infection (UTI)	◯	◯	◯	◯	◯	◯	◯	◯
Hypoglycaemia	◯	◯	◯	◯	◯	◯	◯	◯
Hyperglycaemia	◯	◯	◯	◯	◯	◯	◯	◯
Hypokalaemia	◯	◯	◯	◯	◯	◯	◯	◯
Hyperkalaemia	◯	◯	◯	◯	◯	◯	◯	◯
Hypomagnesaemia	◯	◯	◯	◯	◯	◯	◯	◯
Hyponatraemia	◯	◯	◯	◯	◯	◯	◯	◯
Hypernatraemia	◯	◯	◯	◯	◯	◯	◯	◯
Hypophosphataemia	◯	◯	◯	◯	◯	◯	◯	◯

Did the patient sustain any cardiovascular complications?

◯ No
◯ Yes

This could include, but not limited to (Arrhythmia, DVT, Myocardial infarction)

Cardiovascular complications and Clavien-Dindo grade

	No complication	Grade I	Grade II	Grade IIIa	Grade IIIb	Grade IVa	Grade IVb	Grade V - Death
Angina	◯	◯	◯	◯	◯	◯	◯	◯
Arterial thrombosis/embolism - not stroke or CVA	◯	◯	◯	◯	◯	◯	◯	◯
Arrhythmia	◯	◯	◯	◯	◯	◯	◯	◯
Hypertension	◯	◯	◯	◯	◯	◯	◯	◯
Myocardial Infarction or Ischaemia	◯	◯	◯	◯	◯	◯	◯	◯
Deep venous thrombosis	◯	◯	◯	◯	◯	◯	◯	◯

Other venous thrombosis	◯	◯	◯	◯	◯	◯	◯	◯

Did the patient sustain any neurological complications?

◯ No
◯ Yes

This could include, but not limited to (Stroke, TIA, Head Injury)

Neurological complications and Clavien-Dindo grade

	No complication	Grade I	Grade II	Grade IIIa	Grade IIIb	Grade IVa	Grade IVb	Grade V - Death
Delirium	◯	◯	◯	◯	◯	◯	◯	◯
Head injury	◯	◯	◯	◯	◯	◯	◯	◯
Stroke	◯	◯	◯	◯	◯	◯	◯	◯
TIA	◯	◯	◯	◯	◯	◯	◯	◯

Did the patient sustain any other complications?

◯ No
◯ Yes

This could include, but not limited to (Falls, Fractures, Other HAI, Cellulitis, Allergic reactions)

Other complications and Clavien-Dindo grade

	No complication	Grade I	Grade II	Grade IIIa	Grade IIIb	Grade IVa	Grade IVb	Grade V - Death
Anaphylaxis	◯	◯	◯	◯	◯	◯	◯	◯
Non-anaphylaxis allergic reaction	◯	◯	◯	◯	◯	◯	◯	◯
Blood stream infection / bacteraemia	◯	◯	◯	◯	◯	◯	◯	◯
Cellulitis	◯	◯	◯	◯	◯	◯	◯	◯
Central line infection (including CVC/PICC)	◯	◯	◯	◯	◯	◯	◯	◯
Fracture	◯	◯	◯	◯	◯	◯	◯	◯
Falls	◯	◯	◯	◯	◯	◯	◯	◯
Pressure sore	◯	◯	◯	◯	◯	◯	◯	◯
Other	◯	◯	◯	◯	◯	◯	◯	◯

Describe other complications including Clavien-Dindo grade

_____