

## Appendix 2 (as supplied by the authors): Supplementary table

### Data dictionary for retrospectively collected variables

Data Element	Definition	Specifications
<b>Demographics</b>		
Hospital site	Hospital where the patient was arrived at.	Field type: Categorical (select one only) Field length: 3 digits assigned to each participating hospital site  Valid data: 101 - 907
ED arrival date and time	Date and time the patient arrived to the ED (before triage).	Field type: Date time Field length 14  Valid data: YYYY-MM-DD HH:MM:SS
Sex	The sex of the patient.	Field type: Categorical (select one only) Field length: 1 digit  Valid data: 0, 1, 2  0 = Male 1 = Female 2 = Intersex
Arrival from	The origin of the patient prior to arriving to the ED.	Field type: Categorical (select one only) Field length 1 digit  Valid data: 0-6  0 = Home (community) 1 = No fixed address 2 = Long-term care/Rehab (includes assisted living) 3 = Shelter 4 = Single room occupancy 5 = Inter-hospital transfer 6 = Other
Provide detail around 'Other' arrival	If the origin of the patient prior to arriving to the ED is 'Other', use free text to provide further details.	Field type: Free-text  Valid data: Free text or blank
Postal code	First 3 characters of the postal code of where the patient lives prior to arriving at the ED.	Field type: Character Field length: 3 characters  Valid data: ANA or XXX  XXX = patients originated outside of Canada
Calculated age (in years)	Calculated difference between arrival date and time and data of birth.	Field type: Numeric Field length: 3 digits  Valid data: 0 to 150

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
Age (in months)	Age in months as per recorded in the medical chart if the patient is between 2 to 12 months.	Field type: Numeric Field length: 2 digits  Valid data: 2 to 12
Age (in days) for individuals under 2 months	Age in days as per recorded in the medical chart if the patient is less than 2 months old.	Field type: Numeric Field length: 2 digits  Valid data: 0 to 70
Risk for infection	The state in which the patient was at risk to be infected by SARS-CoV2.	Field type: Categorical (with option to select more than one category) Field length: 1 digit  Valid data: 0 to 8  1 = Travel from country with known cases within 14 days 2 = Institutional exposure (e.g. LTC, prison), 3 = Healthcare worker 4 = Microbiology lab 5 = Household/caregiver contact 6 = Other 7 = Unknown (Nothing documented in charts on risk of infection) 8 = No documented risk for infection (Documented no risk of infection)
Other risk of infection	For the state in which the patient was at risk to be infected by SARS-CoV2 is 'Other', use free text to provide further details.	Field type: Free-text  Valid data: Free text or blank
Institutional type	For patient who had institutional exposure (e.g. LTC, prison), indicate the kind of institutional exposure.	Field type: Categorical (with option to select more than one category) Field length: 1 digit  Valid data: 0 to 5  1 = Correctional Facility 2 = Hospital 3 = Shelter 4 = Long-term care/rehab 5 = Other
Other institutional type	For patient who had 'Other' kind of institutional exposures, use the free text to provide further details.	Field type: Free-text  Valid data: Free text or blank

Data Element Comorbidities	Definition	Specifications
Comorbid conditions	The diagnosis, conditions, problem or circumstances for the patient's ED visit that is in addition to the main diagnosis.	Field type: Categorical (with option to select more than one category) Field length: 2 digits  Valid data: 1 to 23  1 = Congestive heart failure 2 = Coronary artery disease 3 = Hypertension 4 = Asthma 5 = Pulmonary fibrosis 6 = Chronic lung disease 7 = Chronic kidney 8 = Dialysis 9 = Diabetes 10 = Mild liver disease 11 = Moderate/severe 12 = Organ transplant 13 = Chronic neuro 14 = Dementia 15 = Rheumatologic disorder 16 = Active malignant neoplasm 17 = Past malignant neoplasm 18 = Obesity (clinical impression) 19 = Other 20 = Atrial Fibrillation, 21= Psychiatric Condition/Mental Health Diagnosis 22 = Dyslipidemia 23 = Hypothyroidism  Moderate or severe liver disease is defined as cirrhosis with portal hypertension, with or without bleeding or a history of variceal bleeding. Mild liver disease is defined as cirrhosis without portal hypertension or chronic hepatitis.
Other Comorbidity  *Up to 5 other comorbidities is collected	If the comorbidity is 'Other', use the free text to provide further details.	Field type: Free-text  Valid data: Free text or blank

