



CovidSurg data completion guide

Before you continue

- Please read this guide carefully.
- The spreadsheet attached in your 'data completion request' email contains the submitted cases from your centre (one case per row with missing points in columns).
- 'Missing' written in a cell denotes the required data that you must enter for that case.
- Please examine each case/row and note the missing and required fields per case.
- The guide below explains how to enter your missing data into the fields on REDCap with the field headings on the columns of your emailed spreadsheet matched to the relevant REDcap field.
- Please note, we are using the same REDCap project for both CovidSurg and CovidSurg Cancer studies for which patients may be eligible for either or both. Therefore, you may not see the same fields for the same patients, depending on which study they are entered into. i.e a patient entered into CovidSurg Cancer will have different fields than a patient entered into CovidSurg only.

Once you have logged into REDCap and selected the CovidSurg project, navigate to 'Add/ Edit Records' in the left hand side menu under 'Data Collection'. Under the 'select record' dropdown list, select the record ID you need to edit.

Baseline information form

Spreadsheet Field Label	REDCap Field and Notes
COVID_Diagnosis_Method	<p>How was COVID-19 diagnosed</p> <div data-bbox="475 315 1501 477" style="border: 1px solid #ccc; padding: 5px;"> <p>How was COVID-19 diagnosed</p> <p><i>Patients are eligible for inclusion in CovidSurg if they had COVID-19 infection at the time of surgery or surgery within 30 days of surgery</i></p> <p><i>* must provide value</i></p> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p><input type="radio"/> Positive laboratory test for COVID-19</p> <p><input type="radio"/> Positive computed tomography scan of chest for COVID-19</p> <p><input type="radio"/> Clinical diagnosis (no COVID-19 test/scan performed)</p> </div> <div style="text-align: right;"> <p>reset</p> </div> </div> </div> <ul style="list-style-type: none"> Please select the appropriate option. A clinical diagnosis is where symptoms have been diagnosed by a senior doctor without a CT scan or laboratory test for COVID-19
COVID_Diagnosis_Timing	When was COVID-19 diagnosed
Month_Operation	Month operated
Patient_Age	Age
Gender	Sex
ASA_Grade	ASA at time of surgery
Comorbidity_All	<p>Co-morbidity</p> <div data-bbox="475 954 1501 1417" style="border: 1px solid #ccc; padding: 5px;"> <p>Co-morbidity (tick all that apply)</p> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p><input type="checkbox"/> Current smoker</p> <p><input type="checkbox"/> Asthma</p> <p><input type="checkbox"/> Current cancer diagnosis</p> <p><input type="checkbox"/> Chronic kidney disease (moderate/severe)</p> <p><input type="checkbox"/> Chronic obstructive pulmonary disease (COPD)</p> <p><input type="checkbox"/> Congenital abnormality - cardiac</p> <p><input type="checkbox"/> Congenital abnormality - non-cardiac</p> <p><input type="checkbox"/> Congestive heart failure</p> <p><input type="checkbox"/> Dementia</p> <p><input type="checkbox"/> Diabetes mellitus</p> <p><input type="checkbox"/> Hypertension</p> <p><input type="checkbox"/> Myocardial infarction</p> <p><input type="checkbox"/> Peripheral vascular disease</p> <p><input type="checkbox"/> Stroke/ TIA</p> <p><input type="checkbox"/> Other (including other lung disease)</p> </div> <div style="text-align: right;"> <p>reset</p> </div> </div> <p>Please confirm that this patient has no comorbidities</p> <p><i>* must provide value</i></p> <p><input type="radio"/> This patient has no comorbidities</p> </div> <ul style="list-style-type: none"> Tick all boxes that apply If the co-morbidity you would like to enter is not listed, tick 'other (including other lung disease)' and a free text box will appear to enter the relevant details. If the patient has no co-morbidities, please confirm by selecting the option 'This patient has no comorbidities'
Urgency_Surgery	Urgency of surgery
Symptoms_All	<p>Symptoms on hospital admission</p> <div data-bbox="475 1765 1501 2056" style="border: 1px solid #ccc; padding: 5px;"> <p>Symptoms on hospital admission (tick all that apply)</p> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p><input type="checkbox"/> Abdominal pain</p> <p><input type="checkbox"/> Breathlessness (dyspnoea)</p> <p><input type="checkbox"/> Cough</p> <p><input type="checkbox"/> Diarrhoea</p> <p><input type="checkbox"/> Fatigue</p> <p><input type="checkbox"/> Fever (>38 celsius)</p> <p><input type="checkbox"/> Haemoptysis</p> <p><input type="checkbox"/> Myalgia</p> <p><input type="checkbox"/> Nausea/vomiting</p> <p><input type="checkbox"/> Sputum</p> <p><input type="checkbox"/> Other</p> </div> <div style="text-align: right;"> <p>reset</p> </div> </div> </div>

