Multisystem inflammatory syndrome (MIS) in children and adolescents temporally related to COVID-19

Definitions

Date of patient assessment
This is the date when the patient was first clinically assessed for MIS. This may be the same data as the date of admission to hospital, or for patients already admitted to hospital, who later develop or are later assessed for symptoms consistent with MIS, enter the date MIS is first clinically assessed.

Hospital admission
For patients admitted to hospital with symptoms consistent with MIS, please enter details for the date of hospital admission. For patients already admitted to hospital, who were later identified with MIS, the original admission date to the hospital should be documented. Where a patient was admitted via multiple hospital departments, count admission from the time they came to the first department during the visit that led to their admission (e.g. arrival at the Emergency Department).

Comorbidities
Comorbidities present before the onset of MIS and that are still present. Do not include any that developed following the onset of MIS.

Oxygen therapy
Include any form of supplemental oxygen received using any methods.

Invasive ventilation
Please include any mechanical ventilation delivered. Do not include patients who are breathing independently via a tracheostomy.

Non-invasive ventilation
Please include any positive-pressure treatment given via a tight-fitted mask. This can be continuous positive pressure (CPAP) or bi-level positive pressure (BIPAP).

Renal replacement therapy or dialysis
Please include any form of continuous renal replacement therapy or intermittent haemodialysis.

Worst result
References to ‘worst result’ refer to those furthest from the normal physiological range or laboratory normal range.
Results that were rejected by the clinical team (e.g. pulse oximetry on poorly perfused extremities, haemolysed blood samples, contaminated microbiology results) should not be reported.
The following measures should be considered as a single observation and documented at the same time:
Blood pressure: Please report the systolic and diastolic blood pressure from the observation with the lowest mean arterial pressure (if mean arterial pressure has not been calculated, report the measurement with lowest systolic blood pressure).
Respiratory rate: If both abnormal low and high rate observed, record the abnormally high rate.
Blood gas results: Please report the measures from the blood gas with the lowest pH (most acidotic).
MIS Temporally Related to COVID-19 Case Report Form Completion Guide

**MODULE 1: PRESENTATION/ADMISSION CASE REPORT FORM**

**PRELIMINARY CASE DEFINITION**

Suspected multisystem inflammatory syndrome (MIS) temporally related to COVID-19 infection:

Initiate completion of the form at the time MIS is first suspected, even if all the criteria in the case definition provided are not met. Submit Module 1 when the initial investigations included in the case definition are available. Therefore, Module 1 can be initiated with incomplete investigations and submitted at a later date when the full information is available.

1a **DEMOGRAPHICS**

Date of birth
Please provide the patient’s date of birth. If this is not known, please provide their age in years OR months.

Ethnicity
Please document the ethnicity reported by the family. Document all that applies.

1b. **DATE OF ONSET OF CURRENT ILLNESS AND VITAL SIGNS**

Date of onset of first symptom or sign
Please provide the date of patient/carer reported onset of the first symptom that you clinically believe was related to this episode of MIS.

Date of onset of fever
Please provide the date of patient/carer reported onset of fever (self-reported or measured)

Temperature
Please enter the peripheral body temperature in degrees Celsius (°C) (rectal if < 3 months) in the space provided.

Heart rate (HR)
Enter the heart rate measured in beats per minute. This may be measured manually or by electronic monitoring.

Respiratory rate (RR)
Enter the respiratory rate in breaths per minute. Manual rather than electronic measurement is preferred where possible. Record the highest respiratory rate documented at first suspicion of MIS.

Systolic BP
Please enter the systolic blood pressure measured in millimetres of mercury (mmHg), in the relevant sections. Use any recognised method for measuring blood pressure.

Diastolic BP
Please enter the diastolic blood pressure measured in millimetres of mercury (mmHg), in the relevant sections. Use any recognised method for measuring blood pressure.

Capillary refill time > 2 seconds
Capillary refill time is measured by pressing on the sternum for five seconds with a finger or thumb until the underlying skin turns white and then noting the time in seconds needed for the colour to return once the pressure is released.