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
Breastfeeding	For female or intersex patient, indicate if patient was breastfeeding prior to arrival to the ED.	Field type: Categorical (select one only) Field length: 1 digit  Valid data: 0, 1, 9  0 = No 1 = Yes 9 = Uncertain
<b>Outpatient Medications</b>		
Medications use pre-ED	Medications use by the patient prior to arriving to the ED.	Field type: Categorical (select one only) Field length: 1 digit  Valid data: 0 to 2  0 = I confirm that I have no access to the patient's pre-ED medication list 1 = I have reviewed the patient's pre-ED medication list and the patient is not on any medications. 2 = Yes, the medications are listed below
Prescription medication pre-ED	Medications prescribed to the patient prior to arriving to the ED.	Field type: Categorical (with option to select more than one category) Field length: 2 digits  Valid data: 0001 to 1100  For the full drug list, refer to <a href="https://canadiancovid19registry.org/">https://canadiancovid19registry.org/</a> .
	*Up to 20 medications is recorded*	
Other medications pre-ED	Medications prescribed to the patient prior to arriving to the ED that is not indicated in the dropdown list.	Field type: Free-text or blank
Over the counter medication	Over the counter medications the patient used prior to arriving to the ED.	Field type: Free-text or blank
ED Arrival Mode	The mode by which the patient arrived to the ED.	Field type: Categorical (Select one only) Field length: 1 digit  Valid data: 0, 1, 2  0 = Self 1 = Ambulance 2 = Police
Treating physician(s)	The physicians who attended to the patient at the ED.	Field type: Free-text  Valid data: Text or blank

Data Element	Definition	Specifications
CTAS	<p>The CTAS assigned to the patient.</p> <p>The CTAS (Canadian Triage and Acuity Scale) is a 5 point scale that emergency rooms (ERs) use to evaluate a patient's acuity level to more accurately define the patient's needs and allow for timely care.</p>	<p>Field type: Categorical (Select one only)</p> <p>Field length: 1 digit</p> <p>Valid data: 1-5</p> <p>1 = requires resuscitation. It includes conditions that are threats to life or imminent risk of deterioration, requiring immediate aggressive interventions (e.g., cardiac arrest, major trauma or shock states).</p> <p>2 = requires emergent care. It includes conditions that are a potential threat to life or limb function requiring rapid medical intervention or delegated acts (e.g., head injury, chest pain, gastrointestinal bleeding, abdominal pain with visceral symptoms, or neonates with hyperbilirubinemia).</p> <p>3 = requires urgent care. It includes conditions that could potentially progress to a serious problem requiring emergency intervention (e.g., mild moderate asthma or dyspnea, moderate trauma, or vomiting and diarrhea in patients younger than 2 years).</p> <p>4 = requires less urgent care. It includes conditions related to patient age, distress, or potential for deterioration or complications that would benefit from intervention or reassurance within 1 to 2 hours (e.g., such as urinary symptoms, mild abdominal pain, or earache).</p> <p>5 = requires non-urgent care. It includes conditions in which investigations or interventions could be delayed or referred to other areas of the hospital or health care system (e.g., a sore throat, menses, conditions related to chronic problems, or psychiatric complaints with no suicidal ideation or attempts).</p>

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
Presenting complaint	The main reason the patient went to the ED. Presenting complaints differ from diagnoses in that the patient may initially present with vague symptoms such as chest pain or swelling, and the clinician later determines the formal diagnosis (e.g., acute myocardial infarction, anaphylactic shock) after examination of the patient. This examination might include laboratory tests or diagnostic interventions. The clinician's diagnosis is not listed on the ED visit record.	Field type: Free-text  Valid data: Text
Arrival heart rate	The heart rate (in beats per minute) of the patient upon arrival to the ED.	Field type: Numeric Field length: 3 digits  Valid data: 0 - 300
Arrival systolic blood pressure	The systolic blood pressure (in mmHg) of the patient upon arrival to the ED.	Field type: Numeric Field length: 3 digits  Valid data: 30 - 300
Arrival diastolic blood pressure	The diastolic blood pressure (in mmHg) of the patient upon arrival to the ED.	Field type: Numeric Field length: 3 digits  Valid data: 20 - 200
Arrival respiratory rate	The respiratory rate (in number of breaths per minute) of the patient upon arrival to the ED.	Field type: Numeric Field length: 2 digits  Valid data: 0 - 80
Arrival oxygen saturation	The oxygen saturation (in percent) of the patient upon arrival to the ED.	Field type: Numeric Field length: 3 digits  Valid data: 0 - 100
Lowest oxygen saturation	The lowest recorded oxygen saturation (in percent) of the patient upon arrival to the ED.	Field type: Numeric Field length: 1 - 3 digits  Valid data: 0 - 100
Arrival temperature	The body temperature of the patient (in Celcius) upon arrival to the ED.	Field type: Numeric Field length: 2 digits  Valid data: 25 - 44
Arrival/triage Glasgow Coma Score (GCS)	The GCS of the patient upon arrival to the ED or at triage.	Field type: Numeric Field length: 2 digits  Valid data: 3 – 15

