

Appendix 2 - Multidisciplinary Coded Dataset Suggestions (MCDS) to improve accuracy and consistency of COVID-19 coding

Context

The tables in this document have been amended and updated since inclusion in the December 2020 publication '*GIRFT Clinical practice guide for improving the management of adult COVID-19 patients in secondary care*'.

The tables are designed to support a retrospective data validation process where either an experienced coder, or experienced coder working with a clinician, may wish to go back and check the coding for COVID-19 patients to ensure that data are accurate, complete and consistent.

The tables are not intended to provide a definitive or exhaustive list of codes, nor are they designed to cover all conditions that may be relevant in COVID-19 cases. They are simply an aide memoire to ensure that key relevant factors are captured. It is not recommended that these tables are given to coders as a coding aid or checklist as this is not the purpose of the document.

The content of these tables is not intended to replace or contradict national clinical coding standards and the information presented is only up to date as of 1st February 2021.

When using these tables to assist a review process, it should be borne in mind that the national standards for the coding of COVID-19 have changed a number of times since March 2020. These changes are summarised [here](#).

Main COVID-19 clinical terms for sign and symptoms, diagnoses, and conditions

COVID-19 descriptions (non-obstetric)	Code (ICD-10)	Notes
Symptomatic coronavirus/COVID-19 – confirmed by laboratory testing	U07.1	
Symptomatic coronavirus/COVID-19 – presumed, but laboratory testing inconclusive or unavailable	U07.2	U07.2 should only be assigned when there is a high clinical suspicion of COVID-19 despite negative test results.
Hospital acquired coronavirus/COVID-19 - laboratory confirmed	U07.1 + Y95.X	Use of Y95.X with U07.2 is unlikely to apply. Please refer to 5/10/2020 letter from Mark Wilcox (NHSEI National Infection Prevention & Control Microbiology Lead) sent to Directors of Nursing, Medical Directors and NHS acute providers.
Incidental COVID-19 - confirmed by laboratory testing	U07.1	Use U07.1 in the first available secondary code position immediately after the primary diagnosis (without breaking specific coding rules for the use of the first secondary position, e.g. Z37.-).
Incidental COVID-19 - presumed/clinically diagnosed but not laboratory confirmed	U07.2	Use U07.2 in the first available secondary code position immediately after the primary diagnosis (without breaking specific coding rules for the use of the first secondary position, e.g. Z37.-).
Suspected COVID-19 that was ruled out by testing	Z03.8	Primary diagnosis coded is the main condition treated or symptoms investigated. Assign Z03.8 in a secondary code position.
Personal history of COVID-19	U07.3	This code is used to record the fact that a patient has previously had COVID-19 (confirmed or probable). This code should not be used for primary mortality tabulation.
Post-COVID-19 condition	U07.4	This code is used to establish a link between a current condition and a previous COVID-19 infection. This code can be used alone (for post-COVID as a condition in its own right) or in addition to other codes in line with sequelae coding rules.
Multisystem inflammatory syndrome associated with COVID-19	U07.5	This includes these conditions when they are temporarily associated with COVID-19: cytokine storm; Kawasaki-like syndrome; paediatric inflammatory multisystem syndrome; multisystem inflammatory syndrome in children. Excludes: mucocutaneous lymph node syndrome [Kawasaki] (M30.3).
Vaccination for COVID-19	U07.6	This code is intended to be used when a person who may or may not be sick encounters health services for the specific purpose of receiving a COVID-19 vaccine. Useful reference: Delen coding query resolution on "Need for immunization against COVID-19".
Adverse effect of COVID-19 vaccination	U07.7	This code is to be used as an external cause code (i.e. as a sub category under Y59, "Other and unspecified vaccines and biological substances").

COVID-19 descriptions (obstetric)	Code (ICD-10)	Notes
Symptomatic antenatal/puerperal coronavirus/COVID-19 - laboratory confirmed	U07.1 + O98.5	Code each COVID-19 manifestation.
Symptomatic antenatal/puerperal coronavirus/COVID-19 - presumed but not laboratory confirmed	U07.2 + O98.5	
Symptomatic coronavirus/COVID-19, delivery episode - laboratory confirmed	U07.1 + Z37.-	
Symptomatic coronavirus/COVID-19, delivery episode - presumed but not laboratory confirmed	U07.2 + Z37.-	
Asymptomatic or incidental finding of coronavirus/COVID-19, delivery episode. COVID-19 positive or COVID-19 suspected, presumed or probable.	Primary diagnosis + Z37.- + U07.1 or U07.2	Main condition treated - code from ICD10 chapter XV.

COVID-19 exposure and isolation precautions	Code (ICD-10)	Notes
COVID-19 related isolation (patient treated in side room, patient isolated)	Z29.0	
Suspected or confirmed exposure to COVID-19	Z20.8	This code is not to be used for patients who are COVID-19 positive.

