



Feasibility counts for SARS-CoV-2-related codes in CPRD primary care data

January 2021

Background

CPRD primary databases

The Clinical Practice Research Datalink (CPRD) holds longitudinal primary care EHR on 50 million patients, with a median 10 year follow up. CPRD data cover 24% of the UK population (over 16 million patients) currently registered at a network of 1 in every 5 GP practices across the UK, who share patient data with CPRD on a daily basis. CPRD collects fully coded patient electronic health records from GP Practices using the Vision® or EMIS® software systems. Due to some differences in structure and clinical coding in these two systems, these data are provided as two separate primary care databases at present with accompanying metadata and advice to enable researchers to make study-specific decisions on how best to pool these data. CPRD GOLD contains data contributed by practices using Vision® software. CPRD Aurum contains routinely collected data from practices using EMIS Web® electronic patient record system software. Both research databases are updated monthly. The counts in this report are based on the January 2021 database builds of CPRD Aurum and CPRD GOLD.

Context

The novel coronavirus and disease that it causes (COVID-19) are an immediate focus for many research groups globally. CPRD primary care data are a potentially valuable resource to support this research. Feasibility counts to understand whether and how codes relating to SARS-CoV-2 are being recorded in primary care are the first step in establishing the research potential of CPRD data on this topic. The counts in this report should only be presented in the context of a feasibility count within a given data source and/or database (e.g. CPRD GOLD or CPRD Aurum). It would not be appropriate to present these in a publication as incidence or prevalence counts or to use these for surveillance purposes.



Summary counts

The CPRD GOLD January 2021 build includes data from 19.5M patients, of which 3M are currently registered and acceptable¹. A total of 945 GP practices have contributed data to CPRD GOLD of which 394 are currently contributing practices.

The CPRD Aurum January 2021 build includes data from 39.2M patients, of which 13.2M are currently registered and acceptable¹. A total of 1,485 GP practices have contributed data to CPRD Aurum of which 1,370 are currently contributing practices.

The feasibility counts are based on a cohort of patients who have at least one relevant COVID-19 code in the period **02/12/2019 – 31/12/2020** and within their registration period. The patient registration period starts at the patient registration date with the practice and ends at the earliest of the patient transfer out date (de-registration), and the practice last collection date.

601,955 events related to SARS-CoV-2 were recorded in CPRD GOLD in the period 02/12/2019-31/12/2020. Each coded event is counted, irrespective of the distance between consecutive entries. These relate to **309,612** unique patients.

4,362,344 events related to SARS-CoV-2 were recorded in CPRD Aurum in the period 02/12/2019-31/12/2020. Each coded event is counted, irrespective of the distance between consecutive entries. These relate to **2,105,386** unique patients.

Table 1 presents numbers of unique events and patients stratified by gender.

Table 1. SARS-CoV-2 codes by gender

Gender	CPRD GOLD events	CPRD GOLD patients	CPRD Aurum events	CPRD Aurum patients
Male	221,047	131,357	1,624,663	896,016
Female	380,908	178,255	2,737,681	1,209,370

¹ Acceptable patients are identified within the CPRD using pre-defined criteria to assess the research quality of a patient health record



Table 2 presents numbers of unique events and patients stratified by age group. Age at event is calculated as the difference between the year of the event and the year of birth recorded in the CPRD primary care data.

Table 2. SARS-CoV-2 codes by age group

Age Group	CPRD GOLD events	CPRD GOLD patients	CPRD Aurum events	CPRD Aurum patients
0-18	79,315	55,149	609,062	405,593
19-49	280,276	140,677	2,082,275	1,013,138
50-59	100,181	44,996	674,499	281,130
60-69	60,546	28,485	417,812	172,238
70-79	36,609	20,423	256,653	114,383
80+	45,028	19,882	322,043	118,904



Table 3 presents numbers of unique events and patients across the period stratified by practice nation.

Table 3. SARS-CoV-2 codes by practice country

Practice country	Number of currently contributing CPRD practices (n= 1764) ²	Regional coverage of CPRD practices ³	All events (CPRD Aurum + CPRD GOLD)	Patients (CPRD Aurum + CPRD GOLD)
England	1,411 (80%)	21.5%	4,537,750	2212,677
Northern Ireland	52 (2.9%)	15.5%	11,527	6,794
Scotland	197 (11.2%)	19.7%	223,029	99,015
Wales	104 (5.9%)	24.8%	191,993	96,512

Table 4 presents numbers of unique events and the associated number of unique patients stratified by code type (see appendix 1). The number of patients provided is the number of unique patients within each stratification (code type). The same patient may therefore be present in two or more stratifications. Note: There were no vaccination codes in CPRD GOLD.