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
Respiratory distress/ increased work of breathing	Indicate if the patient had respiratory distress/increased work of breathing in ED.	Field type: Categorical (Select one only) Field length: 1 digit  Valid data: 0, 1, 9  0 = No 1 = Yes 9 = Not Documented
Symptoms	Symptoms presented by the patient upon arrival to an ED.	Field type: Categorical (with option to select more than one category) Field length: 2 digits  Valid date: 1 - 29  1 = Cough 2 = Shortness of breath 3 = Fever 4 = Chills 5 = Headache 6 = Nausea/vomiting 7 = Diarrhea 8 = Dysgeusia/anosmia 9 = Sputum production 10 = Hemoptysis (bloody sputum) 11 = Sore throat 12 = Runny nose (rhinorrhea) 13 = Ear pain 14 = Wheezing 15 = Chest pain 16 = Muscle aches (myalgia) 17 = Joint pain (arthralgia) 18 = Fatigue/malaise 19 = Lower chest wall indrawing 20 = Altered consciousness/confusion 21 = Seizures 22 = Abdominal pain 23 = Conjunctivitis 24 = Skin rash 25 = Skin ulcers 26 = Lymphadenopathy 27 = Bleeding (hemorrhage) 28 = Dizziness/Vertigo 29 = None of the above
Bleeding site	For patient with bleeding (hemorrhage) as a symptom, use free text to provide details.	Field type: Free-text  Valid data: Text or blank

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
Other symptoms  *Up to 3 other symptoms are recorded*	If symptoms presented by the patient is not included in the dropdown list, indicated up to three additional symptoms using free text.	Field type: Free-text  Valid data: Text or blank
Date of onset for earliest symptom	The date of the onset of the first symptom.	Field type: Date Field length: 8  Valid data: YYYY-MM-DD and dates ED arrival date
Tobacco Use	Patient's history of tobacco use prior to arrival to the ED.	Field type: Categorical (Select one only) Field length 1 digit  Valid data: 0, 1, 2, 9  0 = Never 1 = Past user 2 = Current user 9 = Unknown
Vaping	Patient's history of vaping prior to arrival to the ED.	Field type: Categorical (Select one only) Field length 1 digit  Valid data: 0, 1, 2, 9  0 = Never 1 = Past user 2 = Current user 9 = Unknown
Alcohol misuse	Patient's history of alcohol misuse prior to arrival to the ED.	Field type: Categorical (Select one only) Field length 1 digit  Valid data: 0, 1, 2, 9  0 = Never 1 = Past user 2 = Current user 9 = Unknown
Illicit substances use	Patient's history of using illicit substances prior to arrival to the ED.	Field type: Categorical (Select one only) Field length 1 digit  Valid data: 0, 1, 2, 9  0 = Never 1 = Past user 2 = Current user 9 = Unknown



<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
Type of illicit substances	For patient with past or current usage of illicit substances prior to arrival to the ED, provide details on the type of illicit substance that used.	Field type: Categorical (with option to select more than one category) Field length: 1 digit  Valid data: 1, 2, 3  1 = Opioids 2 = Stimulants 3 = Cannabis
Other type of illicit substances	For patient with past or current usage of illicit substances prior to arrival to the ED and the type of illicit substances is not listed in the dropdown menu, use free text to provide details.	Field type: Free-text or blank
Code status pre-ED	The type of resuscitation procedures (if any) the patient would receive if her/his heart or breathing were to stop before arriving to the ED.	Field type: Categorical (Select one only) Field length 1 digit  Valid data: 0, 1, 2, 3  0 = Full code 1 = Not documented 2 = Do not resuscitate 3 = Level of care
Level of care pre-ED	If the code status pre-ED is 3 (level of care), use free text to provide details.	Field type: Free-text or blank
Code status in ED	The type of resuscitation procedures (if any) the patient would receive if her/his heart or breathing were to stop after admitted to the ED.	Field type: Categorical (Select one only) Field length 1 digit  Valid data: 0, 1, 2, 3  0 = Full code 1 = Not documented 2 = Do not resuscitate 3 = Level of care (describe in free text below)
Level of care in ED	If the code status pre-ED is 3 (level of care), use free text to provide details.	Field type: Free-text or blank
Oxygen delivered	Indicate if oxygen was delivered to patient in the ED.	Field type: Categorical (Select one only) Field length 1 digit  Valid data: 0, 1  0 = No 1 = Yes

