DESIGN OF THIS CASE REPORT FORM (CRF)

This CRF has 3 modules:

**Module 1** to be completed on the first day of admission to the health centre.

**Module 2** to be completed daily during hospital stay for as many days as resources allow. Continue to follow-up patients who transfer between wards.

**Module 3** to be completed at discharge or death.

GENERAL GUIDANCE (ADAPTED FROM ISARIC GUIDANCE)

- The Rapid Core CRF is designed to collect data obtained through examination, interview and review of hospital notes. Data may be collected retrospectively if the patient is enrolled after the admission date.

- Participant identification numbers consist of a site code and a participant number. You can obtain a site code and register on the data management system by contacting COVID ClinPlatform@who.int

Participant numbers should be assigned sequentially for each site beginning with 00001. In the case of a single site recruiting participants on different wards, or where it is otherwise difficult to assign sequential numbers, it is acceptable to assign numbers in blocks or incorporating alpha characters. For example, Ward X will assign numbers from 00001 or A0001 onwards and Ward Y will assign numbers from 50001 or B0001 onwards. Enter the participant identification number at the top of every page.

- Data are entered on the central electronic WHO OpenClinica database at https://who.eclinicalhosting.com/OpenClinica/ Printed paper CRFs may be used for later transfer of the data onto the electronic database.

- In the case of a participant transferring between sites, it is preferred to maintain the same participant identification number across the sites. When this is not possible, space for recording the new number is provided.

- Complete every section. Questions marked “If yes, …” should be left blank when they do not apply (i.e. when the answer is not yes).

- As necessary, where there are multiple selection answers, choose as many as are applicable.

- Mark “Unknown” for any data that are not available, not applicable or unknown.

- Avoid recording data outside of the dedicated areas. Sections are available for recording additional information.

- If using paper CRFs, we recommend writing clearly in ink, using BLOCK CAPITAL LETTERS.

- Place an X when you choose the corresponding answer. To make corrections, strike through (-------) the data you wish to delete and write the correct data above it. Please initial and date all corrections.

- Please keep all the sheets for a single participant together, e.g. with a staple or participant-unique folder.

- All paper CRFs can be stored by the institution responsible for them.

- Please enter data on the electronic data capture system at https://who.eclinicalhosting.com/OpenClinica/

- Please contact us at COVID ClinPlatform@who.int to contribute data to the WHO Clinical Data Platform.
MODULE 1. COMPLETE ON HOSPITAL ADMISSION

Participant ID: On each page, enter your assigned 5-digit site code followed by the 4-digit participant ID. Participant numbers should be assigned sequentially for each site beginning with 0001, 0002, 0003.

1a. CLINICAL INCLUSION CRITERIA
How to define a pathogen of public health interest: select “Yes” if you suspect a pathogen may: be capable of causing severe disease, be highly contagious, have outbreak potential, be an emerging pathogen, or may be of public health interest for another reason. Select “No” if none of those apply.

Suspected or proven acute COVID-19 infection as main cause for admission. A proven COVID-19 infection refers to a laboratory-confirmed diagnosis of COVID-19. A participant may also be included if the treating clinician suspects they may have an COVID-19 infection, based on local definition. Place a cross (X) in the appropriate box (“yes”, “no”).

1b. DEMOGRAPHICS
Please provide sex at birth, and date of birth in day/month/year form.
If date of birth is unknown, please record age in years, or if < 1 year old, record age in months.
Record whether the patient is a health care worker with potential exposure to infected patients (for example, but not limited to: physician, nurse, nursing assistant, clinical officer, etc.).
Record whether the patient is a laboratory worker who processes or analyses human biological samples. Please select details of any pregnancy.

Pregnancy status is based on patient reported response and/or confirmatory testing if available. If there is a discrepancy, report the results of testing. Record “N/A” if no documentation of pregnancy status exists and it is unclear if the question was asked. Gestational weeks are based on the patient’s reported response and/or confirmatory testing (ultrasound) if available. If there is a discrepancy, report the patient’s response.
1c. DATE OF ONSET AND ADMISSION VITAL SIGNS

Please ensure all measurements are provided using the units specified.

Please provide the date of the first symptom that you clinically believe was related to this episode of COVID-19 infection in day/month/year form.

Please enter the date of admission to your site in day/month/year form.

Please provide details of clinical observations made on admission. For observations not made at admission, please record the first available data after admission measured within 24 hours of admission.

Record the first documented patient temperature, regardless of route (oral, peripheral, etc.) in degrees Celsius.

Record the first documented patient heart rate in beats per minute.

Record the first documented patient respiratory rate in breaths/min.

Record the first documented patient systolic and diastolic blood pressure measurement in mmHg.

Please record if severe dehydration was present at any point during the follow-up day. Signs of severe dehydration include dry mucous membranes, low volumes of dark-coloured urine, sunken eyes, reduced skin elasticity.