Table 4. SARS-CoV-2 codes by code type

Code Type	CPRD GOLD events	CPRD GOLD patients	CPRD Aurum events	CPRD Aurum patients
Possible	31,638	26,886	215,483	134,510
Tested	486,144	237,477	2,642,025	1,460,169
Diagnosis	51,011	38,677	372,343	245,522
Advice	33,162	29,357	1,128,876	465,132
Vaccination	0	0	3,617	2,768

Notes:

- The code lists used (see appendix) include both emergency codes created in response to the novel coronavirus and more general coronavirus codes. Though there is a risk of misclassification with the more general codes, these are likely to have been used until the specific codes were made available.
- The CPRD patient data quality indicator, the ‘acceptable’⁴ flag has not been applied. This allows the inclusion of temporary patients.

² Numbers correct at release of January 2021 database builds

³ Based on currently contributing practices and national practice numbers in May 2020.

⁴ Acceptable patients are identified within the CPRD using pre-defined criteria to assess the research quality of a patient health record



- The counts provided have been de-duplicated. Patients in practices that have migrated software system from Vision® to EMIS® have been excluded from the CPRD GOLD counts.
- Due to CPRD's small cell policy, patient counts with fewer than 5 observations have been suppressed.

Appendix 1
CPRD GOLD SARS-CoV-2 code list

medcode	Read code	Term	Code Type
114771	4J3R100	2019-nCoV (novel coronavirus) detected	Tested/Diagnosis
114769	4J3R200	2019-nCoV (novel coronavirus) not detected	Tested
114770	4J3R.00	2019-nCoV (novel coronavirus) serology	Tested
114760	8CAO100	Advice given about 2019-nCoV (novel coronavirus) by telephone	Advice
114754	8CAO.00	Advice given about 2019-nCoV (novel coronavirus) infection	Advice
114891	A7y0000	Coronavirus as cause of dis classified to other chapters	Diagnosis
114731	65PW.00	Coronavirus contact	Possible
50068	A795.00	Coronavirus infection	Diagnosis
91124	43jS.00	Coronavirus nucleic acid detection	Tested
109154	43jS000	Coronavirus nucleic acid detection assay	Tested
110951	43jS100	Coronavirus ribonucleic acid detection assay	Tested
114765	A795100	Disease caused by 2019-nCoV (novel coronavirus)	Diagnosis
114764	65PW100	Exposure to 2019-nCoV (novel coronavirus) infection	Possible
113745	1JX..00	Suspected coronavirus infection	Possible
114766	1JX1.00	Suspected disease caused by 2019-nCoV (novel coronavirus)	Possible
114753	9N31200	Telephone consultation for suspected 2019-nCoV (novel coronavirus)	Possible
114762	AyuDC00	[X]Coronavirus infection, unspecified	Diagnosis
115315	AyuKL00	[X]Coronavirus/cause/diseases classified to other chapters	Diagnosis

CPRD Aurum SARS-CoV-2 code list

medcodeid	Term	snomedctdescriptionid	Type
12990221000006117	2019 novel coronavirus	2808671000000116	Diagnosis
12990761000006117	2019 novel coronavirus detected	2808921000000112	Tested/ Diagnosis
12990791000006113	2019 novel coronavirus not detected	2808931000000114	Tested
12991121000006117	2019 novel coronavirus serology	2808991000000110	Tested
12990521000006119	2019 novel coronavirus vaccination	2808751000000116	Vaccination
13482991000006119	2019 novel coronavirus vaccination	3902341013	Vaccination
12991221000006110	2019 novel coronavirus vaccination invitation SMS (short message service) text message sent	2809181000000118	Vaccination
12991201000006117	2019 novel coronavirus vaccination invitation short message service text message sent	2809141000000114	Vaccination
12990201000006110	2019-nCoV (novel coronavirus)	2807491000000115	Diagnosis