Data Element	Definition	Specifications
Mode of oxygen delivery	Mode of oxygen delivery in ED prior to induction sequence initiated.	Field type: Categorical (with option to select more than one category) Field length 1 digit  Valid data: 1, 2, 3, 4, 5, 6, 7  1 = Nasal prongs 2 = Facemask 3 = Simple rebreather 4 = Non-rebreather 5 = High-flow nasal oxygen (e.g., Optiflow, Airvo) 6 = Bilevel pressure vent 7 = Continuous pressure vent
Nasal prong duration	For patient who received oxygen by nasal prongs, the direction of nasal prong used (in hours) in ED.	Field type: Numeric Field length: 2 digits  Valid data: 0 to 48
Nasal prong max oxygen	For patient who received oxygen by nasal prongs, the maximum oxygen delivered (in L/min) in ED.	Field type: Free text  Valid data: Text
Face mask duration	For patient who received oxygen by face mask, the direction of face mask used (in hours) in ED.	Field type: Numeric Field length: 2 digits  Valid data: 0 to 48
Face mask max oxygen	For patient who received oxygen by Face mask, the maximum oxygen delivered (in L/min) in ED.	Field type: Free text  Valid data: Text
Simple rebreather duration	For patient who received oxygen by simple rebreather, the direction of face mask used (in hours) in ED.	Field type: Numeric Field length: 2 digits  Valid data: 0 to 48
Simple rebreather max oxygen	For patient who received oxygen by simple rebreather, the maximum oxygen delivered (in L/min) in ED.	Field type: Free text  Valid data: Text
Non-rebreather duration	For patient who received oxygen by non-rebreather, the direction of face mask used (in hours) in ED.	Field type: Numeric Field length: 2 digits  Valid data: 0 to 48
Non-rebreather max oxygen	For patient who received oxygen by non-rebreather, the maximum oxygen delivered (in L/min) in ED.	Field type: Free text  Valid data: Text
High-flow nasal oxygen duration	For patient who received oxygen by high-flow nasal, the direction of face mask used (in hours) in ED.	Field type: Numeric Field length: 2 digits  Valid data: 0 to 48
High-flow nasal max oxygen	For patient who received oxygen by high-flow nasal, the maximum oxygen delivered (in L/min) in ED.	Field type: Free text  Valid data: Text

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
Bilevel pressure vent duration	For patient who received oxygen by bilevel pressure vent, the direction of face mask used (in hours) in ED.	Field type: Numeric Field length: 2 digits  Valid data: 0 to 48
Bilevel pressure vent max oxygen	For patient who received oxygen by bilevel pressure vent, the maximum oxygen delivered (in L/min) in ED.	Field type: Free text  Valid data: Text
Continuous pressure vent duration	For patient who received oxygen by continuous pressure vent, the direction of face mask used (in hours) in ED.	Field type: Numeric Field length: 2 digits  Valid data: 0 to 48
Continuous pressure vent duration max oxygen	For patient who received oxygen by continuous pressure vent, the maximum oxygen delivered (in L/min) in ED.	Field type: Free text  Valid data: Text
ED/Pre-hospital Intubation	Indicate if patient received intubation in the ED or prior to arrival to the ED.	Field type: Categorical (Select one only) Field length 1 digit  Valid data: 0, 1  0 = No 1 = Yes
Pre-oxygenation method	For patient who received intubation, indicate the method of pre-oxygenation immediately before intubation in ED.	Field type: Categorical (with option to select more than one category) Field length 1 digit  Valid data: 0 to 9  0 = Bag-mask valve 1 = Nasal prongs 2 = Face mask 3 = Simple rebreather 4 = Non-rebreather 5 = Optiflow 6 = Bilevel pressure vent 7 = Continuous pressure vent 8 = None 9 = Unknown
Bagged	Patient was bagged during intubation in ED.	Field length: Categorical (Select one only)  Valid data: 0, 1, 9  0 = No 1 = Yes 2 = Unknown

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
Paralytic	Paralytic agent used in ED.	Field length: Categorical (with option to select more than one category)  Valid data: 1 to 5  1 = Rocuronium 2 = Succinylcholine 3 = Other 4 = None 5 = Unknown
Other Paralytic	If patient received 'Other' type of paralytic agent in the ED, use free text to provide details.	Field length: Free text  Valid data: Text or blank
Sedative	Sedative agent used in ED.	Field length: Categorical (with option to select more than one category)  Valid data: 1 to 6  1 = Ketamine 2 = Propofol 3 = Midazolam 4 = Etomidate 5 = Dexmedatomidine 6 = Other
Other sedative	If patient received 'Other' type of sedative agent in the ED, use free text to provide details.	Field length: Free text  Valid data: Text or blank
Intubation technique	Intubation technique used in the ED.	Field length: Categorical (with option to select more than one category)  Valid data: 1 to 5  1 = Video laryngoscope 2 = Fiberoptic intubation 3 = Direct laryngoscopy 4 = Blind nasotracheal 5 = Other
Other intubation technique	If patient received 'Other' intubation technique, use free text to provide details.	Field length: Free text  Valid data: Text or blank

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
Intubation outcome	Outcome of the intubation in the ED.	Field length: Categorical (Select one only) Valid data: 0 to 5  0 = First pass success 1 = Second pass success 2 = Third pass success 3 = Rescue device 4 = Surgical airway 5 = Unable to establish airway
Other intubation outcome	If patient had 'Other' intubation outcome, use free text to provide details.	Field length: Free text  Valid data: Text or blank
Adverse events	Adverse events observed during intubation.	Field length: Categorical (with option to select more than one category)  Valid data: 1 to 7  1 = Desaturation < 80% 2 = Desaturation < 70% 3 = Vomiting 4 = Arrhythmia 5 = Cardiac arrest 6 = Intubation awareness 7 = Dental trauma