Please record if sternal capillary refill time was > 2 seconds. This is assessed by pressing on the sternum for 5 seconds until the underlying skin turns white and then noting the time for the colour to return when the pressure is released.

Record the first documented patient peripheral oxygen saturation measurement as a percentage. Record whether the first documented patient peripheral oxygen saturation measurement occurred while the patient was breathing room air or any form of supplemental oxygen. Record "Unknown" if it is unclear whether the patient was breathing room air or oxygen at the time of the measurement. Sometimes a low measurement is obtained by pulse oximetry due to poor peripheral perfusion, and a warmer body site will give a greater value.
In these circumstances, where the pulse oximeter has given two different readings in succession, with no change to oxygen therapy, the greater measurement should be recorded. If the low measurement was accepted by the clinical team and changes to oxygen therapy were made before a repeat measurement, then the lowest reading should be stated.

Record **AVPU**. Record the patient's first documented level of **consciousness / mental status**: patient was alert and appropriate (A); patient responds to verbal commands (V); patient responds to pressure or pain (P); patient unresponsive to any stimulus (U).

Record **Glasgow Coma Scale**. Record the patient's first documented level of consciousness/mental status.

Eye response (E): 1 = No opening of the eye; 2 = Eye opening in response to pain, such as squeezing the person's fingernail; 3 = Eye opening to speech; 4 = Eyes opening spontaneously.

Verbal response (V): 1 = No verbal response; 2 = Incomprehensible sounds, for example, moaning but no words; 3 = Inappropriate words such as random or exclamatory speech, nonsensical words; 4 = Confused, as in responds to questions but with some disorientation and confusion; 5 = Oriented, as in the person responds coherently and appropriately to questions.

Motor response (M): 1 = No motor response; 2 = Decerebrate posturing accentuated by pain (extensor response: adduction of arm, internal rotation of shoulder, pronation of forearm and extension at elbow, flexion of wrist and fingers, leg extension, plantarflexion of foot); 3 = Decorticate posturing accentuated by pain (flexor response: internal rotation of shoulder, flexion of forearm and wrist with clenched fist, leg extension, plantarflexion of foot); 4 = Withdrawal from pain (absence of abnormal posturing; unable to lift hand past chin with supraorbital pain but does pull away when nailbed is pinched); 5 = Localizes to pain (purposeful movements towards painful stimuli, e.g. brings hand up beyond chin when supraorbital pressure applied); 6 = Obeys commands (the person does simple things as asked).

Record whether any type of malnutrition (e.g. wasting, stunting, kwashiorkor, marasmus, severe acute malnutrition) is listed as a comorbidity or diagnosis.
Record **mid-upper arm circumference**. If measured, record the mid-upper arm circumference in mm.

Record **height**. If measured, record the height in cm.

Record **weight**. If measured, record the weight in kg.

**1d. CO-MORBIDITIES**

Please record if any of these comorbidities existed at admission. Where example conditions are given, these are not intended to be exhaustive and other conditions of equivalent severity should be included.

**Chronic cardiac disease (not hypertension).** Please include any of:
- Coronary artery disease (angina, ischaemic heart disease, atherosclerotic heart disease, previous coronary artery bypass graft, previous cardiac stenting/coronary intervention)
- Congestive heart failure
- Congenital heart disease (that causes symptoms, requires medication or has required surgery)
- Cardiomyopathy
- Rheumatic heart disease.

**Hypertension.** High blood pressure for which medication has been prescribed.

**Chronic pulmonary disease.** Please include any of:
- Chronic obstructive pulmonary disease (also chronic obstructive airways disease, chronic bronchitis, emphysema)
- Cystic fibrosis
- Bronchiectasis
- Interstitial lung disease (e.g. pulmonary fibrosis, asbestosis, autoimmune)
- A pre-existing requirement for long-term oxygen therapy.

**Asthma.** Please include clinician-diagnosed asthma (including patients with diagnosed asthma not currently taking any treatment for it).

**Chronic kidney disease.** Clinician-diagnosed chronic kidney disease, including any with:
- Markers of kidney damage (albuminuria, haematuria of renal origin, electrolyte abnormalities due to tubular disorders, renal histological abnormalities, structural abnormalities detected by imaging)
- Estimated glomerular filtration rate < 60 mL/min/1.73 m²
- History of kidney transplantation.

**Chronic neurological disorder.** Please include any of:
- Cerebral palsy
- Multiple sclerosis
- Motor neurone disease
- Muscular dystrophy
- Myasthenia gravis
- Parkinson’s disease
- Stroke
- Severe learning difficulty.

**HIV.** History of laboratory-confirmed HIV infection or AIDS-defining illness. Please include regardless of current viral load or CD4+ count. Please state whether the patient is currently taking antiretroviral treatment.

**Diabetes.** Record “Yes” if the patient has a current diagnosis of or is being treated for type I or type II diabetes mellitus requiring oral or subcutaneous treatment.

**Current smoking.** Smoking at least one cigarette, cigar, pipe or equivalent per day before the onset of the current illness. Do not include smoke-free tobacco products such as chewed tobacco or electronic nicotine delivery devices.

