CLARITY Case Report Form

Patient characteristics data collection form	Required data (definition / comment)	Suggested source(s) / field notes
Characteristics (includes a check the patient is eligible)		
1. Patient age	Years *(whole years at the time of assessment / admission)*	– If this is entered outside 16-40 REDCap brings up a not eligible message – Clinical letters / notes
2. Patient sex at birth	Male / Female	– Clinical letters / notes
3. Is the patient pregnant? (for females only)	Yes / No	– If this does not match eligibility criteria, REDCap brings up a not eligible message
4. Patient height and weight to calculate body mass index (BMI)	Height (in centimetres) Weight (in kilograms)	– Drug charts – Clinical letters / notes
5. Smoking status	Current, Previous (stopped smoking <6 weeks), Previous (stopped smoking 6 weeks – 1 year), Previous (stopped smoking >1 year), Never smoked	– Admissions clerking – Clinical notes
6. Clinical Frailty scale	1-3 / 4-6 / 7-9 (Full Clinical frailty scale available at: https://www.dal.ca/sites/gmr/our-tools/clinical-frailty-scale.html)	
7. WHO performance status	0 – Asymptomatic (Fully active, able to carry on all predisease activities without restriction) 1 – 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) 2 – 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) 3 – Symptomatic, >50% in bed, but not bedbound (Capable of only limited self-care, confined to bed or chair 50% or more of waking hours) 4 – Completely disabled. Cannot carry on any self-care. Totally confined to bed or chair	
8. Previous abdominal surgery	No / Yes - any open surgery / Yes - laparoscopic or robotic surgery only	– Admissions clerking – Clinical notes – Anaesthetic notes – Outpatient letters
9. Long-term health conditions	**Tick all which apply** None Previous myocardial infarction Ischaemic heart disease Peripheral vascular disease Congestive cardiac failure (NYHA I / II / III / IV) Cerebrovascular disease Dementia Previous TIA / stroke COPD	

	Peptic ulcer disease HIV/AIDS Diabetes Mellitus Mild liver disease Moderate / severe liver disease (cirrhosis) Cancer without metastases Lymphoma / leukaemia Rheumatologic disease Inflammatory Bowel Disease Metastatic cancer Chronic Kidney Disease Venous thromboembolism	
10. If the patient has cardiac failure, what is the NYHA classification?	*I / II / III / IV (available at https://www.heartonline.org.au/media/DRL/New_York_Heart_Association_(NYHA)_classification.pdf)*	These fields only appear if long term health conditions ticked above – Admission clerking – Clinical notes – Anaesthetic notes – Outpatient letters
11. Stage of chronic kidney disease	*I / II / IIIA / IIIB / IV / V*	
12. History of diabetes mellitus	Yes - Type I / Yes - Type II *(diet controlled, tablet controlled, insulin controlled)*	
13. Active cancer and/or cancer treatment	No / Yes - curative intent / Yes - palliative intent / Yes - end of life	
Abbreviations: BMI - Body Mass Index; TIA - Transient Ischaemic Attack; COPD - Chronic Obstructive Pulmonary Disease; HIV/AIDS - Human Immunodeficiency Virus / Acquired Immunodeficiency Syndrome; NYHA - New York Heart Association; RIF - Right Iliac Fossa; WHO - World Health Organisation.		

Initial investigations and treatment		
14. 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 (specify)	– Admission clerking – Clinical notes – Laboratory / radiology systems – Observations chart
15. Time of first symptom onset	Date time field (with field validation)	
16. Time of presentation at hospital for assessment or referral	Date time field (with field validation)	
17. Has the patient attended previously with RIF pain over the last 24 months?	Yes / No	
18. Did the patient have any of the following investigations performed prior to assessment / admission to the surgical team for the same symptoms?	No pre-assessment or pre-admission imaging / CT / USS abdomen / USS transvaginal / MRI (when done and what did these show)	
19. Date of imaging *Only appears if scan selected*	Date time field (with field validation)	
20. Imaging findings *Only appears if scan selected*	No abnormality / Appendicitis - simple without faecolith / Appendicitis - simple with faecolith / Appendicitis - complex localised / Appendicitis - complex diffuse / List of other common diagnoses	