Data Element	Definition	Specifications
Medication administered in ED	Medications that the patient was administered in the ED.	Field type: Categorical (with option to select more than one category) Field length 2 digits  Valid data: 1 to 40  1 = Acyclovir 2 = Amoxicillin 3 = Amoxicillin / Clavulanate 4 = Apixaban / Edoxaban / Rivaroxaban / Dabigatran 5 = Azithromycin / Clarithromycin 6 = Cefazolin 7 = Cefotaxime 8 = Ceftazidime 9 = Ceftriaxone 10 = Chloroquine 11 = Cisatracurium 12 = Dexamethasone 13 = Dexmedetomidine 14 = Doxycycline 15 = Enoxaparin / Tinzaparin / Dalteparin 16 = Epinephrine 17 = Etomidate 18 = Furosemide 19 = Heparin 20 = Hydrocortisone 21 = Hydroxychloroquine 22 = Ipratropium bromide 23 = Ketamine 24 = Levofloxacin 25 = Lopinivir / Ritonavir 26 = Meropenem 27 = Methylprednisolone 28 = Metronidazole 29 = Moxifloxacin 30 = Norepinephrine 31 = Oseltamivir 32 = Piperacillin 33 = Prednisone 34 = Propofol 35 = Rocuronium 36 = Salbutamol 37 = Succinylcholine 38 = Valacyclovir 39 = Vancomycin 40 = Warfarin

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
No medications	Indicate reason for “No medications” being entered into the database.	Field type: Categorical (Select one only) Field length 1 digit  Valid data: 0, 1  0 = I was unable to obtain this patient’s ED medication information 1 = Confirm that after reviewing patient’s chart information, this patient was not given any of the above medications in the ED.
ED Discharge Diagnosis	The patient’s diagnosis at the time of discharged from the ED.	Field type: Categorical (with option to select more than one category) Field length: 2 digits  0 = Respiratory disease 1 = Suspect COVID-19 2 = Confirmed COVID-19 3 = Influenza/Flu-like illness 4 = Upper Respiratory Tract Infection 5 = Pneumonia 6 = Viral pneumonia 7 = COPD exacerbation 8 = Asthma exacerbation 9 = Congestive heart failure/pulmonary edema 10 = Shortness of Breath, NYD 11 = Cough, NYD 12 = Fever, NYD 13 = Other
Other ED Discharge Diagnosis	If patient’s diagnosis at the time of discharged from the ED was ‘Other”, use free text to provide details.	Field type: Free-text  Valid data: Text
ED Alternate Diagnosis	Any other ED discharge diagnoses listed	Field type: Free-text or blank
ED Disposition	Patient’s type of separation from the ambulatory care services after registration.	Field type: Categorical (Select one only) Field length: 1 digit  0 = Discharged home 1 = Admitted 2 = Left AMA 3 = Transferred to other hospital 4 = Transfer to LTC/Rehab 5 = Death 6 = Other
Other ED disposition	If patient’s type of separation from the ambulatory care services after registration is ‘Other’, use free text to provide details.	Field type: Free-text  Valid data: Text

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
ED Disposition date/time	Date and time the decision was made about the patient's disposition.	Field type: Date time Field length 14  Valid data: YYYY-MM-DD HH:MM:SS and date time is after ED arrive date/time.
<b>Diagnostic Variables</b>		
COVID test pre-ED	Patient received COVID testing done prior to ED visit in the past 14 days.	Field type: Categorical (Select one only) Field length 1 digit  Valid data: 0, 1, 9  0 = No 1 = Yes 9 = Unknown
Source of swab	The type of swab that was done if patient received COVID testing prior to ED visit in the past 14 days.	Field type: Categorical (Select one only) Field length: 2 digits  Valid data: 0 - 12  0 = Nasopharyngeal swab 1 = Mouth swab/saliva 2 = Sputum 3 = Broncho-alveolar lavage 4 = Tracheal aspirate 5 = Feces 6 = Urine 7 = Blood test 8 = Bronchial brush 9 = Nasal wash 10 = Cerebrospinal fluid 11 = Other 12 = Mid-Turbinate swab
Other swab collection	If the type of swab is 'Other', use free text to provide details.	Field type: Free-text or blank
COVID test results pre-ED	Results of COVID testing for patient who received testing prior to ED visit in the past 14 days.	Field type: Categorical (Select one only) Field length: 1 digit  Valid data: 0, 1, 2, 9  0 = Negative 1 = Positive 2 = Indeterminate 9 = Unknown