**Tuberculosis.** Patients currently receiving treatment for tuberculosis. Latent tuberculosis should not be included here. Patients who have been cured of tuberculosis should not be included here. Those who have chronic pulmonary sequelae following their tuberculosis should be included as chronic pulmonary disease.

**Asplenia.** Please include all who have had a splenectomy, patients with a non-functional spleen secondary to sickle-cell disease, and congenital asplenia.

**Malignant neoplasm.** Current solid organ or haematological malignancy. Please do not include malignancies that have been declared “cured” ≥ 5 years ago with no evidence of ongoing disease. Do not include non-melanoma skin cancers. Do not include benign growths or dysplasia.

**Other.** Please include other comorbidities that the clinical team feels may affect the patient’s physiological reserves or response to this disease or treatment. Include here any co-existing infectious diseases. Please specify these other comorbidities.
1e. PRE-ADMISSION AND CHRONIC MEDICATION

Please state whether any of these medications were taken in the 14 days before admission.

Record “Yes” if patient reports taking any ACE inhibitor (e.g. captopril, lisinopril, etc.) in the 14 days prior to admission.

Record “Yes” if patient reports taking any angiotensin II receptor blockers (ARB) (e.g. losartan, valsartan) in the 14 days prior to admission.

For non-steroidal anti-inflammatory (NSAID) do not include low-dose aspirin taken for cardioprotective purposes. Record “Yes” if patient reports taking any NSAID (e.g. ibuprofen, ketorolac, naproxen, etc.) in the 14 days prior to admission.

1f. SIGNS AND SYMPTOMS ON ADMISSION

Please report any of the signs and symptoms reported by the patient or observed on physical exam at admission.

1g. MEDICATION

Please record if the patient was already taking any of these medications at the time of admission or record all treatments received on the day of admission. For patients admitted late in the evening or at night, please include medications up to and including those started the first time the patient was reviewed by the most senior clinician responsible for their care (e.g. consultant or attending).

**Oral/orogastric fluids.** Include any fluids delivered clinically but not patient drinking fluids normally.

**Intravenous fluids.** Record “Yes” if on the calendar day of admission, the patient received intravenous fluids for rehydration, maintenance requirements or resuscitation.

**Antiviral.** Record “Yes” if on the calendar day of admission, the patient received an antiviral. Please indicate which drug was taken among those listed. Specify other drug (e.g. remdesivir, etc.) in the free text field.
Corticosteroid. Record “Yes” if on the calendar day of admission, the patient received a corticosteroid (e.g. hydrocortisone, decadron, prednisone, beclomethasone, budesonide, etc.). Select all applicable routes of administration; record the maximum daily dose. Leave blank if it does not apply.

Antibiotic. Record “Yes” if on the calendar day of admission, the patient received an antibiotic (e.g. levofloxacin, meropenem, ceftriaxone, vancomycin, etc.).

Antifungal. Record “Yes” if on the calendar day of admission, the patient received an antifungal (e.g. amphotericin, fluconazole).

Antimalarial agent. Record “Yes” if on the calendar day of admission, the patient received an antimalarial (e.g. artemisinin-based combination therapies, hydroxychloroquine, chloroquine, artesunate, sulfadoxine-pyrimethamine, etc.).

Experimental agent. Record “Yes” if on the calendar day of admission, the patient received an experimental agent for treatment not listed above as an antiviral (e.g. azithromycin, hydroxychloroquine, IVIg, immunomodulators, etc.).

Non-steroidal anti-inflammatory (NSAID). Record “Yes” if on the calendar day of admission, the patient received an NSAID (e.g. ibuprofen, ketorolac, naproxen, etc.). Do not include low-dose aspirin taken for cardioprotective purposes.

Angiotensin converting enzyme inhibitors (ACE inhibitors). Record “Yes” if patient reports taking any ACE inhibitor (e.g. captopril, lisinopril, etc.).

Angiotensin II receptor blockers (ARBs). Record “Yes” if patient reports taking any ARB (e.g. losartan, valsartan) in the 14 days prior to admission.

Systemic anticoagulation. Record “Yes” if on the calendar day of admission, the patient received systemic anticoagulation (e.g. heparin in any formulation, warfarin, etc.).

1h. SUPPORTIVE CARE

Please record all treatments received on the day of admission. For patients admitted late in the evening or at night, please include medications up to and including those started the first time the patient was reviewed by the most senior clinician responsible for their care (e.g. consultant or attending).
ICU. Record “Yes” if on the calendar day of admission, the patient was admitted to the intensive care or high dependency unit on the day of admission.

Oxygen therapy. Please provide details of any supplemental oxygen therapy given. Record “Yes” if on the calendar day of admission, the patient received oxygen therapy (e.g. low-flow, high-flow, face mask). If the patient received oxygen therapy, record the highest flow administered on the calendar of admission. Leave blank if it does not apply. If the patient received oxygen therapy, record the source of oxygen. If multiple sources used, select the most common source. Leave blank if it does not apply. If the patient received oxygen therapy, record which interface was used. If multiple interfaces used, select the primary interface used. Leave blank if it does not apply.