21. Clinical symptoms	Nausea / Vomiting / Anorexia / Loose stools / RIF pain / Migration to RIF pain (tick all that apply)	
22. RIF tenderness on examination	Yes / No	
23. Clinical examination *Only appears if there is rebound tenderness or guarding*	No tenderness / Tender but no guarding / Localised guarding / Generalised guarding / Rebound tenderness / Rovsing's +ve (tick all that apply)	
24. Rebound tenderness or guarding severity	None / Mild / Moderate / Severe	
25. Highest recorded temperature on presentation	Enter value (degrees celsius)	
26. Was a urine dip performed and documented?	No - not performed / Yes - Normal urine dip / Yes (specify findings, including HCG)	
27. Blood tests on presentation	White cell count / Neutrophil count / CRP – enter values (with field validation)	
Assessment, imaging and pathway data		
28. When was the patient first assessed or reviewed by the emergency surgical team?	Date time field (with field validation)	– Admission clerking – Clinical notes – Laboratory / radiology systems
29. 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	
30. Was appendicitis risk scoring performed?	No / Yes (AIRS/AAS/Alvarado/Other (specify score if used))	
31. Result of risk scoring	For AIRS/AAS/Alvarado enter number / Other score: Low-risk, Moderate-risk, High-risk	
32. What investigations were requested as a result of this assessment or review?	None / Blood tests / Urine dip / USS / Standard CT scan without IV contrast/ Standard CT scan with IV contrast/ Low dose CT scan without IV contrast/ Low dose CT scan with IV contrast / MRI / Other (specify)	
33. 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	
34. 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	
35. Time and date patient received USS *Only appears if scan selected*	Date time field (with field validation)	
36. Time and date patient received CT scan *Only appears if scan selected*	Date time field (with field validation)	
37. Time and date patient received MRI scan *Only appears if scan selected*	Date time field (with field validation)	
38. Imaging findings *Only appears if scan selected*	No abnormality / Appendicitis - simple without faecolith / Appendicitis - simple with faecolith / Appendicitis - complex localised / Appendicitis - complex diffuse / List of other common diagnoses	

39. Reporter	Radiology trainee ST2-3 /Radiology trainee ST4-5 / SPR (unknown grade)/Consultant (internal)/ Consultant (external)	
40. Date of initial decision by surgical team	Date time field (with field validation)	
41. 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	
42. Were antibiotics commenced?	No - not indicated / Yes oral - already taking antibiotics (time and date first dose) / Yes IV - already taking antibiotics (time and date first dose) / Yes - started oral antibiotics (time and date first dose) / Yes - started IV antibiotics (time and date first dose)	
Abbreviations: GP - General Practitioner; RIF - Right Iliac Fossa; HCG - Human Chorionic Gonadotropin; AIRS - Appendicitis Inflammatory Response Score; AAS - Adult Appendicitis Score; USS - Ultrasound Scan; CT - Computed Tomography; CRP - C Reactive Protein; ANP - Advanced Nurse Practitioner; CCT - Certificate of Completion of Training; ST - Speciality Trainee; IV - Intravenous		

CLARITY intervention details ***These fields are only seen by the intervention sites***		
43. Was appendicitis risk scoring documented using the CLARITY checklist? *Field only visible to intervention sites*	No - not documented / Yes - documented on CLARITY paper checklist / Yes - documented in electronic notes or CLARITY checklist not available to be scanned	
44. Upload CLARITY checklist OR complete CLARITY checklist electronically *Field only visible to intervention sites*	Upload field or complete electronically	
Ambulatory data collection form		
45. Did the patient receive outpatient or ambulatory follow-up?	Yes / No	- Admission clerking - Clinical notes - Laboratory / radiology systems
46. Date of ambulatory follow-up *Only appears if outpatient or ambulatory follow-up undertaken*	Date time field (with field validation)	
47. Were any ambulatory investigations performed? *Only appears if outpatient or ambulatory follow-up undertaken*	Yes (specify from list) / No	
48. What did the ambulatory investigations show? *Only appears if outpatient or ambulatory follow-up undertaken*	Specify findings (Imaging, urine dip, bloods) For imaging: No abnormality / Appendicitis - simple without faecolith / Appendicitis - simple with faecolith / Appendicitis - complex localised / Appendicitis - complex diffuse / List of other common diagnoses	