13045201000006113	2019-nCoV (novel coronavirus) IgA arbitrary concentration in serum	2829691000000117	Tested/ Diagnosis
13045121000006113	2019-nCoV (novel coronavirus) IgA detected	2829571000000117	Tested/ Diagnosis
13045141000006118	2019-nCoV (novel coronavirus) IgA detection result equivocal	2829601000000112	Tested
13053151000006118	2019-nCoV (novel coronavirus) IgA detection result indeterminate	2832381000000115	Tested
13045161000006119	2019-nCoV (novel coronavirus) IgA detection result unknown	2829631000000118	Tested
13045181000006112	2019-nCoV (novel coronavirus) IgA not detected	2829661000000111	Tested
13045221000006115	2019-nCoV (novel coronavirus) IgA qualitative existence in specimen	2829721000000114	Tested/ Diagnosis
13032551000006117	2019-nCoV (novel coronavirus) IgG arbitrary concentration in serum	2828191000000116	Tested/ Diagnosis
13032641000006118	2019-nCoV (novel coronavirus) IgG detected	2828761000000111	Tested/ Diagnosis
13032741000006112	2019-nCoV (novel coronavirus) IgG detection result equivocal	2828971000000118	Tested
13053131000006113	2019-nCoV (novel coronavirus) IgG detection result indeterminate	2832391000000118	Tested
13032801000006119	2019-nCoV (novel coronavirus) IgG detection result unknown	2829101000000118	Tested
13032701000006110	2019-nCoV (novel coronavirus) IgG not detected	2828901000000114	Tested
13032511000006118	2019-nCoV (novel coronavirus) IgG qualitative existence in specimen	2828131000000117	Tested/ Diagnosis
13032571000006110	2019-nCoV (novel coronavirus) IgM arbitrary concentration in serum	2828221000000111	Tested/ Diagnosis
13032661000006119	2019-nCoV (novel coronavirus) IgM detected	2828801000000118	Tested/ Diagnosis
13032781000006118	2019-nCoV (novel coronavirus) IgM detection result equivocal	2829071000000110	Tested
13053171000006111	2019-nCoV (novel coronavirus) IgM detection result indeterminate	2832401000000115	Tested
13032721000006117	2019-nCoV (novel coronavirus) IgM detection result unknown	2828941000000112	Tested
13032681000006112	2019-nCoV (novel coronavirus) IgM not detected	2828871000000114	Tested
13032491000006112	2019-nCoV (novel coronavirus) IgM qualitative existence in specimen	2828121000000119	Tested/ Diagnosis
13483581000006117	2019-nCoV (novel coronavirus) RNA (ribonucleic acid) detection result indeterminate	2837961000000110	Tested
13483131000006110	2019-nCoV (novel coronavirus) RNA	2837051000000113	Tested



	(ribonucleic acid) not detected		
13053231000006119	2019-nCoV (novel coronavirus) antibody detection result indeterminate	2832341000000111	Tested
13053211000006113	2019-nCoV (novel coronavirus) antibody detection result negative	2832311000000110	Tested
13053191000006112	2019-nCoV (novel coronavirus) antibody detection result positive	2832261000000115	Tested/ Diagnosis
13053251000006114	2019-nCoV (novel coronavirus) antibody detection result unknown	2832371000000117	Tested
13053091000006111	2019-nCoV (novel coronavirus) antigen detection result indeterminate	2832081000000117	Tested
13053071000006110	2019-nCoV (novel coronavirus) antigen detection result negative	2832051000000111	Tested
13053051000006117	2019-nCoV (novel coronavirus) antigen detection result positive	2832021000000118	Tested/ Diagnosis
13053111000006119	2019-nCoV (novel coronavirus) antigen detection result unknown	2832141000000114	Tested
12990741000006116	2019-nCoV (novel coronavirus) detected	2808081000000112	Tested/ Diagnosis
13032861000006118	2019-nCoV (novel coronavirus) detection result equivocal	2829261000000114	Tested
13483601000006110	2019-nCoV (novel coronavirus) detection result positive at the limit of detection	2837991000000116	Tested/ Diagnosis
13032881000006111	2019-nCoV (novel coronavirus) detection result unknown	2829271000000119	Tested
13483561000006110	2019-nCoV (novel coronavirus) immunisation course abandoned	2837931000000117	Vaccination
13483541000006111	2019-nCoV (novel coronavirus) immunisation course started	2837901000000111	Vaccination
13032591000006111	2019-nCoV (novel coronavirus) immunity status	2828251000000118	Tested
13032761000006111	2019-nCoV (novel coronavirus) immunity status equivocal	2829041000000116	Tested
13032821000006112	2019-nCoV (novel coronavirus) immunity status unknown	2829151000000117	Tested
12990771000006112	2019-nCoV (novel coronavirus) not detected	2808111000000116	Tested
13032471000006111	2019-nCoV (novel coronavirus) qualitative existence in specimen	2828071000000119	Tested/ Diagnosis
13483161000006118	2019-nCoV (novel coronavirus) ribonucleic acid detected	2837121000000116	Tested/ Diagnosis
12991101000006110	2019-nCoV (novel coronavirus) serology	2808551000000114	Tested
13032451000006118	2019-nCoV (novel coronavirus) species detection test	2828041000000113	Tested
13032531000006112	2019-nCoV (novel coronavirus) total immunoglobulin arbitrary concentration in serum	2828161000000110	Tested/ Diagnosis