Non-invasive ventilation. Record “Yes” if on the calendar day of admission, the patient received non-invasive ventilation. Please include any positive-pressure treatment given via a tight-fitted mask. This can be a continuous positive pressure (CPAP) or a pressure that changes with the breathing cycle (BIPAP).

Invasive ventilation. Record “Yes” if on the calendar day of admission, the patient received invasive ventilation (e.g. mechanical ventilation with a ventilator). Do not include patients who are breathing independently via a tracheostomy.

PEEP. If on the calendar day of admission, the patient received ventilation, record the positive end-expiratory pressure (PEEP) (cmH₂O) measured closest to 0800.

FiO₂. If on the calendar day of admission, the patient received invasive ventilation, record the fraction of inspired oxygen (FiO₂) (%) measured closest to 08:00. If on the calendar day of admission, the patient received invasive ventilation, record the plateau pressure (cmH₂O) measured closest to 08:00.

PaCO₂. If on the calendar day of admission, the patient received invasive ventilation and had an arterial blood gas drawn, record the arterial partial pressure of carbon dioxide (PaCO₂) recorded closest to 08:00.

PaO₂. If on the calendar day of admission, the patient received invasive ventilation and had an arterial blood gas drawn, record the arterial partial pressure of oxygen (PaO₂) recorded closest to 08:00.
**Extracorporeal support.** Record “yes” if on the calendar day of admission, the patient received extracorporeal support (e.g. ECMO, ECLS, E-CPR).

**Prone position.** Please record for any ventilated patients if they have been in the prone position to aid their ventilation.

**Inotropes/vasopressors.** Record “Yes” if on the calendar day of admission, the patient received inotropes/vasopressors as a continuous infusion (e.g. epinephrine/ adrenaline, norepinephrine, vasopressin, etc.).

### 1. LABORATORY RESULTS ON ADMISSION

Please include results in the first 24 hours following admission. For tests that were repeated for clinical reasons, please include the first measurement. Please specify the units utilized for each measurement.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value*</th>
<th>Units</th>
<th>Parameter</th>
<th>Value*</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hb/hematocrit</td>
<td></td>
<td>g/dL/mm³</td>
<td>Creatinine</td>
<td></td>
<td>mg/L/µmol/L</td>
</tr>
<tr>
<td>WBC count</td>
<td></td>
<td>/µL      (+x10⁹/L)</td>
<td>Sodium</td>
<td></td>
<td>mEq/L mmol/L</td>
</tr>
<tr>
<td>Platelets</td>
<td></td>
<td>/µL      (+x10⁹/L)</td>
<td>Potassium</td>
<td></td>
<td>mEq/L mmol/L</td>
</tr>
<tr>
<td>APTT/APTR</td>
<td></td>
<td>seconds</td>
<td>Procalcitonin</td>
<td></td>
<td>ng/mL µg/L</td>
</tr>
<tr>
<td>PT (seconds)</td>
<td></td>
<td>seconds</td>
<td>LDH</td>
<td></td>
<td>IUL</td>
</tr>
<tr>
<td>INR</td>
<td></td>
<td></td>
<td>Creatine kinase</td>
<td></td>
<td>IUL/µKAT/L</td>
</tr>
<tr>
<td>ALT/AST</td>
<td></td>
<td>IUL</td>
<td>Troponin</td>
<td></td>
<td>ng/mL µg/L</td>
</tr>
<tr>
<td>Total bilirubin</td>
<td></td>
<td>mg/L µmol/L</td>
<td>ESR</td>
<td></td>
<td>mm/hour</td>
</tr>
<tr>
<td>Urea (BUN)</td>
<td></td>
<td>mg/dL g/dL mmol/L</td>
<td>Ferritin</td>
<td></td>
<td>ng/mL µg/L</td>
</tr>
<tr>
<td>Lactate</td>
<td></td>
<td>mg/dL mmol/L</td>
<td>IL-6</td>
<td></td>
<td>pg/mL</td>
</tr>
</tbody>
</table>
MODULE 2. DAILY FOLLOW UP DURING HOSPITAL STAY

Complete daily during hospital stay and for as many days as resources allow. Please state the date of follow-up for this form. All data should refer to that calendar date, from midnight to midnight.

2a. VITAL SIGNS
Record one value for the calendar day (midnight to midnight) for the date of follow-up stated on the form.

**Temperature.** Please state the greatest recorded temperature in degrees Celsius.

**Heart rate.** Please state the greatest recorded heart rate.

**Respiratory rate.** Please state the greatest recorded respiratory rate.

**Blood pressure.** Please state the lowest recorded blood pressure.

**Severe dehydration.** Please record if severe dehydration was present at any point during the follow-up day. Signs of severe dehydration include dry mucous membranes, low volumes of dark-coloured urine, sunken eyes, reduced skin elasticity.