<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
COVID test date pre-ED	Date of the most recent COVID testing done prior to the ED visit	Field type: Date Field length 8  Valid data: YYYY-MM-DD or blank
COVID test in ED or hospital	Patient received COVID testing in ED/hospital.	Field type: Categorical (Select one only) Field length: 1 digit  Valid data: 0, 1  0 = No 1 = Yes
Method of sample collection  *Up to 20 sample collection entries are recorded*	Sample collection method for patient who received COVID testing in ED/hospital.	Field type: Categorical (Select one only) Field length: 2 digits  Valid data: 0 - 12  0 = Nasopharyngeal swab 1 = Mouth swab/saliva 2 = Sputum 3 = Broncho-alveolar lavage 4 = Tracheal aspirate 5 = Feces 6 = Urine 7 = Blood test 8 = Bronchial brush 9 = Nasal wash 10 = Cerebrospinal fluid 11 = Other 12 = Mid-Turbinate swab
Other method of sample collection  *Up to 20 other sample collection entries are recorded*	For sample collection method indicated as 'Other', use free text to provide details.	Field type: Free-text or blank
COVID test results in ED/hospital  *Up to 20 COVID test results are recorded*	Results of patient's COVID testing in ED/hospital.	Field type: Categorical (Select one only) Field length: 1 digit  Valid data: 0, 1, 2, 9  0 = Negative 1 = Positive 2 = Indeterminate 9 = Unknown

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
COVID test date in ED/hospital	Date of patient's COVID testing in ED/hospital	Field type: Date Field length 8 digits
*Up to 20 COVID test dates are recorded*		Valid data: YYYY-MM-DD or blank
Serology testing	Serology testing for SARS-CoV-2 was done on patient in ED/hospital.	Field type: Categorical (Select one only) Field length: 1 digit
		Valid data: 0, 1, 2, 9
		0 = No 1 = Yes 9 = Unknown
Serology testing date	Date of patient's SARS-CoV-2 serology test in ED/hospital.	Field type: Date Field length 8 digits
Serological test type	Type of serological test used for the patient in ED/hospital.	Field type: Categorical (Select one only) Field length: 2 digits
		Valid data: 0, 1, 2, 9, 11
		0 = Enzyme linked immunosorbent assays (ELISAs) 1 = Lateral flow immunoassays (LFIAs) 2 = Chemiluminescent immunoassays (CLIAs) 9 = Unknown 11 = Other
Other serological test	If the type of serological test used for the patient is 'Other', use free text to provide details.	Field type: Free-text or blank
COVID-19 IgG test result	Patient's COVID-19 IgG test result in mg/dL.	Field type: Numeric Field length: 3 digits
COVID-19 IgM test result	Patient's COVID-19 IgM test result in mg/dL.	Field type: Numeric Field length: 3 digits

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
Bloodwork completion	Completed bloodwork on patient in ED or first bloodwork in hospital.	Field type: Categorical (Select one only) Field length: 1 digit  Valid data: 0, 1  0 = No 1 = Yes
Arrival haemoglobin	Patient's haemoglobin level (in grams per liter) at arrival to the ED.	Field type: Numeric Field length: 3 digits  Valid data: 0 to 200
Arrival white blood cells	Patient's white blood cells (in 10 <sup>9</sup> cells per liter) count per at arrival to the ED.	Field type: Numeric Field length: 3 digits  Valid data: 0 to 300
Arrival neutrophils	Patient's neutrophils count (in cells/microliter) at arrival to the ED.	Field type: Numeric Field length: 2 digits  Valid data: 0 to 50
Arrival lymphocytes	Patient's lymphocytes count (in 10 <sup>9</sup> cells per liter) at arrival to the ED.	Field type: Numeric Field length: 2 digits  Valid data: 0 to 50
Arrival platelets	Patient's platelets count (in 10 <sup>9</sup> cells per liter) at arrival to the ED.	Field type: Numeric Field length: 4 digits  Valid data: 0 to 1000
Arrival sodium	Patient's sodium level (in mmol/L) at arrival to the ED.	Field type: Numeric Field length: 3 digits  Valid data: 0 to 250
Arrival potassium	Patient's potassium level (in mmol/L) at arrival to the ED.	Field type: Numeric Field length: 2 digits  Valid data: 0 to 10
Arrival creatinine	Patient's creatinine level (in µmol/L) at arrival to the ED.	Field type: Numeric Field length: 4 digits  Valid data: 0 to 1000
Arrival alanine aminotransferase (ALT)	Patient's ALT level (in U/L) at arrival to the ED.	Field type: Numeric Field length: 5 digits  Valid data: 0 to 10000

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
Arrival bilirubin	Patient's bilirubin level (in $\mu\text{mol/L}$ ) at arrival to the ED.	Field type: Numeric Field length: 3 digits  Valid data: 0 to 300
Arrival lactate	Patient's lactate level (in $\text{mmol/L}$ ) at arrival to the ED.	Field type: Numeric Field length: 2 digits  Valid data: 0 to 20
International normalised ratio (INR)	Patient's INR at arrival to the ED.	Field type: Numeric Field length: 2 digits  Valid data: 0 to 10
D-dimer	Patient's D-dimer level (in $\mu\text{g FEU/L}$ ) at arrival to the ED.	Field type: Free-text or blank
Procalcitonin	Patient's procalcitonin level (in $\text{ng/mL}$ ) at arrival to the ED.	Field type: Free-text or blank
C-Reactive Protein (CRP)	Patient's CRP level (in $\text{mg/L}$ ) at arrival to the ED.	Field type: Numeric Field length: 3 digits  Valid data: 0 to 500
Troponin	Patient's test result for troponin.	Field type: Categorical (Select one only) Field length: 1 digit  Valid data: 0, 1  0 = Negative 1 = Positive
Troponin I	The level of troponin I (in $\text{ng/mL}$ ) for patient with a positive test result for troponin.	Field type: Numeric Field length: 3 digits  Valid data: 0 to 300
Troponin T	The level of troponin T (in $\text{ng/mL}$ ) for patient with a positive test result for troponin.	Field type: Numeric Field length: 3 digits  Valid data: 0 to 300
Other troponin results	Patient's troponin results not otherwise entered.	Field type: Free-text or blank
First blood gas	Type of patient's first blood gas at arrival to the ED. If arterial blood gas and venous blood gas are available, enter arterial blood gas.	Field type: Categorical (Select one only) Field length: 1 digit  Valid data: 0, 1, 2, 3  0 = None 1 = Venous 2 = Arterial 3 = Capillary