12990501000006112	2019-nCoV (novel coronavirus) vaccination	2807821000000115	Vaccination
13483021000006111	2019-nCoV (novel coronavirus) vaccination	2833671000000117	Vaccination
13483401000006113	2019-nCoV (novel coronavirus) vaccination dose not given	2837671000000110	Vaccination
13483421000006115	2019-nCoV (novel coronavirus) vaccination first dose not given	2837701000000114	Vaccination
12991191000006115	2019-nCoV (novel coronavirus) vaccination invitation SMS (short message service) text message sent	2809121000000119	Vaccination
13483441000006110	2019-nCoV (novel coronavirus) vaccination second dose not given	2837731000000115	Vaccination
13483241000006114	Administration of first dose of 2019-nCoV (novel coronavirus) vaccine	2837381000000117	Vaccination
13483231000006116	Administration of first dose of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine	2837371000000119	Vaccination
13483261000006113	Administration of second dose of 2019-nCoV (novel coronavirus) vaccine	2837421000000114	Vaccination
13483251000006111	Administration of second dose of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine	2837411000000115	Vaccination
13483201000006112	Adverse reaction to 2019-nCoV (novel coronavirus) vaccine	2837401000000117	Vaccination
13483191000006114	Adverse reaction to SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine	2837301000000110	Vaccination
12991091000006116	Advice given about 2019 novel coronavirus by telephone	2809081000000117	Advice
12991061000006112	Advice given about 2019 novel coronavirus infection	2809161000000110	Advice
12991071000006117	Advice given about 2019-nCoV (novel coronavirus) by telephone	2808521000000116	Advice
12991041000006113	Advice given about 2019-nCoV (novel coronavirus) infection	2808501000000113	Advice
13012411000006111	Advice given about SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) by telephone	2826341000000112	Advice
13012401000006113	Advice given about SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) infection	2826421000000113	Advice
12991081000006119	Advice given about Wuhan 2019-nCoV (novel coronavirus) by telephone	2808541000000111	Advice
12991051000006110	Advice given about Wuhan 2019-nCoV (novel coronavirus) infection	2808511000000110	Advice
13483281000006115	Allergy to 2019-nCoV (novel coronavirus) vaccine	2837511000000116	Vaccination
13483271000006118	Allergy to SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine	2837481000000110	Vaccination



12990281000006118	Antibody to 2019 novel coronavirus	2808681000000119	Tested
12990261000006111	Antibody to 2019-nCoV (novel coronavirus)	2807541000000112	Tested
13012141000006117	Antibody to SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2826441000000118	Tested
12990271000006116	Antibody to Wuhan 2019-nCoV (novel coronavirus)	2807561000000113	Tested
12990251000006114	Antigen of 2019 novel coronavirus	2808691000000117	Tested
12990231000006119	Antigen of 2019-nCoV (novel coronavirus)	2807521000000117	Tested
13012131000006110	Antigen of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2826451000000115	Tested
12990241000006112	Antigen of Wuhan 2019-nCoV (novel coronavirus)	2807531000000115	Tested
13002271000006115	Assessment using COVID-19 severity scale	2794361000000111	Diagnosis
13012431000006117	COVID-19	2826511000000115	Diagnosis
13483031000006114	COVID-19	3947185011	Diagnosis
13012441000006110	COVID-19 caused by SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2826541000000119	Diagnosis
13002281000006117	COVID-19 confirmed by laboratory test	2799591000000111	Tested/ Diagnosis
13002311000006115	COVID-19 confirmed clinically	2799661000000118	Diagnosis
13002291000006119	COVID-19 confirmed using clinical diagnostic criteria	2799621000000114	Diagnosis
13483951000006118	COVID-19 detected	3973484010	Tested/ Diagnosis
13002451000006114	COVID-19 excluded by laboratory test	2827331000000118	Tested
13483971000006111	COVID-19 not detected	3973487015	Tested
13484091000006110	COVID-19 pneumonia	3951095016	Diagnosis
13002261000006110	COVID-19 severity scale	2794311000000114	Diagnosis
13002251000006113	COVID-19 severity score	2712291000000117	Diagnosis
13483011000006115	COVID-19 vaccination	3950925017	Vaccination
13032381000006117	Cardiomyopathy caused by 2019-nCoV (novel coronavirus)	2828261000000115	Diagnosis
13032371000006115	Cardiomyopathy caused by SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2827881000000110	Diagnosis
13484051000006116	Cardiomyopathy due to COVID-19	3970718018	Diagnosis
13484041000006118	Cardiomyopathy due to disease caused by 2019 novel coronavirus	3970567019	Diagnosis
13484071000006114	Cardiomyopathy due to disease caused by 2019-nCoV (novel coronavirus)	2836611000000119	Diagnosis
13484031000006111	Cardiomyopathy due to disease caused by SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2836591000000110	Diagnosis
13033001000006117	Central laboratory 2019-nCoV (novel	2829421000000117	Tested