**Sternal capillary refill time.** Please record if sternal capillary refill time was > 2 seconds. This is assessed by pressing on the sternum for 5 seconds until the underlying skin turns white and then noting the time for the colour to return when the pressure is released.

**Oxygen saturation.** Please state the lowest reliable oxygen saturation recorded. Record the first documented patient peripheral oxygen saturation measurement as a percentage. Record whether the first documented patient peripheral oxygen saturation measurement occurred while the patient was breathing room air or any form of supplemental oxygen. Record "Unknown" if it is unclear whether the patient was breathing room air or oxygen at the time of the measurement. Sometimes a low measurement is obtained by pulse oximetry due to poor peripheral perfusion, and a warmer body site will give a greater value. In these circumstances, where the pulse oximeter has given two different readings in succession, with no change to oxygen therapy, the greater measurement should be recorded. If the low measurement was accepted by the clinical team and changes to oxygen therapy were made before a repeat measurement, then the lowest reading should be stated.
AVPU. Record the patient's first documented level of consciousness/mental status: patient was alert and appropriate (A); patient responds to verbal commands (V); patient responds to pressure or pain (P); patient unresponsive to any stimulus (U).

Glasgow Coma Scale. Record the patient's first documented level of consciousness/mental status.

Eye response (E): 1 = No opening of the eye; 2 = Eye opening in response to pain, such as squeezing the person's fingernail; 3 = Eye opening to speech; 4 = Eyes opening spontaneously.

Verbal response (V): 1 = No verbal response; 2 = Incomprehensible sounds, for example, moaning but no words; 3 = Inappropriate words such as random or exclamatory speech, nonsensical words; 4 = Confused, as in responds to questions but with some disorientation and confusion; 5 = Oriented, as in the person responds coherently and appropriately to questions.

Motor response (M): 1 = No motor response; 2 = Decerebrate posturing accentuated by pain (extensor response: adduction of arm, internal rotation of shoulder, pronation of forearm and extension at elbow, flexion of wrist and fingers, leg extension, plantarflexion of foot); 3 = Decorticate posturing accentuated by pain (flexor response: internal rotation of shoulder, flexion of forearm and wrist with clenched fist, leg extension, plantarflexion of foot); 4 = Withdrawal from pain (absence of abnormal posturing; unable to lift hand past chin with supraorbital pain but does pull away when nailbed is pinched); 5 = Localizes to pain (purposeful movements towards painful stimuli; e.g. brings hand up beyond chin when supraorbital pressure applied); 6 = Obeys commands (the person does simple things as asked).

2b. DAILY CLINICAL FEATURES

Record “yes” for all that were present at any time during the date of follow-up stated on the form.
**2c. LABORATORY RESULTS**

Please state all laboratory results for the calendar day (midnight to midnight) of follow-up stated on the form. The day of follow-up for this form should correspond to the date of sample collection, not the date when the laboratory reported the result. If a test was repeated to monitor progress (e.g. following treatment for an electrolyte abnormality) please state the most abnormal result (i.e. the result furthest from the normal physiological range as stated by your laboratory). Please reports these results with the unit used in your laboratory in the value column.

**2d. MEDICATION**

Please record if the patient received any of these medications on the date stated on this follow-up form. Please select as many treatments as are applicable.

**Oral/orogastric fluids.** Include any fluids delivered clinically but not patients drinking fluids normally.

**Intravenous fluids.** Record “Yes” if on the calendar day of follow up, the patient received intravenous fluids for rehydration, maintenance requirements or resuscitation.

**Antiviral.** Record “Yes” if on the calendar day of admission, the patient received an antiviral. Please which drug was taken among those listed. Specify other drug (e.g. remdesivir, etc.) in the free text field.

**Corticosteroid.** Record “Yes” if on the calendar day of follow up, the patient received a corticosteroid (e.g. hydrocortisone, decadron, prednisone, beclomethasone, budesonide, etc.). Select all applicable routes of administration; record the maximum daily dose. Leave blank if it does not apply.

**Antibiotic.** Record “Yes” if on the calendar day of follow up, the patient received an antibiotic (e.g. levofloxacin, meropenem, ceftriaxone, vancomycin, etc.).

**Antifungal.** Record “Yes” if on the calendar day of follow up, the patient received an antifungal (e.g. amphotericin, fluconazole).
Antimalarial agent. Record “Yes” if on the calendar day of follow up, the patient received an antimalarial (e.g. artemisinin-based combination therapies, hydroxychloroquine, chloroquine, artesunate, sulfadoxine-pyrimethamine, etc.).

Experimental agent. Record “Yes” if on the calendar day of follow up, the patient received an experimental agent for treatment not listed above as an antiviral (e.g. azithromycin, hydroxychloroquine, IVIg, immunomodulators, etc.).