49. Decision by surgical team at outpatient or ambulatory follow-up *Only appears if outpatient or ambulatory follow-up undertaken*	Discharge / Admit / Refer / Other investigation	
50. Time and date of admission from ambulatory care *Only appears if outpatient or ambulatory follow-up undertaken*	Date time field (with field validation)	

Clinical management		
51. Did the patient receive an operation within 30 days of admission / assessment?	Yes / No	– Anaesthetic notes – Operation notes
52. When was the decision made to operate? *Only appears if patient has an operation*	Date time field (with field validation)	
53. Was non-operative management attempted?	No - initial decision operative management / Yes - nonoperative management failed / Yes - nonoperative management successful	
54. When did patient fail non-operative management? *Only appears if nonoperative management attempted*	Date time field (with field validation)	
55. Patient ASA grade *Only appears if patient has an operation*	Grade I-V (Full ASA classification available at: https://www.asahq.org/resources/clinical-information/asa-physical-status-classification-system)	
56. Knife to skin time *Only appears if patient has an operation*	Date time field (with field validation)	
57. Primary operation performed *Only appears if patient has an operation*	Defined according to list of OPCS codes	
58. Was an additional procedure performed during this procedure? *Only appears if patient has an operation*	No / Yes - OPCS list of procedures	
59. Operative approach *Only appears if patient has an operation*	Open (performed exclusively using instruments inserted into the abdomen through a surgical incision). Laparoscopic (performed exclusively using instruments inserted in to the abdomen through small ports) or Laparoscopic-assisted (laparoscopic surgery in which an incision is enlarged to deliver a specimen or to insert a gloved hand into the abdomen). Laparoscopic converted to open (surgery planned to be performed laparoscopically but for unforeseen reasons the decision was made to change to an open approach).	

60. Was the appendix removed during this operation? *Only appears if patient has an operation*	Yes – completely / Yes – incompletely (stump remaining) / No – not indicated / No – could not be identified	
61. Operative contamination *Only appears if patient has an operation*	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 bile).	
62. Peritoneal contamination *Only appears if patient has an operation*	None / Serous fluid / Localised pus / Free bowel content (i.e. pus or blood)	
63. Completed skin closure time *Only appears if patient has an operation*	Date time field (with field validation)	
Abbreviations: ASA - American Society Anesthesiologists; OPCS - Office of Population Censuses and Surveys Classification of Interventions and Procedures; GI - Gastrointestinal; GU - Genitourinary		

30-day outcomes		
	Required data (definition / comment)	**Suggested sources**
64. Underlying diagnosis causing symptoms on presentation	Appendicitis, colorectal cancer, common differentials, other (specify)	- Clinical notes
65. Histopathological assessment *Only appears if patient has an operation*	Histopathologically normal appendix / Simple appendicitis (not perforated, no abscess) / Complicated appendicitis (perforated or with abscess) / Adenocarcinoma / Appendiceal mucinous neoplasm / Carcinoid / Mucocele / Crohn's / Ulcerative Colitis / Other (specify)	
66. Did the patient die within 30 days of first admission / assessment?	Yes – inpatient (specify date of death), Yes – out of hospital (specify date of death), No (specify date of discharge)	
67. Date of discharge or death	Date time field (with field validation)	
68. Critical care admission (including intensive care and high dependency units)	Yes, planned admission from theatre / Yes, unplanned admission from theatre / Yes, unplanned admission from ward / No	
69. Critical care bed days *Only appears if has had a critical care admission*	Number (days from first postoperative day to day of discharge from critical care. If the patient has not been discharged prior to the end of 30-day follow-up, enter '31').	
70. 30-day reoperation or reintervention for any cause	Yes – return to theatre / Yes – endoscopic reintervention / Yes – interventional radiology reintervention / No (tick all that apply – with field validation)	
71. Did the patient require radiological, percutaneous or endoscopic drainage of their appendix at any point from first admission / assessment?	Yes – radiologically guided drainage (specify date and time), Yes – non-guided percutaneous drainage (specify date and time), Yes – endoscopically guided drainage (specify date and time), No – no drainage	
72. 30-day readmission	No (this applies if patient had died during initial admission) / Yes - planned / Yes- unplanned	

	Date and length of stay for readmission if they were readmitted	
73. Did the patient have any of the following complications?	List of complications: Surgical, Respiratory, Cardiovascular, Renal / Metabolic, Neurological, Miscellaneous. Graded Clavien Dindo I-V	