	coronavirus) antibody detection test		
13032951000006112	Central laboratory 2019-nCoV (novel coronavirus) species detection test	2829351000000115	Tested
13032991000006118	Central laboratory SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) antibody detection test	2829411000000111	Tested
13032941000006110	Central laboratory SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) species detection test	2829331000000110	Tested
12990401000006111	Close exposure to 2019 novel coronavirus infection	2808701000000117	Possible
12990381000006111	Close exposure to 2019-nCoV (novel coronavirus) infection	2807671000000117	Possible
13012181000006111	Close exposure to SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) infection	2826461000000117	Possible
12990391000006114	Close exposure to Wuhan 2019-nCoV (novel coronavirus) infection	2807681000000115	Possible
12802201000006117	Confirmed 2019-nCoV (novel coronavirus) infection	12802201000006117	Diagnosis
12990551000006111	Detection of 2019 novel coronavirus using polymerase chain reaction technique	2808741000000119	Tested
12990531000006116	Detection of 2019-nCoV (novel coronavirus) using polymerase chain reaction technique	2807871000000116	Tested
13012231000006116	Detection of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) using polymerase chain reaction technique	2826591000000112	Tested
12990541000006114	Detection of Wuhan 2019-nCoV (novel coronavirus) using polymerase chain reaction technique	2807891000000117	Tested
13483041000006116	Disease caused by 2019 novel coronavirus	3902357013	Diagnosis
12991151000006114	Disease caused by 2019 novel coronavirus	2808911000000118	Diagnosis
13483051000006119	Disease caused by 2019-nCoV	3902358015	Diagnosis
12991131000006119	Disease caused by 2019-nCoV (novel coronavirus)	2808881000000118	Diagnosis
12991141000006112	Disease caused by Wuhan 2019-nCoV (novel coronavirus)	2808901000000115	Diagnosis
13032901000006113	Does not have immunity to 2019-nCoV (severe acute respiratory syndrome coronavirus 2)	2829251000000111	Tested
13032891000006114	Does not have immunity to SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2829231000000116	Tested
12991031000006115	Educated about 2019 novel coronavirus infection	2809171000000115	Advice
12991011000006114	Educated about 2019-nCoV (novel coronavirus) infection	2808471000000118	Advice



13012391000006111	Educated about SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) infection	2826681000000111	Advice
12991021000006118	Educated about Wuhan 2019-nCoV (novel coronavirus) infection	2808481000000116	Advice
12990701000006118	Encephalopathy caused by 2019 novel coronavirus	2808811000000113	Diagnosis
13484021000006113	Encephalopathy caused by 2019-nCoV (novel coronavirus)	2808031000000113	Diagnosis
12990681000006116	Encephalopathy caused by 2019-nCoV (novel coronavirus)	12990681000006116	Diagnosis
13012281000006115	Encephalopathy caused by SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2826711000000110	Diagnosis
12990691000006118	Encephalopathy caused by Wuhan 2019-nCoV (novel coronavirus)	2808041000000116	Diagnosis
13483911000006119	Encephalopathy due to COVID-19	3970720015	Diagnosis
13483901000006117	Encephalopathy due to disease caused by 2019 novel coronavirus	3970589015	Diagnosis
13483931000006113	Encephalopathy due to disease caused by 2019-nCoV (novel coronavirus)	2838301000000111	Diagnosis
13483891000006116	Encephalopathy due to disease caused by SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2838291000000112	Diagnosis
12990371000006113	Exposure to 2019 novel coronavirus infection	2808711000000115	Possible
12990351000006115	Exposure to 2019-nCoV (novel coronavirus) infection	2807641000000111	Possible
12802171000006116	Exposure to 2019-nCoV (novel coronavirus) infection	12802171000006116	Possible
13012171000006113	Exposure to SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) infection	2826731000000119	Possible
12990361000006118	Exposure to Wuhan 2019-nCoV (novel coronavirus) infection	2807651000000114	Possible
13045241000006110	Exposure to confirmed case of 2019-nCoV (novel coronavirus) infection	2829751000000116	Possible
13045231000006117	Exposure to confirmed case of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) infection	2829741000000119	Possible
13045261000006114	Exposure to suspected case of 2019-nCoV (novel coronavirus) infection	2829781000000110	Possible
13045251000006112	Exposure to suspected case of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) infection	2829761000000118	Possible
12990731000006114	Gastroenteritis caused by 2019 novel coronavirus	2808821000000119	Diagnosis
12990711000006115	Gastroenteritis caused by 2019-nCoV (novel coronavirus)	2808051000000118	Diagnosis