SIGNS AND SYMPTOMS OF COVID-19	Code (ICD10)	Notes
Cough	R05.X	
Shortness of breath, difficulty breathing, dyspnoea	R06.0	
Wheezing	R06.2	
Pain in throat/chest	R07.-	
New loss of smell or taste	R43.-	
Headache	R51.X	
Fever, pyrexia	R50.9	
Fever and chills, rigor	R50.8	
Muscle pain, myalgia	M79.1-	
Fatigue	R53.X	
Abdominal/pelvic pain	R10.-	

DIAGNOSES AND CONDITIONS CAUSED BY OR ASSOCIATED WITH COVID-19		
Pneumonia / Chest infection	Code (ICD-10)	Notes
COVID-19 related pneumonia: pneumonia, lobar pneumonia, bronchopneumonia, pneumonitis	J12.8 + B97.2	
X-ray/CT scan findings supporting a diagnosis of COVID-19 pneumonia such as: consolidation; 'characteristic COVID appearance'; opacification; infiltrates; 'congestion of the lung due to COVID'		If these conditions or findings are mentioned (in a patient with COVID-19), then the patient is likely to have COVID-19 pneumonia. They would not be coded separately to COVID-19 pneumonia.
Alveolitis, proteinaceous exudate, chest infection		
Fibrosis	J84.1 + B97.2	Fibrosis is a COVID-19 associated condition that may need to be coded separately. Fibrosis is long term damage to the lungs. It may or may not be apparent during the acute phase of COVID-19.
Aspiration pneumonia/aspiration pneumonitis, specifically described as such	J69.0	External cause codes W78.- and W79.- It may be useful to capture these external cause codes to help to identify hospital versus community occurrence.
Bacterial pneumonia	J13.X - J15.-	Bacterial pneumonia superimposed on COVID-19 pneumonia will be coded separately using the specific bacterial pneumonia code.

Respiratory distress / respiratory failure	Code (ICD-10)	Notes
Adult respiratory distress syndrome, ARDS	J80.X	
Type 1 acute respiratory failure	J96.00	
Type 2 acute respiratory failure	J96.01	
Type 1 chronic respiratory failure	J96.10	
Type 2 chronic respiratory failure	J96.11	

Upper airways	Code (ICD-10)	Notes
Acute rhinitis, coryza, nasopharyngitis	J00.X	
Acute laryngitis	J04.0	
Acute laryngotracheitis	J04.2	
Acute upper respiratory tract infection, URTI	J06.9	

Cardiac	Code (ICD-10)	Notes
Cardiomyopathy	B33.2D + I43.0A	
Carditis	B33.2D + I52.1A	
Heart failure	I50.-	
Cor pulmonale	I26.0	Includes acute cor pulmonale NOS and pulmonary embolism with acute cor pulmonale.

Gastrointestinal	Code (ICD-10)	Notes
Acute hepatitis	B17.8	
Gastroenteritis/diarrhoea	A08.3	
Liver failure	K72.-	
Intestinal ischaemia/intestinal vascular accident	K55.0	

Vascular/Thromboembolic disease	Code (ICD-10)	Notes
Vasculitis	I77.6	
Thromboembolism	I74.-	
Pulmonary embolism	I26.9	Excludes pulmonary embolism with cor pulmonale (I26.0)
Coagulopathy/coagulation disorder	D68.9	
Deep vein thrombosis, DVT	I80.2	

Neurological	Code (ICD-10)	Notes
Encephalitis	A85.8	
Hypoxic brain injury	G93.1	

Renal	Code (ICD-10)	Notes
Urinary tract infection, UTI	N39.0	
Acute renal failure, acute kidney injury, AKI	N17.9	

Other	Code (ICD-10)	Notes
Metabolic acidosis	E87.2	

Sepsis	Code (ICD-10)	Notes
Sepsis		COVID-19 associated sepsis could be coded to A41.8. However, where a COVID-19 patient has sepsis associated with another infective process, this should be coded in accordance with the national clinical coding standards.
Septic shock	R57.2	

Examples of post-COVID syndromes and sequelae	Code (ICD-10)	Notes
Post-COVID-19 syndrome (diffuse pulmonary fibrosis)	J84.1+ U07.4	These are examples of how the code U07.4 may be used and not an exhaustive list.
Post-COVID-19 pulmonary hypertension	I27.2 + U07.4	
Post-COVID-19 fatigue syndrome	G93.3 + U07.4	

Main COVID-19 clinical terms for interventions and procedures

Oxygenation/ventilation support	Code (OPCS-4)	Notes
Oxygen delivery (high-flow nasal oxygen, OptiFlow, HFNO, HFNC, HFOT)	X52.8	Venturi mask and nasal cannula are methods of oxygen delivery and are not assigned a procedure code unless they are used for the delivery of high flow oxygen.
Continuous positive airway pressure, CPAP	E85.6	
Non-invasive ventilation, NIV	E85.2	
Invasive ventilation, intubation and ventilation, I&V, mechanical ventilation	E85.1	
Cardiorespiratory support, extracorporeal membrane oxygenation, ECMO	X58.1	
Cricothyroidostomy	E42.2	
Surgical tracheostomy	E42.3	
Percutaneous (dilatational) tracheostomy, bronchoscope assisted	E42.3 + Y76.3	If dilatation is of local interest Y40.8 can also be added.
Percutaneous (dilatational) tracheostomy, bronchoscope and video assisted	E42.3 + Y76.3 + Y53.6	If dilatation is of local interest Y40.8 can also be added.
Tracheostomy tube change	E42.6	
Tracheostomy revision (surgical)	E42.4	
Revision of percutaneous (dilatational) tracheostomy, bronchoscope assisted	E42.4 + Y76.3	If dilatation is of local interest Y40.8 can also be added.
Revision of percutaneous (dilatational) tracheostomy, bronchoscope and video assisted	E42.4 + Y76.3 + Y53.6	If dilatation is of local interest Y40.8 can also be added.
Tracheostomy decannulation	E42.7	

Renal replacement therapy	Code (OPCS-4)	Notes
Haemodialysis	X40.3	
Haemofiltration	X40.4	
Peritoneal dialysis	X40.2	

Other	Code (OPCS-4)	Notes
Plasma transfusion	X34.2	