Global COVID-19 Clinical Platform: Case Record Form for suspected cases of Multisystem inflammatory syndrome (MIS) in children and adolescents temporally related to COVID-19

**Preliminary case definition**

Children and adolescents 0–19 years of age with measured or self-reported fever ≥ 3 days AND two or more of the following:

- Rash or bilateral non-purulent conjunctivitis or mucocutaneous inflammation signs (oral, hands or feet)
- Hypertension or shock
- Features of myocardial dysfunction, or pericarditis, or valvulitis, or coronary abnormalities (clinical features, ECHO findings or laboratory markers such as elevated Troponin/NT-proBNP)
- Evidence of coagulopathy (such as abnormal PT, PTT, elevated d-Dimers)
- Acute gastrointestinal problems (such as diarrhoea, vomiting or abdominal pain)

AND

- Elevated markers of inflammation such as CRP, C-reactive protein or procalcitonin
- No other obvious microbial cause of inflammation, including bacterial sepsis, staphylococcal or streptococcal shock syndromes
- Evidence of COVID (RT-PCR, antigen test or serology positive) or likely contact with patients with COVID

NB Consider this syndrome in children with features of typical or atypical Kawasaki disease or toxic shock syndrome.
DATE OF ONSET CONTINUED

**Oxygen saturation**
For all patients, irrespective of ventilation or supplemental oxygen requirement, please enter the percentage oxygen saturation at the time of admission. Measured by pulse oximetry or by arterial blood gas analysis.

**Conscious state**
State the least responsive condition of the patient during the calendar day (not counting normal sleep).

**Mid-upper arm circumference**
Measured as the circumference of the left upper arm at the mid-point between the tip of the shoulder and the tip of elbow.

1c. POSSIBLE SIGNS AND SYMPTOMS OF MULTISYSTEM INFLAMMATORY SYNDROME
Please provide details of the clinical features present when MIS is clinically first suspected, clinically assessed according to local standard/ranges, or follow the WHO standardised age-ranges for children in the WHO pocket guide: www.who.int/maternal_child_adolescent/documents/9241546700/en/

**Fever**
Add the number of days the patient has had fever (self-reported or measured) prior to assessment.

**Oral mucosal inflammation signs**
Examples include redness, swelling, or dryness of the lips; redness of the throat; strawberry tongue.

**Peripheral cutaneous inflammation signs (hands or feet)**
Examples include pain, swelling, or redness of the fingers, toes, hands, or feet.

**Hypotension (age-appropriate)**
Please follow the normal standard ranges for blood pressure appropriate to the age, size, and sex of the child.

**Tachycardia (age-appropriate)**
Please follow the normal standard ranges for heart rate appropriate to the age, size, and sex of the child.

**Prolonged capillary refill time**
A normal capillary refill time should be 2 seconds or less.

**Tachypnoea (age-appropriate)**
Please follow the normal standard ranges for respiratory rate appropriate to the age, size, and sex of the child.

**Respiratory distress**
Any signs of difficulties breathing or achieving adequate oxygenation.
1d. OTHER SIGNS AND SYMPTOMS
Please provide details of any other signs and symptoms present at the time when MIS is first suspected. This is in addition to the clinical features listed in section 1c.

1e. RECENT HISTORY
Hospital discharge date
If patient has been admitted to hospital more than once (prior to this episode) within the last 3 months, record the most recent discharge date.

Similar problems
Similar problems refer to the MIS illness episode and symptoms or previous COVID-19 admission

Any household member (or other contact) with confirmed COVID-19 in previous 4 weeks?
Any person who lives in the same household as the patient, or other close contact with laboratory-confirmed COVID-19 infection diagnosed in the last 4 weeks prior to date of onset of this illness episode.

Past history of Kawasaki disease
A previous clinical diagnosis of Kawasaki disease, prior to the current illness episode.

Family history of Kawasaki disease
Any genetically linked family member with a previous clinical diagnosis of Kawasaki disease.
1f. CO-MORBIDITIES, PAST HISTORY

Please record if any of these comorbidities existed prior to admission. In general, do not include past comorbidities that are no longer ongoing.

**Inflammatory or rheumatological disorder**
This is defined as an inflammatory and degenerative diseases of connective tissue structures. It includes chronic arthropathies and arthritis, connective tissue disorders and vasculitides. Please specify in the space provided.

**Hypertension (age-appropriate)**
Elevated arterial blood pressure diagnosed clinically.

**Other chronic cardiac disease**
Please include any of coronary artery disease, heart failure, congenital heart disease, cardiomyopathy, rheumatic heart disease. Please specify in the space provided.

**Asthma**
Clinician-diagnosed asthma.

**Tuberculosis**
Patients currently receiving treatment for active tuberculosis (any site). Do not include latent tuberculosis.