13012291000006117	Gastroenteritis caused by SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2826771000000117	Diagnosis
12990721000006111	Gastroenteritis caused by Wuhan 2019-nCoV (novel coronavirus)	2808071000000110	Diagnosis
13032841000006117	Has immunity to 2019-nCoV (novel coronavirus)	2829161000000119	Tested
13032831000006110	Has immunity to SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2829131000000112	Tested
12990821000006116	High priority for 2019 novel coronavirus vaccination	2808971000000111	Vaccination
12990801000006114	High priority for 2019-nCoV (novel coronavirus) vaccination	2808151000000117	Vaccination
13012321000006114	High priority for SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination	2826751000000114	Vaccination
12990811000006112	High priority for Wuhan 2019-nCoV (novel coronavirus) vaccination	2808161000000119	Vaccination
13483221000006119	Immunisation course to achieve immunity against 2019-nCoV (novel coronavirus)	2837341000000113	Vaccination
13483211000006110	Immunisation course to achieve immunity against SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2837321000000118	Vaccination
13483871000006117	Infection of upper respiratory tract caused by 2019 novel coronavirus	3970607014	Diagnosis
12990641000006110	Infection of upper respiratory tract caused by 2019 novel coronavirus	2808861000000110	Diagnosis
13483691000006115	Measurement of 2019 novel coronavirus antibody	3970553011	Tested
12990461000006112	Measurement of 2019 novel coronavirus antibody	2808761000000118	Tested
13483741000006118	Measurement of 2019 novel coronavirus antigen	3970580016	Tested
12990491000006116	Measurement of 2019 novel coronavirus antigen	2808781000000110	Tested
12990441000006113	Measurement of 2019-nCoV (novel coronavirus) antibody	12990441000006113	Tested
13483711000006117	Measurement of 2019-nCoV (novel coronavirus) antibody	2837211000000119	Tested
13483101000006119	Measurement of 2019-nCoV (novel coronavirus) antibody	2836951000000114	Tested
13483981000006114	Measurement of 2019-nCoV (novel coronavirus) antibody	2807721000000110	Tested
13483761000006119	Measurement of 2019-nCoV (novel coronavirus) antigen	2837231000000110	Tested
13483991000006112	Measurement of 2019-nCoV (novel coronavirus) antigen	2807761000000119	Tested



12990471000006117	Measurement of 2019-nCoV (novel coronavirus) antigen	12990471000006117	Tested
13483181000006111	Measurement of 2019-nCoV (novel coronavirus) antigen	2837161000000112	Tested
13483681000006118	Measurement of COVID-19 antibody	3970552018	Tested
13483731000006111	Measurement of COVID-19 antigen	3970579019	Tested
13483091000006113	Measurement of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) antibody	2836931000000119	Tested
13483701000006115	Measurement of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) antibody	2837201000000116	Tested
13012201000006112	Measurement of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) antibody	2827551000000119	Tested
13483171000006113	Measurement of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) antigen	2837151000000114	Tested
13483751000006116	Measurement of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) antigen	2837221000000113	Tested
13012211000006110	Measurement of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) antigen	2827571000000111	Tested
12990451000006110	Measurement of Wuhan 2019-nCoV (novel coronavirus) antibody	2807741000000115	Tested
12990481000006119	Measurement of Wuhan 2019-nCoV (novel coronavirus) antigen	2807771000000114	Tested
12990611000006111	Myocarditis caused by 2019 novel coronavirus	2808831000000117	Diagnosis
13484011000006117	Myocarditis caused by 2019-nCoV (novel coronavirus)	2807941000000118	Diagnosis
12990591000006117	Myocarditis caused by 2019-nCoV (novel coronavirus)	12990591000006117	Diagnosis
13012251000006111	Myocarditis caused by SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2827591000000110	Diagnosis
12990601000006113	Myocarditis caused by Wuhan 2019-nCoV (novel coronavirus)	2807951000000115	Diagnosis
13483841000006113	Myocarditis due to COVID-19	3970721016	Diagnosis
13483831000006115	Myocarditis due to disease caused by 2019 novel coronavirus	3970602015	Diagnosis
13483861000006112	Myocarditis due to disease caused by 2019-nCoV (novel coronavirus)	2838451000000117	Diagnosis
13483821000006118	Myocarditis due to disease caused by SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2838441000000115	Diagnosis
12990581000006115	Otitis media caused by 2019 novel coronavirus	2808841000000114	Diagnosis
12990561000006113	Otitis media caused by 2019-nCoV (novel coronavirus)	12990561000006113	Diagnosis
13484001000006115	Otitis media caused by 2019-nCoV (novel coronavirus)	2807901000000116	Diagnosis
13012241000006114	Otitis media caused by SARS-CoV-2 (severe	2827611000000119	Diagnosis