For non-steroidal anti-inflammatory (NSAID). Record “Yes” if on the calendar day of follow up, the patient received an NSAID (e.g. ibuprofen, ketorolac, naproxen, etc.). Do not include low-dose aspirin taken for cardioprotective purposes.

Angiotensin converting enzyme inhibitors (ACE inhibitors). Record “Yes” if patient reports taking any ACE inhibitor (e.g. captopril, lisinopril, etc.) on the calendar day of follow up.

Angiotensin II receptor blockers (ARBs). Record “Yes” if patient reports taking any ARB (e.g. losartan, valsartan) on the calendar day of follow up.

Systemic anticoagulation. Record “Yes” if on the calendar day of follow up, the patient received systemic anticoagulation (e.g. heparin in any formulation, warfarin, etc.).

2e. SUPPORTIVE CARE

Please record all treatments received on the calendar day of follow up.

ICU. Record “Yes” if on the calendar day of follow up, the patient was admitted to the intensive care or high dependency unit on the day of admission.

Oxygen therapy. Please provide details of any supplemental oxygen therapy given. Record “Yes” if on the calendar day of follow up the patient received oxygen therapy (e.g. low-flow, high-flow, face mask). If the patient received oxygen therapy, record the highest flow administered on the calendar day. Leave blank if it does not apply. If the patient received oxygen therapy, record the source of oxygen. If multiple sources used, select the most common source. Leave blank if it does not apply. If the patient received oxygen therapy, record which interface was used. If multiple interfaces used, select the primary interface used. Leave blank if it does not apply.
Non-invasive ventilation. Record “Yes” if on the calendar day of follow up the patient received non-invasive ventilation. Please include any positive-pressure treatment given via a tight-fitted mask. This can be a continuous positive pressure (CPAP) or a pressure that changes with the breathing cycle (BIPAP).

Invasive ventilation. Record “Yes” if on the calendar day of follow up the patient received invasive ventilation (e.g. mechanical ventilation with a ventilator). Do not include patients who are breathing independently via a tracheostomy.

PEEP. If on the calendar day of follow up the patient received invasive ventilation, record the positive end-expiratory pressure (PEEP) (cmH₂O) measured closest to 08:00.

FiO₂. If on the calendar day of follow up the patient received invasive ventilation, record the fraction of inspired oxygen (FiO₂) (%) measured closest to 08:00. If on the calendar day the patient received invasive ventilation, record the plateau pressure (cmH₂O) measured closest to 08:00.

PaCO₂. If on the calendar day of follow up the patient received invasive ventilation and had an arterial blood gas drawn, record the arterial partial pressure of carbon dioxide (PaCO₂) recorded closest to 08:00.

PaO₂. If on the calendar day of follow up the patient received invasive ventilation and had an arterial blood gas drawn, record the arterial partial pressure of oxygen (PaO₂) recorded closest to 08:00.

Extracorporeal support. Record “Yes” if on the calendar day of follow up the patient received extracorporeal support (e.g. ECMO, ECLS, E-CPR).

Prone position. Please record for any ventilated patients if they have been in the prone position to aid their ventilation.

Inotropes/vasopressors. Record “Yes” if on the calendar day of follow up the patient received inotropes/vasopressors as a continuous infusion (e.g. epinephrine/adrenaline, norepinephrine, vasopressin, etc.).

Renal replacement therapy or dialysis. This includes any form of continuous renal replacement therapy or intermittent haemodialysis.
MODULE 3. COMPLETE AT DISCHARGE/DEATH

This page should be completed once a patient is discharged or has died using all available data throughout their stay in hospital.

3a. DIAGNOSTIC/PATHOGEN TESTING

Chest X-ray/CT. Please select “Yes” if a chest X-ray or thoracic CT was performed at any point during the patient’s hospital stay.

Infiltrates present. Please tick that infiltrates are present if they are reported as present by a radiologist. You can also select “Yes” if you are qualified to assess the images, or if a senior member of the clinical team looking after the patient has documented that the images showed “infiltrates”, “consolidation” or “radiological signs of pneumonia”.

Pathogen testing. For each pathogen, select whether the test was positive (the pathogen was found), negative (the pathogen was not found) or the test was not done. Where a pathogen was identified, please specify the organism identified as precisely as possible.

3b. COMPLICATIONS

Please select all that were present at any time during the hospital admission.

Shock. An acute, life-threatening circulatory failure. Signs can include tachycardia, tachypnoea, hypotension and altered mental state.

Seizure. A seizure, convulsion or “fit” is an involuntary rhythmic contraction of muscles. Select “Yes” for any seizure regardless of cause (e.g. febrile or due to epilepsy).

Meningitis/encephalitis. Inflammation of the meninges or the brain. Select “Yes” if diagnosed clinically, radiologically or microbiologically.
**Anaemia.** Select “Yes” if haemoglobin levels were lower than age- and sex-specific thresholds listed below.