**Other chronic pulmonary disease**
Please include any of chronic obstructive pulmonary disease (chronic bronchitis, chronic obstructive pulmonary disease (COPD), emphysema), cystic fibrosis, bronchiectasis, interstitial lung disease, pre-existing requirement for long term oxygen therapy. Do not include asthma. Please specify in the space provided.

**Diabetes**
Type 2 diabetes mellitus requiring oral or subcutaneous treatment or insulin dependent Type 1.

**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.

**Asplenia**
Please include any of splenectomy, non-functional spleen, and congenital asplenia.

**Congenital or acquired immune-suppression**
Any congenital or acquired immunodeficiency syndrome. Do not include HIV, which should be entered under HIV. Please specify in the space provided.

**Chronic Kidney Disease**
Please include any of clinician-diagnosed chronic kidney disease or history of kidney transplantation.

**Chronic liver disease**
Any chronic liver disease, including cirrhosis or a history of variceal bleeding, or hepatitis.
CO-MORBIDITIES CONTINUED

Chronic neurological disorder
Include any e.g. cerebral palsy, multiple sclerosis, motor neurone disease, muscular dystrophy, myasthenia gravis, severe learning difficulty.

Haematologic disorder
Any long-term disorder of the red or white blood cells, platelets or coagulation system requiring regular or intermittent treatment. Do not include leukaemia, lymphoma or myeloma, instead include these under malignancy.

HIV
History of laboratory-confirmed HIV infection.

Other
List any significant risk factors or comorbidities that existed prior to admission and are ongoing, that are not already listed.

1g. PRE-ADMISSION AND CHRONIC MEDICATION
Taken within 14 days of admission.

Non-steroidal anti-inflammatory (NSAIDs): Examples include aspirin, ibuprofen, naproxen, celecoxib, diclofenac, diflunisal, etodolac, indomethacin, ketoprofen, ketorolac, nabumetone, oxaprozin, piroxicam, salsalate, sulindac, tolmetin. Specify generic names and route

Steroids: Examples include prednisolone, betamethasone, dexamethasone, hydrocortisone, methylprednisolone, deflazacort and fludrocortisone. Specify generic names and route

Any other medication: Any other medications taken in the 14 days prior to admission.

1h. LABORATORY RESULTS
Please record all laboratory results available from tests conducted on the day MIS is first suspected. If the unit of measurement is different from those listed, please record the unit. Additional units will be available in the eCRF. If you cannot find the unit used in the eCRF, please use a unit converter such as: http://unitslab.com/ or equivalent or email us to let us know

Please give the ‘worst value’, which refers to values furthest from the normal physiological range or laboratory normal range. Results that were rejected by the clinical team (e.g. haemolysed blood samples) should not be reported.

Total WBC count is the total white blood cell count in blood.

Haematocrit (Ht or HCT), also known as packed cell volume (PCV) or erythrocyte volume fraction (EVF), is the volume percentage (%) of red blood cells in blood.

APTT is the activated partial thromboplastin time. Record the highest value.

APTR is the activated partial thromboplastin ratio. Record the highest value.

PT is the prothrombin time. Record the highest value.

INR is the international normalised ratio. Record the highest value.

Procalcitonin or PCT refers to blood procalcitonin. Record the highest value.

CRP is C-reactive protein and refers to the blood (serum or plasma) CRP level. Record the highest value.

Creatinine refers to serum creatinine. Record the highest value.
LABORATORY RESULTS CONTINUED

Blood urea nitrogen is also known as ‘urea’, measured in a blood sample. Record the highest value.

Pro-BNP (also called NT-proBNP) is pro B-type natriuretic peptide. Record the highest value.

Troponin refers to type of Troponin and the highest value.

Creatine kinase (CK, or creatine phosphokinase, CPK) refers to total creatine kinase measured in the blood. Record the highest value.

LDH is lactate dehydrogenase. Record the highest value.

Triglycerides refers to the total triglycerides measured in the blood.

ALT/SGPT: ALT is alanine transaminase (also called serum glutamic pyruvate transaminase, SGPT). Record the highest value.

Total Bilirubin refers to total bilirubin measured in the blood. Record the highest value.

ESR is the erythrocyte sedimentation rate. Record the highest value.

D-dimer Record the highest value.

IL-6 is Interleukin 6. Record the highest value.

IL-10 is Interleukin 10. Record the highest value.

AST/SGOT is aspartate transaminase (also called serum glutamic oxaloacetic transaminase, SGOT). Record the highest value.

Lactate refers to blood lactate. Record the highest value.