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
Date first blood gas drawn	Date of patient's first blood gas at arrival to the ED.	Field type: Categorical Field length 8 digits  Valid data: YYYY-MM-DD or blank
pH	pH (acidity) measured from patient's first blood gas at arrival to the ED.	Field type: Numeric Field length: 2 digits  Valid data: 6.5 to 7.7
pCO2	Partial pressure of carbon dioxide (torr) measured from patient's first blood gas at arrival to the ED.	Field type: Numeric Field length: 3 digits  Valid data: 0 to 100
pO2	Partial pressure of oxygen (torr) measured from patient's first blood gas at arrival to the ED.	Field type: Numeric Field length: 3 digits  Valid data: 0 to 500
Oxygen saturation	The percent of hemoglobin fully combined with oxygen measured from patient's first blood gas at arrival to the ED.	Field type: Numeric Field length: 3 digits  Valid data: 0 to 100
Other viral swab	Patient received other viral swab.	Field type: Categorical (Select one only) Field length: 2 digits  Valid data: 0, 1  0 = No 1 = Yes
RSV	For patient who received other viral swab test, the patient's result for RSV.	Field type: Categorical (Select one only) Field length: 1 digit  Valid data: 0, 1, 9  0 = Negative 1 = Positive 9 = Unknown
Parainfluenza	For patient who received other viral swab test, the patient's result for parainfluenza.	Field type: Categorical (Select one only) Field length: 1 digit  Valid data: 0, 1, 9  0 = Negative 1 = Positive 9 = Unknown

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
Rhinovirus	For patient who received other viral swab test, the patient's result for rhinovirus.	Field type: Categorical (Select one only) Field length: 1 digit  Valid data: 0, 1, 9  0 = Negative 1 = Positive 9 = Unknown
Metapneumovirus	For patient who received other viral swab test, the patient's result for metapneumovirus.	Field type: Categorical (Select one only) Field length: 1 digit  Valid data: 0, 1, 9  0 = Negative 1 = Positive 9 = Unknown
Influenza	For patient who received other viral swab test, the patient's result for influenza.	Field type: Categorical (Select one only) Field length: 1 digit  Valid data: 0, 1, 9  0 = Negative 1 = Positive 9 = Unknown
Chest X-Ray  *Up to 5 Chest X-Ray results are recorded*	Patient's chest X-ray result in ED/hospital.	Field type: Categorical (with option to select more than one category) Field length: 2 digits  Valid data: 0 to 13  0 = CXR not performed 1 = Focal consolidation 2 = Multi-lobal consolidation 3 = Interstitial pneumonia 4 = Ground glass opacity 5 = Local patchy shadowing 6 = Bilateral patchy shadowing 7 = Interstitial abnormalities 8 = No acute findings 9 = Other 10 = Atelectasis 11 = Pleural effusion 12 = Pulmonary fibrosis 13 = COPD findings

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
Other Chest X-Ray findings	If chest X-ray finding is 'Other', use free text to provide details.	Field type: Free-text or blank
*A maximum of 5 Chest X-Ray results are collected.		
CT Chest	Patient's CT chest result in ED/hospital.	Field type: Categorical (with option to select more than one category) Field length: 2 digits  Valid data: 0 to 14  0 = CT not performed 1 = Focal consolidation 2 = Multi-lobal consolidation 3 = Interstitial pneumonia 4 = Ground glass opacity 5 = Local patchy shadowing 6 = Bilateral patchy shadowing 7 = Interstitial abnormalities 8 = No acute findings 9 = Other 10 = Atelectasis 11 = Pleural effusion 12 = Pulmonary fibrosis 13 = COPD findings 14 = Pulmonary embolism
Other CT Chest	If CT chest finding is 'Other', use free text to provide details.	Field type: Free-text or blank
<b>Hospital Variables</b>		
Patient admit	Patient was admitted to the hospital.	Field type: Categorical (Select one only) Field length: 1 digit  Valid data: 0, 1  0 = No 1 = Yes