<table>
<thead>
<tr>
<th>Age and sex</th>
<th>Haemoglobin threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>g/L</td>
</tr>
<tr>
<td>Age 6 months to 5 years</td>
<td>110</td>
</tr>
<tr>
<td>Age 5–12 years</td>
<td>115</td>
</tr>
<tr>
<td>Age 12–15 years</td>
<td>120</td>
</tr>
<tr>
<td>Age &gt; 15 years, non-pregnant women</td>
<td>120</td>
</tr>
<tr>
<td>Pregnant women</td>
<td>110</td>
</tr>
<tr>
<td>Age &gt; 15 years, men</td>
<td>130</td>
</tr>
</tbody>
</table>

**Cardiac arrhythmia.** Record “Yes” if at any time during hospitalization the patient was diagnosed with a cardiac arrhythmia (e.g. ventricular tachycardia, ventricular fibrillation, long QT, atrial fibrillation, atrial flutter, atrial tachycardia, atrio-ventricular tachycardia, atrioventricular block of any degree, bradycardia, etc.). Do NOT include premature ventricular contractions, premature atrial contractions, sinus pauses, or variations in rhythm due to respirations.

**Cardiac arrest.** Record “Yes” if the patient had a sudden lack of a palpable pulse, with loss of consciousness and absent breathing, preceded or accompanied by one or more of the following signs/symptoms: abnormal breathing, chest pain, shortness of breath, nausea, fatigue, blackouts, dizziness, weakness.

**Pneumonia.** Select “Yes” if radiologically diagnosed pneumonia or if the patient’s discharge diagnosis was recorded as pneumonia. Record “Yes” if at any time during hospitalization the patient was diagnosed with pneumonia from any pathogen (e.g. bacterial, viral, fungal, or unknown). This includes ventilator-associated pneumonia.
Bronchiolitis. This is a clinical diagnosis, generally in children < 2 years old.

Acute respiratory distress syndrome (ARDS): Defined according to Berlin criteria as:
- Occurring within 1 week of a known clinical insult or worsening respiratory symptoms.
- Bilateral radiological opacities not fully explained by effusions, lobar/lung collapse, or nodules.
- Respiratory failure not fully explained by cardiac failure or fluid overload.

Stroke.
- Ischaemic stroke. Record “yes” if the patient has an acute neurological dysfunction caused by focal infarction at single or multiple sites of the brain.
- Intracerebral haemorrhage. Record “yes” if the patient had a focal collection of blood within the brain parenchyma or ventricular system that is not caused by trauma that may lead to acute neurological dysfunction.

Bacteraemia. Growth of bacteria on a blood culture. Select “No” if the only bacteria grown were believed to be a skin contaminant.

Bleeding. Please record “Yes” for haemorrhage from any site.

Endocarditis. Inflammation of the endocardium (inner lining of the heart). Diagnosis is according to modified Duke criteria, using evidence from microbiological results, echocardiogram and clinical signs.

Myocarditis/pericarditis. Inflammation of the heart or pericardium (outer lining of the heart). Diagnosis can be reached from results of imaging, ECG, biochemistry and haematology results.

Acute renal injury. Record “Yes” if at any time during hospitalization the patient was diagnosed with acute renal or kidney injury (AKI) or renal insufficiency. Acute renal injury is defined as any of:
- Increase in serum creatinine by ≥ 0.3 mg/dL (≥ 26.5 µmol/L) within 48 hours.
- Increase in serum creatinine to ≥ 1.5 times baseline, which is known or presumed to have occurred within the prior 7 days.
- Urine volume < 0.5 mL/kg/hour for 6 hours.
**Pancreatitis.** Inflammation of the pancreas, diagnosed from clinical, biochemical, radiological or histological evidence.

**Liver dysfunction.** Record “Yes” if at any time during hospitalization the patient was diagnosed with liver dysfunction or failure. Defined by any of: an increase in alanine transaminase or aspartate transaminase that is twice the upper limit of the normal range; clinical jaundice; hyperbilirubinemia (blood bilirubin level twice the upper limit of the normal range).

**Cardiomyopathy.** Record “Yes” if at any time during hospitalization the patient was diagnosed with cardiomyopathy or heart failure.

**Other.** Please report any other serious complications during this patient’s stay in hospital.
3c. MEDICATION

Please record if the patient received any of these medications during their stay in hospital or as a medication to take home on discharge.

**Oral/orogastric fluids.** Include any fluids delivered clinically but not patient drinking fluids normally.

**Intravenous fluids.** Record “Yes” if at any point during the patient’s hospital stay, the patient received intravenous fluids for rehydration, maintenance requirements or resuscitation.

**Antiviral.** Record “Yes” if at any point during the patient’s hospital stay, the patient received an antiviral. Please indicate which drug was taken among those listed. Specify other drug (e.g. remdesivir, etc.) in the free text field.

**Corticosteroid.** Record “Yes” if at any point during the patient’s hospital stay, the patient received a corticosteroid (e.g. hydrocortisone, decadron, prednisone, beclomethasone, budesonide, etc.). Select all applicable routes of administration; record the maximum daily dose. Leave blank if it does not apply.