	<ul style="list-style-type: none"> • Tick all symptoms that may apply • If no symptoms present (asymptomatic), please leave this field blank
Last available data from before surgery (e.g. recorded in anaesthetic room pre-anaesthetic induction)	
Mental_Status	Mental status
Respiratory_Rate	Respiratory Rate (breaths per minute)
Heart_Rate	Heart rate
Systolic_BloodPressure	Systolic Blood Pressure (mmHg)
Diastolic_BloodPressure	Diastolic blood pressure (mmHg)
	<div style="background-color: #f0f0f0; padding: 5px;"> <p>Systolic blood pressure (mmHg) H <input type="text"/> <small>* must provide value</small></p> <p>Diastolic blood pressure (mmHg) H <input type="text"/> <small>* must provide value</small></p> </div>
	<ul style="list-style-type: none"> • Please ensure that these are entered the correct way round

Preop investigations (CovidSurg only) form

Spreadsheet Field Label	REDCap Field and Notes
Haemoglobin	<p>Haemoglobin (g/L)</p> <p>Haemoglobin (g/L)</p> <p>* must provide value</p> <p>If your lab reports Hb as g/dL (normal range approx 11-17) please multiply this by 10 to record value as g/L</p> <ul style="list-style-type: none"> Please ensure to enter the recorded haemoglobin in g/L making the normal range approximately 110-170 g/L. If your lab reports haemoglobin in g/dL (normal range 11-170 please multiply this value by 10 before entering
White_Cell_Count	White cell count (10 ⁹ /L)
CRP	CRP - C-reactive protein (mg/L)
Albumin	Albumin (g/dL)
Urea	<p>Units used by lab to report serum creatinine and urea/blood nitrogen urea</p> <p><input checked="" type="radio"/> Units are mg/dL or g/L</p> <p><input type="radio"/> Units are mmol/L or µmol/L</p> <p>reset</p> <p>Urea/ blood urea nitrogen (mg/dL)</p> <p>Typical normal range 6 to 20 mg/dL</p> <p>Serum creatinine (mg/dL)</p> <p>Typical normal range 0.6 to 1.3 mg/dL</p> <ul style="list-style-type: none"> Select the unit used in your lab for serum urea/ blood urea nitrogen and serum creatinine and the fields to enter their values will appear Then enter the correct values for each, according to the units you have selected
Creatinine	
Chest imaging before surgery	
PreOp_ChestXR	Preoperative chest x-ray
PreOp_CT	<p>Preoperative computed tomography (CT) scan of the chest</p> <p>Preoperative computed tomography (CT) scan of the chest (please tick all that apply)</p> <p>* must provide value</p> <p><input type="checkbox"/> Not performed</p> <p><input type="checkbox"/> Yes - normal</p> <p><input type="checkbox"/> Yes - consolidation</p> <p><input type="checkbox"/> Yes - ground glass opacity</p> <p><input type="checkbox"/> Yes - pulmonary infiltration</p> <p><input type="checkbox"/> Yes - other abnormality</p> <ul style="list-style-type: none"> More than one option can be selected. Please tick all that apply. If a CT scan was not performed tick 'not performed' only.

Management (all patients) form

Spreadsheet Field Label	REDCap Field and Notes
COVID_TimeofSurgery	Was COVID-19 suspected at the time of surgery?
Anaesthesia	<p>Anaesthesia type</p> <p>Anaesthesia type Please tick all that apply * must provide value</p> <ul style="list-style-type: none"> <input type="checkbox"/> Local <input type="checkbox"/> Regional <input type="checkbox"/> General <ul style="list-style-type: none"> • Please tick all that apply if more than one type of anaesthesia was used
Surgical_Diagnosis	<p>Surgical indication</p> <p>Surgical indication * must provide value</p> <ul style="list-style-type: none"> <input type="radio"/> Benign disease <input type="radio"/> Malignant disease (cancer) <input type="radio"/> Obstetrics <input type="radio"/> Trauma <p>Surgical diagnosis/ indication This field is OPTIONAL in case you wish to give additional details</p> <ul style="list-style-type: none"> • Please select the most appropriate option for surgical indication. If you want to add further details or clarification of the surgical diagnosis, enter this information in the 'surgical diagnosis/ indication' free text field
Surgical_Procedure	Surgical procedure completed