	acute respiratory syndrome coronavirus 2)		
12990571000006118	Otitis media caused by Wuhan 2019-nCoV (novel coronavirus)	2807921000000113	Diagnosis
13483791000006110	Otitis media due to COVID-19	3970722011	Diagnosis
13483781000006112	Otitis media due to disease caused by 2019 novel coronavirus	3970601010	Diagnosis
13483811000006114	Otitis media due to disease caused by 2019-nCoV (novel coronavirus)	2838431000000112	Diagnosis
13483771000006114	Otitis media due to disease caused by SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2838421000000110	Diagnosis
13032971000006119	POC (point of care) SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) antibody detection test	2829381000000114	Tested
13032921000006115	POC (point of care) SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) species detection test	2829311000000119	Tested
12990671000006119	Pneumonia caused by 2019 novel coronavirus	2808851000000112	Diagnosis
13484101000006116	Pneumonia caused by 2019 novel coronavirus	3951294010	Diagnosis
13484121000006114	Pneumonia caused by 2019-nCoV (novel coronavirus)	2833741000000115	Diagnosis
12990651000006112	Pneumonia caused by 2019-nCoV (novel coronavirus)	2807991000000111	Diagnosis
13012271000006118	Pneumonia caused by SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2827631000000110	Diagnosis
13484081000006112	Pneumonia caused by SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2833571000000118	Diagnosis
12990661000006114	Pneumonia caused by Wuhan 2019-nCoV (novel coronavirus)	2808011000000117	Diagnosis
13032981000006116	Point of care 2019-nCoV (novel coronavirus) antibody detection test	2829391000000111	Tested
13032931000006117	Point of care 2019-nCoV (novel coronavirus) species detection test	2829341000000118	Tested
13032961000006114	Point-of-care SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) antibody detection test	2829371000000112	Tested
13032911000006111	Point-of-care SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) species detection test	2829301000000116	Tested
13012471000006119	Possible COVID-19	2827531000000114	Possible
13002301000006118	Probable COVID-19 confirmed using clinical diagnostic criteria	2799651000000116	Possible
13045291000006118	Provision of advice, assessment or treatment delayed due to COVID-19 pandemic	2829811000000113	Advice
13002551000006110	Provision of advice, assessment or treatment limited due to COVID-19 pandemic	2827521000000112	Advice



12990311000006116	Ribonucleic acid of 2019 novel coronavirus	2808721000000114	Tested
13483661000006111	Ribonucleic acid of 2019 novel coronavirus	3973148012	Tested
13483641000006112	Ribonucleic acid of 2019-nCoV	3973146011	Tested
12990291000006115	Ribonucleic acid of 2019-nCoV (novel coronavirus)	2807581000000116	Tested
13483651000006114	Ribonucleic acid of COVID-19	3973147019	Tested
13012151000006115	Ribonucleic acid of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2827651000000115	Tested
12990301000006119	Ribonucleic acid of Wuhan 2019-nCoV (novel coronavirus)	2807591000000119	Tested
6618161000006117	SARS-CoV PCR	2536660012	Tested
6604671000006111	SARS-CoV infection	2536663014	Diagnosis
13045191000006110	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgA arbitrary concentration in serum	2829671000000116	Tested/ Diagnosis
13045131000006111	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgA detection result equivocal	2829591000000118	Tested
13053141000006115	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgA detection result indeterminate	2832181000000118	Tested
13045171000006114	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgA detection result negative	2829641000000110	Tested
13045111000006117	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgA detection result positive	2829551000000114	Tested/ Diagnosis
13045151000006116	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgA detection result unknown	2829621000000115	Tested
13045211000006111	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgA qualitative existence in specimen	2829701000000117	Tested/ Diagnosis
13032541000006119	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgG arbitrary concentration in serum	2828171000000115	Tested/ Diagnosis
13032731000006119	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgG detection result equivocal	2828961000000113	Tested
13053121000006110	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgG detection result indeterminate	2832161000000110	Tested
13032691000006110	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgG detection result negative	2828891000000113	Tested
13032631000006111	SARS-CoV-2 (severe acute respiratory	2828741000000110	Tested/



	syndrome coronavirus 2) IgG detection result positive		Diagnosis
13032791000006115	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgG detection result unknown	2829091000000114	Tested
13032501000006116	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgG qualitative existence in specimen	2828101000000111	Tested/ Diagnosis
13032561000006115	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgM arbitrary concentration in serum	2828201000000119	Tested/ Diagnosis
13032771000006116	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgM detection result equivocal	2829451000000110	Tested
13053161000006116	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgM detection result indeterminate	2832201000000119	Tested
13032671000006114	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgM detection result negative	2829491000000119	Tested
13032651000006116	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgM detection result positive	2829471000000118	Tested/ Diagnosis
13032711000006113	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgM detection result unknown	2829461000000113	Tested
13032481000006114	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) IgM qualitative existence in specimen	2828091000000115	Tested/ Diagnosis
13052391000006118	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) RNA (ribonucleic acid) detection result equivocal	2831471000000115	Tested
13483571000006115	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) RNA (ribonucleic acid) detection result indeterminate	2837951000000112	Tested
13052361000006114	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) RNA (ribonucleic acid) detection result negative	2831561000000114	Tested
13483111000006116	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) RNA (ribonucleic acid) detection result negative	2837011000000114	Tested
13052351000006112	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) RNA (ribonucleic acid) detection result positive	2831581000000117	Tested/ Diagnosis
13483141000006117	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) RNA (ribonucleic acid) detection result positive	2837101000000113	Tested/ Diagnosis