**Antibiotic.** Record “Yes” if at any point during the patient’s hospital stay, the patient received an antibiotic (e.g. levofloxacin, meropenem, ceftriaxone, vancomycin, etc.).

**Antifungal.** Record “Yes” if at any point during the patient’s hospital stay, the patient received an antifungal (e.g. amphotericin, fluconazole).

**Antimalarial agent.** Record “Yes” if at any point during the patient’s hospital stay, the patient received an antimalarial (e.g. artemisinin-based combination therapies, hydroxychloroquine, chloroquine, artesunate, sulfadoxine-pyrimethamine, etc.).

**Experimental agent.** Record “Yes” if at any point during the patient’s hospital stay, the patient received an experimental agent for treatment not listed above as an antiviral (e.g. azithromycin, hydroxychloroquine, IVIg, immunomodulators, etc.).

**For non-steroidal anti-inflammatory (NSAID).** Record “Yes” at any point during the patient’s hospital stay, the patient received an NSAID (e.g. ibuprofen, ketorolac, naproxen, etc.). Do not include low-dose aspirin taken for cardioprotective purposes.

**Systemic anticoagulation.** Record “Yes” if on the calendar day of admission, the patient received systemic anticoagulation (e.g. heparin in any formulation, warfarin, etc.).

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### CRF Completion Guidance

**Oral/orogastric fluids?**
- Yes
- No
- Unknown

**Intravenous fluids?**
- Yes
- No
- Unknown

**Antiviral?**
- Yes
- No
- Unknown

**Corticosteroid?**
- Yes
- No
- Unknown

**Antibiotic?**
- Yes
- No
- Unknown

**Antifungal agent?**
- Yes
- No
- Unknown

**Anti-malarial agent?**
- Yes
- No
- Unknown

**Systemic anticoagulation?**
- Yes
- No
- Unknown
3d. SUPPORTIVE CARE

ICU. Please state whether the patient was admitted to ICU or a high dependency unit at any point during their stay in hospital. Please report the total number of days the patient was in ICU or a high dependency unit.

Please state the date the were admitted to ICU. If they died in ICU or were transferred from your site’s ICU to another hospital’s ICU, please select “in ICU at outcome”, otherwise please record the date they were discharged from ICU.

Oxygen therapy. Please provide details of any supplemental oxygen therapy given. Record “Yes” if on any day during the hospitalization the patient received oxygen therapy (e.g. low-flow, high-flow, face mask). If the patient received oxygen therapy, record the highest flow administered on the calendar day. Leave blank if it does not apply. If the patient received oxygen therapy, record the source of oxygen. If multiple sources used, select the most common source. Leave blank if it does not apply. If the patient received oxygen therapy, record which interface was used. If multiple interfaces used, select the primary interface used. Leave blank if it does not apply.

Non-invasive ventilation. Record “Yes” if on any day during the hospitalization the patient received non-invasive ventilation. Please include any positive-pressure treatment given via a tight-fitted mask. This can be a continuous positive pressure (CPAP) or a pressure that changes with the breathing cycle (BIPAP).

Invasive ventilation. Record “Yes” if on any day during the hospitalization the patient received invasive ventilation (e.g. mechanical ventilation with a ventilator). Do not include patients who are breathing independently via a tracheostomy.

Extracorporeal support. Record “Yes” if on any day during the hospitalization the patient received extracorporeal support (e.g. ECMO, ECLS, E-CPR).

Prone position. Please record for any ventilated patients if they have been in the prone position to aid their ventilation.

Inotropes/vasopressors. Record “Yes” if on any day during the hospitalization the patient received inotropes/vasopressors as a continuous infusion (e.g. epinephrine/adrenaline, norepinephrine, vasopressin, etc.).
Renal replacement therapy or dialysis. This includes any form of continuous renal replacement therapy or intermittent haemodialysis.

3e. OUTCOME

Record the patient's final outcome. Please select only one outcome.

Discharged alive signifies that the patient was discharged to home alive and not for palliative care. It can mean discharge to their usual place of residence before their illness, to the home of a relative or friend, or to a social care facility, because their illness is no longer severe enough to warrant treatment in a medical facility.

Hospitalized signifies that the patient continues to be hospitalized without the possibility of continued data collection.

Transfer to other facility means they have been transferred to another facility that provides medical care. This could be a specialist centre for more intensive treatment or a step-down for rehabilitation. It does not include facilities that solely provide social care (these patients should be listed as discharged alive).

Death means the patient died in the hospital.

Palliative discharge means the patient has been discharged with the expectation that they will not recover from this illness. This could be to a specialist hospice facility, or to their usual home address with anticipatory end of life medications.

Unknown is to be used in cases when the patient is lost to follow-up or the outcome is unknown/undocumented.

Outcome date. Please state the date for the outcome listed above.

If the patient was discharged alive, record the patient's self-care ability at the time of discharge relative to his/her ability PRIOR to this illness (not at the time of admission).