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
Level of care after ED	The level of care provided to the patient after admitted to the ED.	Field type: Categorical (Select one only) Field length: 1 digit
*Up to 5 level of care after admitted to the ED are recorded*		0 = Regular room 1 = Isolation room 2 = High acuity/step down 3 = ICU 4 = Hallway 5 = Operating room (without going for surgery) 6 = Room but unable to determine isolation status 7 = Transferred to another hospital
Transfer hospital name	The name of hospital the patient was transferred to.	Field type: Free-text or blank
Date of transfer into level of care	Date of patient submitted to the level of care.	Field type: Date Field length 8
Valid data: YYYY-MM-DD or blank		



Data Element	Definition	Specifications
New medications	New medications administered in ED/hospital.	Field type: Categorical (with option to select more than one category) Field length 2 digits  Valid data: 1 to 40  1 = Acyclovir 2 = Amoxicillin 3 = Amoxicillin / Clavulanate 4 = Apixaban / Edoxaban / Rivaroxaban / Dabigatran 5 = Azithromycin / Clarithromycin 6 = Cefazolin 7 = Cefotaxime 8 = Ceftazidime 9 = Ceftriaxone 10 = Chloroquine 11 = Cisatracurium 12 = Dexamethasone 13 = Dexmedetomidine 14 = Doxycycline 15 = Enoxaparin / Tinzaparin / Dalteparin 16 = Epinephrine 17 = Etomidate 18 = Furosemide 19 = Heparin 20 = Hydrocortisone 21 = Hydroxychloroquine 22 = Ipratropium bromide 23 = Ketamine 24 = Levofloxacin 25 = Lopinivir / Ritonavir 26 = Meropenem 27 = Methylprednisolone 28 = Metronidazole 29 = Moxifloxacin 30 = Norepinephrine 31 = Oseltamivir 32 = Piperacillin 33 = Prednisone 34 = Propofol 35 = Rocuronium 36 = Salbutamol 37 = Succinylcholine 38 = Valacyclovir 39 = Vancomycin 40 = Warfarin

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
No new medications	Indicate reason for no options selected for “New medications in hospital” field.	Field type: Categorical (Select one only) Field length 1 digit  Valid data: 0, 1  0 = I was unable to obtain this patient’s hospital medication information 1 = I confirm that after reviewing patient’s chart information, this patient was not given any of the above medications in hospital
Intubation on ward/in ICU	For patient admitted to the hospital, patient was intubated on ward or in ICU.	Field type: Categorical (Select one only) Field length 1 digit  Valid data: 0, 1, 9  0 = No 1 = Yes 9 = Unknown
Date hospital intubation	Date the patient was intubated.	Field type: Date Field length: 8  Valid data: YYYY-MM-DD or blank
Date hospital extubation	Date the patient was extubated	Field type: Date Field length: 8  Valid data: YYYY-MM-DD or blank
Re-intubation on ward/ICU	For patient admitted to the hospital, patient was re-intubated on ward or in ICU	Field type: Categorical (Select one only) Field length: 1 digit  Valid data: 0, 1, 9  0 = No 1 = Yes 9 = Unknown
Date hospital re-intubation	Date the patient was re-intubated.	Field type: Date Field length: 8  Valid data: YYYY-MM-DD or blank
Date hospital re-extubation	Date the patient was re-extubated	Field type: Date Field length: 8  Valid data: YYYY-MM-DD or blank

<b>Data Element</b>	<b>Definition</b>	<b>Specifications</b>
In-hospital death	In-hospital death is defined death in ED or hospital by any cause.	Yes/No
Date hospital death	Date the patient died in hospital.	Field type: Date Field length: 8  Valid data: YYYY-MM-DD or blank
Hospital discharge diagnosis	The patient's diagnosis at the time of discharge from the hospital.	Field type: Categorical (Select one only) Field length 2 digits  Valid data: 1 to 22  1 = Suspected case of COVID-19 2 = Confirmed case of COVID-19 3 = Upper Respiratory Tract Infection 4 = Pneumonia 5 = Viral pneumonia 6 = Cough = NYD 7 = Fever = NYD 8 = Sinusitis 9 = Pharyngitis 10 = Flu-like Illness 11 = Bronchitis 12 = Chronic obstructive lung disease 13 = Asthma 14 = ARDS Adult respiratory distress syndrome 15 = Pulmonary edema/congestive heart failure 16 = Pulmonary embolism 17 = SOB Shortness of breath 18 = Viral pneumonia 19 = FUO Fever unknown origin 20 = Sepsis = NYD 21 = Chest pain = NYD 22 = Other
*Up to 5 hospital discharge diagnosis are recorded*		
Other hospital discharge diagnosis	If chart indicates hospital discharge diagnosis is 'Other', use free text to provide details.	Field type: Free-text or blank
Comment on discharge diagnosis	Use free text to provide additional information about the patient's diagnosis at the time of discharge from the hospital.	Field type: Free-text or blank
Hospital discharge date	The date patient was discharged from the hospital.	Field type: Date Field length 8  Valid data: YYYY-MM-DD or blank