Ferritin Record the highest value.

1i. IMAGING AND PATHOGEN TESTING

Please complete this section with the results of any tests that were ordered as the time MIS is first suspected. Record if a test was performed even if findings were normal. If abnormal findings were detected, specify these in the free text field.

Chest X-ray/CT performed
Record if X-ray and/or CT were performed, if infiltrates and any other significant findings.

ECG performed
Record if an electrocardiogram (ECG) was performed, even if the result was normal. Indicate any significant findings.

Echocardiography performed
Record if echocardiography was performed, even if the result was normal. Indicate any significant findings.

Other cardiac imaging performed
Record any other cardiac imaging performed, e.g. cardiac MRI. Please specify the type of imaging and the results in the space provided.
MODULE 2: OUTCOME CASE REPORT FORM

Complete and submit this module at the time of discharge or death. Please include all relevant information from post-admission or post-first day MIS clinically assessed up to the time of discharge/death. Do not repeat data entered in Section 1.

2a. SUMMARY OF CLINICAL FEATURES OF CURRENT ILLNESS

Please include all signs and symptoms clinically assessed between admission and discharge/death. Clinically assessed according to local standard ranges, or for information see the WHO standardised age-ranges for children see the WHO pocket guide:
www.who.int/maternal_child_adolescent/documents/9241546700/en/

Oral mucosal inflammation signs
Examples include redness, swelling, or dryness of the lips; redness of the throat; strawberry tongue.

Peripheral cutaneous inflammation signs (hands or feet)
Examples include pain, swelling, or redness of the fingers, toes, hands, or feet.

Hypotension (age-appropriate)
Please follow the normal standard ranges for blood pressure appropriate to the age, size, and sex of the child.

Tachycardia (age-appropriate)
Please follow the normal standard ranges for heart rate appropriate to the age, size, and sex of the child.

Prolonged capillary refill time
A normal capillary refill time should be 2 seconds or less.

Tachypnoea (age-appropriate)
Please follow the normal standard ranges for respiratory rate appropriate to the age, size, and sex of the child.

2b. LABORATORY RESULTS

Please record the most abnormal result between admission up to the time of discharge/death. If the unit of measurement is different from those listed, please record the units. Results that were rejected by the clinical team (e.g. haemolysed blood samples) should not be reported. For individual parameters see guidance in section 1h.

---

### 2a. SUMMARY OF CLINICAL FEATURES OF CURRENT ILLNESS

- **Fever**
  - Yes
  - No
  - Unknown
  - Maximum temperature during the hospital admission ___(°C) (if not applicable write ‘NA’)
  - Duration of fever during the admission ___ days (if not applicable write ‘NA’)

- **Rash**
  - Yes
  - No
  - Unknown
  - If yes type of rash

- **Bilateral conjunctivitis**
  - Yes
  - Purulent
  - Yes, non-purulent
  - No
  - Unknown

- **Oral mucosal inflammation signs**
  - Yes
  - No
  - Unknown

- **Peripheral cutaneous inflammation signs (hands or feet)**
  - Yes
  - No
  - Unknown