COVID-19 treatment (COVID+ patients only) form

Spreadsheet Field Label	REDCap Field Notes
Hospital_Treatment	<p>At any point during the index hospital admission did the patient receive</p> <p>At any point during the index hospital admission did the patient receive * must provide value</p> <ul style="list-style-type: none"> <input type="checkbox"/> None of the treatments listed below <input type="checkbox"/> Antibiotics <input type="checkbox"/> Antivirals <input type="checkbox"/> Quinine or derivative <input type="checkbox"/> Corticosteroids <input type="checkbox"/> Intravenous immunoglobulins <input type="checkbox"/> Interferon <input type="checkbox"/> IL-6 blocker <ul style="list-style-type: none"> • Please select tick any and all COVID treatments listed, at any dose, that the patient received at any point in the 30 day post operative period. Tick as many as apply. If none of the treatments listed were given, tick 'None of the treatments listed below'.
Renal_Dialysis	Renal dialysis - at any point during the index hospital admission
PreOp_Resp_Support	Preoperative respiratory support
PostOp_Resp_Support	<p>Postoperative respiratory support</p> <p>(please tick all that apply) * must provide value</p> <ul style="list-style-type: none"> <input type="checkbox"/> None <input type="checkbox"/> Low-flow supplemental oxygen <input type="checkbox"/> High-flow supplemental oxygen <input type="checkbox"/> Non-invasive ventilation <input type="checkbox"/> Invasive mechanical ventilation <input type="checkbox"/> Extracorporeal membrane oxygenation (ECMO) <ul style="list-style-type: none"> • Please select the type of respiratory support used when the patient has left recovery

Surgical outcomes (operated patients only)

Spreadsheet Field Label	REDCap Field and Notes
Outcome_30day	<p>Outcome at 30 days after surgery</p> <p>Mortality</p> <p>Outcome at 30 days after surgery * must provide value</p> <ul style="list-style-type: none"> <input type="radio"/> Died - on-table <input type="radio"/> Died - on days 0-7 after surgery <input type="radio"/> Died - on days 8-30 after surgery <input type="radio"/> Alive - remains admitted in hospital <input type="radio"/> Alive - transferred to another hospital <input type="radio"/> Alive - discharged to a rehabilitation centre <input type="radio"/> Alive - discharged home <p>Day of surgery is day 0 reset</p> <ul style="list-style-type: none"> Please ensure this field is completed as accurately as possible as this is the primary endpoint of the study.
Reoperation_Reintervention	Re-operation or re-intervention
PostOp_ICU	Postoperative intensive care admission
Complications	<p>Complications (if any)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Acute kidney injury <input type="checkbox"/> Acute respiratory distress syndrome (ARDS) <input type="checkbox"/> Anastomosis leak <input type="checkbox"/> Bleeding requiring transfusion <input type="checkbox"/> Cardiac arrest requiring CPR <input type="checkbox"/> Coma >24 hours <input type="checkbox"/> Deep vein thrombosis <input type="checkbox"/> Graft/ prosthesis/ flap failure <input type="checkbox"/> Myocardial infarction <input type="checkbox"/> Pneumonia <input type="checkbox"/> Pulmonary embolism <input type="checkbox"/> Sepsis <input type="checkbox"/> Septic shock <input type="checkbox"/> Stroke/ cerebrovascular accident <input type="checkbox"/> Surgical site infection - superficial or deep <input type="checkbox"/> Surgical site infection - organ space <input type="checkbox"/> Urinary tract infection <input type="checkbox"/> Wound dehiscence <input type="checkbox"/> Other complication <p>Please confirm that this patient did not have any postoperative complications * must provide value</p> <p><input type="radio"/> This patient did not have any postoperative complications reset</p> <ul style="list-style-type: none"> Please tick all complications that occurred within 30 days taking particular care to note pneumonia and ARDS. If a complication not listed occurred, select 'other complication' and a free text field will appear to enter the relevant details If no complications occurred, please confirm this in the field below.