- **Hypotension (age-appropriate)**
  - Yes
  - No
  - Unknown

- **Prolonged capillary refill time**
  - Yes
  - No
  - Unknown

- **Pale/mottled skin**
  - Yes
  - No
  - Unknown

- **Cold hands/feet**
  - Yes
  - No
  - Unknown

- **Urinary output < 2 mL/kg/hour**
  - Yes
  - No
  - Unknown

- **Chest pain**
  - Yes
  - No
  - Unknown

- **Tachypnoea (age-appropriate)**
  - Yes
  - No
  - Unknown

- **Respiratory distress**
  - Yes
  - No
  - Unknown

- **Abdominal pain**
  - Yes
  - No
  - Unknown

- **Diarrhoea**
  - Yes
  - No
  - Unknown

- **Vomiting**
  - Yes
  - No
  - Unknown

**Other, specify**

---

### 2b. LABORATORY RESULTS

(Record the most abnormal result during the hospital admission up to the time of discharge/death) (‘Record units if different from those listed’)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Most abnormal value(^a) (and Date)</th>
<th>Parameter</th>
<th>Most abnormal value(^a) (and Date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hb (g/dL)</td>
<td></td>
<td>Creatinine (mmol/L)</td>
<td></td>
</tr>
<tr>
<td>Total WBC count (x10(^9)/L)</td>
<td>Sodium (mmol/L)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neutrophils (x10(^9)/L)</td>
<td>Potassium (mmol/L)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lymphocytes (x10(^9)/L)</td>
<td>Urea (BUN) (mmol/L)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hb (g/dL)</td>
<td>Glucose (mmol/L)</td>
<td>Platelets (x10(^9)/L)</td>
<td>Pro-BNP (pg/mL)</td>
</tr>
<tr>
<td>APTT/INR</td>
<td>Troponin (ng/mL)</td>
<td>PT (seconds)</td>
<td>Creatine kinase (U/L)</td>
</tr>
<tr>
<td>INR</td>
<td>LDH (UI/L)</td>
<td>Fibrinogen (g/L)</td>
<td>Triglycerides</td>
</tr>
<tr>
<td>Procalcitonin (ng/mL)</td>
<td>ALI/SAO2 (U/L)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRP (mg/L)</td>
<td>Total bilirubin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESR (mm/hr)</td>
<td>AST/ALT (U/L)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D-dimer (mg/L)</td>
<td>Albumin (g/dL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IL-6 (pg/mL)</td>
<td>Lactate (mmol/L)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IL-10 (pg/mL)</td>
<td>Ferritin (ng/mL)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) Where available, record the lowest and highest abnormal value in parenthesis.
2c. IMAGING/PATHOGEN TESTING
Please include the most abnormal results post-admission or post-first day MIS clinically assessed up to the time of discharge/death.

Chest X-ray/CT performed
Record if X-ray and/or CT were performed, even if no infiltrates were present.

Echocardiography performed
Record if echocardiography was performed, even if the result was normal. Indicate any significant findings.

ECG performed
Record if an ECG was performed, even if the result was normal. Indicate any significant findings.

Other cardiac imaging performed
Record any other cardiac imaging performed, e.g. cardiac MRI. Please specify the type of imaging and the results in the space provided.

Bacterial pathogen testing
Please record if the patient was tested for bacterial pathogens and the result.

SARS-CoV-2 testing
Please complete all of this section even if the tests were not done or the result was negative. Please provide the site of specimen collection or the titre where indicated.

Other tests
Please specify any other pathogen tests that were done and provide the results in the space provided.

Results that were rejected by the clinical team (e.g. contaminated microbiology results) should not be reported.

If no pathogen testing: Clinically diagnosed COVID-19
If no pathogen testing was conducted, please indicate if the patient had a clinical diagnosis of COVID-19.
2d. **TREATMENT**

At any time during the hospital admission post-admission or post-first day MIS clinically assessed up to the time of discharge/death, did the patient receive any of the treatments listed.

**Fluids**

Please record if the patient received fluids via a feeding tube, oral or intravenously.

**Corticosteroid**

‘Corticosteroids’ (commonly referred to as ‘steroids’). Examples include: prednisolone, prednisone, methyl-prednisolone, dexamethasone, hydrocortisone, flucicasone, betamethasone (note that other examples exist). Please include the route and the maximum daily dose.

**IV immune globulin**

Please provide the daily dose and the number of days of treatment.

**Immunomodulators**

Examples include tofacitinib, cyclosporine, tacrolimus, sirolimus, everolimus, azathioprine, leflunomide, mycophenolate, and biologics such as abatacept, adalimumab, anakinra, certolizumab, etanercept, adalimumab, infliximab, and rituximab. Please provide the generic name and the route.

**Antibiotic**

Please provide the generic name and the route.

**Antifungal agent**

Examples include fluconazole, amphotericin, caspofungin, anidulafungin, posaconazole,itraconazole (note that other examples exist). Please provide the generic name and the route.

**Antimalarial agent**

‘Antimalarial agent’ refers to any agent(s) prescribed in the treatment or prophylaxis against malaria. Examples include chloroquine, hydroxychloroquine, quinine, primaquine (note that other examples exist). Please provide the generic name and the route. Some antimalarials (e.g. doxycycline, clindamycin) are antibiotics and should be included in the antibiotic section.

**Experimental agent**

Please record any other experimental medication, administered to modify the course of illness during the admission (including as part of a clinical trial). Please specify the name and the route.

**Non-steroidal anti-inflammatory (NSAID)**

Examples include aspirin, ibuprofen, naproxen, celecoxib, diclofenac, diflunisal, etodolac, indomethacin, ketoprofen, ketorolac, nabumetone, oxaprozin, piroxicam, salsalate, sulindac, tolmetin. Please provide the generic name and the route.

**Systemic anticoagulation**

‘Anticoagulant’ refers to any agent(s) used to prevent or reduce the risk of blood clots. Examples include warfarin, direct oral anticoagulants (DOACs, e.g. apixaban, rivaroxaban), unfractionated heparin, low molecular weight heparins (LMWHs, e.g. enoxaparin, tinzaparin). Please provide the generic name and the route.

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### MIS Temporally Related to COVID-19 Case Report Form Completion Guide

<table>
<thead>
<tr>
<th><strong>Oral/intranasal fluids?</strong></th>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intravenous fluids?</strong></td>
<td>Yes</td>
<td>No</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

**Antiviral?**

If yes, specify name, route, duration, and specify any antiviral agent(s).

**Corticosteroid (not topical)?**

If yes, specify name, route, duration, and specify any corticosteroid agent(s).

**IV immune globulin?**

If yes, specify name, route, duration.

**Immunomodulators?**

If yes, specify name, route, duration.

**Antibiotic?**

If yes, specify name, route, duration.

**Antifungal agent?**

If yes, specify name, route, duration.

**Antimalarial agent?**

If yes, specify name, route, duration.

**Experimental agent?**

If yes, specify name, route, duration.

**Non-steroidal anti-inflammatory (NSAID)?**

If yes, specify name, route, duration.

**Systemic anticoagulation?**

If yes, specify name, route, duration.

**Other?**

If yes, specify name, route, duration.
TREATMENT CONTINUED

Other
Please record any other treatment given that is not included in any of the sections above, including the generic name and the route of administration.

2e. SUPPORTIVE CARE

Oxygen supplementation therapy
Complete this field for all patients. If any supplemental oxygen (at any concentration) was given by any means of delivery at any point until the time of submission of Module 1, place a cross in the box marked ‘yes’. This includes any supplementary oxygen (O2) delivered via non-invasive facemasks/nasal cannula/mask or via invasive mechanical ventilation. Please also indicate the maximum O2 flow volume. If it is not possible to access record of the absolute highest O2 volume delivered during the admission indicate the highest known.

Prone positioning
If the patient received prone positioning at any time during their hospital stay, please tick ‘yes’.

Non-invasive ventilation
If the patient received non-invasive ventilation (NIV), defined as the provision of ventilatory support through the patient’s upper airway using a mask or similar device, at any time until discharge or death, please tick ‘yes’ and enter the total duration in days if known.

Invasive ventilation (Any)
Invasive ventilation means that patient has undergone tracheal intubation, the mode of intubation may be orotracheal, nasotracheal, or via a cricothyrotomy or tracheotomy. If the patient received invasive ventilation at any time until until discharge or death, please tick ‘yes’, enter the maximum ventilation parameters, and enter the duration in days.

Inotropes/vasopressors
Vasopressor agents include norepinephrine, epinephrine, vasopressin, terlipressin and phenylephrine. Commonly used ‘positive’ inotropes include dobutamine, dopamine, milrinone and adrenaline (epinephrine). If the patient received a vasopressor or inotrope for at least one hour during their hospital stay, please tick ‘yes’ and provide the generic name in the space provided.

Extracorporeal (ECMO) support
ECMO refers to Extra Corporeal Membrane Oxygenation.

HFOV
High frequency oscillatory ventilation (HFOV) is a type of mechanical ventilation which utilises a high respiratory rate and low tidal volume.

Blood transfusion
Blood transfusion is the administration of any blood product.

Renal replacement therapy or dialysis
Please include any form of continuous renal replacement therapy or intermittent haemodialysis.
2f. OUTCOME

Discharged alive 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 means they are still in prolonged hospital stay but the form has been completed.

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).

Left against medical advice means that the medical team responsible for the patient did not feel that they were recovered from their illness enough to be safely discharged but that the legal guardian or responsible for the child has taken them from the hospital or the patient has left.

Outcome date

Please state the date for the outcome listed above.

If Discharged Alive:

Care needs at discharge versus before illness: if the patient requires care at discharge (in terms of activities of daily living) at the same level as before they developed illness then tick ‘same as before illness’. If their care needs have decreased or increased, then tick the appropriate box (‘worse’ or ‘better’).

What was the physician’s impression of the final diagnosis:

Clinician assessment of diagnosis on death or discharge.

Other: please specify if a final diagnosis not listed above was given.

Were there any sequelae present at the time of discharge:

Specify if the patient had any remaining sequelae from this illness episode at the time of discharge, as assessed by a physician/clinician.