13483591000006119	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) RNA (ribonucleic acid) detection result positive at the limit of detection	2837971000000115	Tested/ Diagnosis
13052401000006116	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) RNA (ribonucleic acid) detection result unknown	2831601000000114	Tested
13052381000006116	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) RNA (ribonucleic acid) qualitative existence in specimen	2831751000000118	Tested/ Diagnosis
13053221000006117	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) antibody detection result indeterminate	2832331000000119	Tested
13053201000006110	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) antibody detection result negative	2832301000000113	Tested
13053181000006114	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) antibody detection result positive	2832251000000118	Tested/ Diagnosis
13053241000006112	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) antibody detection result unknown	2832361000000112	Tested
13053081000006113	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) antigen detection result indeterminate	2832061000000114	Tested
13053061000006115	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) antigen detection result negative	2832031000000116	Tested
13053041000006119	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) antigen detection result positive	2832011000000112	Tested/ Diagnosis
13053101000006117	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) antigen detection result unknown	2832131000000117	Tested
13012301000006116	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) detected	2827041000000112	Tested/ Diagnosis
13032851000006115	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) detection result equivocal	2829201000000110	Tested
13039291000006119	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) detection result negative	2829521000000116	Tested
13039281000006117	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) detection result positive	2829511000000110	Tested/ Diagnosis
13032871000006113	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) detection result	2829211000000112	Tested



	unknown		
13483551000006113	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunisation course abandoned	2837921000000119	Vaccination
13483531000006118	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunisation course started	2837891000000110	Vaccination
13032581000006113	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunity status	2828231000000113	Tested
13032751000006114	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunity status equivocal	2829021000000111	Tested
13032811000006116	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunity status unknown	2829111000000116	Tested
13012311000006118	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) not detected	2827081000000116	Tested
13032461000006116	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) qualitative existence in specimen	2828051000000111	Tested/ Diagnosis
13012421000006115	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) serology	2827201000000118	Tested
13032441000006115	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) species detection test	2828021000000118	Tested
13032521000006114	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) total immunoglobulin arbitrary concentration in serum	2828151000000112	Tested/ Diagnosis
13482981000006117	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination	2833591000000119	Vaccination
13012221000006119	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination	2827001000000114	Vaccination
13483391000006111	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination dose not given	2837661000000115	Vaccination
13483411000006111	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination first dose not given	2837681000000112	Vaccination
13012481000006116	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination invitation SMS (short message service) text message sent	2827221000000110	Vaccination
13483431000006117	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination second dose not given	2837711000000111	Vaccination



13012121000006112	SARS-CoV-2 - severe acute respiratory syndrome coronavirus 2	2827021000000117	Diagnosis
13002351000006119	Self-taken swab for 2019-nCoV (novel coronavirus) completed	2826641000000115	Tested
13002371000006112	Self-taken swab for 2019-nCoV (novel coronavirus) offered	2826651000000117	Tested
13002341000006116	Self-taken swab for SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) completed	2826611000000116	Tested
13002361000006117	Self-taken swab for SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) offered	2826691000000113	Tested
12990341000006117	Serotype 2019 novel coronavirus	2808731000000111	Tested
12990321000006112	Serotype 2019-nCoV (novel coronavirus)	2807611000000110	Tested
13012161000006118	Serotype SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2826981000000117	Tested
12990331000006110	Serotype Wuhan 2019-nCoV (novel coronavirus)	2807621000000116	Tested
13002611000006110	Signposting to CHMS (COVID-19 Home Management Service)	2827781000000118	Advice
12802181000006118	Suspected 2019-nCoV (novel coronavirus) infection	12802181000006118	Possible
13012451000006112	Suspected COVID-19	2827381000000119	Possible
13012461000006114	Suspected COVID-19 caused by SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2827391000000117	Possible
12991171000006116	Suspected disease caused by 2019 novel coronavirus	2809021000000118	Possible
12991161000006111	Suspected disease caused by 2019-nCoV (novel coronavirus)	2809001000000110	Possible
12991181000006118	Suspected disease caused by Wuhan 2019-nCoV (novel coronavirus)	2809031000000116	Possible
13002391000006113	Swab for 2019-nCoV (novel coronavirus) taken by healthcare professional	2826961000000114	Tested
13002381000006110	Swab for SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) taken by healthcare professional	2826951000000111	Tested
13002331000006114	Taking of swab for 2019-nCoV (novel coronavirus)	2826271000000111	Tested
13002321000006111	Taking of swab for SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2826251000000119	Tested
12990431000006115	Telephone consultation for suspected 2019 novel coronavirus	2808801000000111	Possible
12990411000006114	Telephone consultation for suspected 2019-nCoV (novel coronavirus)	2807691000000118	Possible
13012191000006114	Telephone consultation for suspected SARS-CoV-2 (severe acute respiratory syndrome	2827261000000119	Possible



	coronavirus 2)		
12990421000006118	Telephone consultation for suspected Wuhan 2019-nCoV (novel coronavirus)	2807711000000116	Possible
12802191000006115	Tested for 2019-nCoV (novel coronavirus) infection	12802191000006115	Tested
12990621000006115	Upper respiratory tract infection caused by 2019-nCoV (novel coronavirus)	2807971000000112	Diagnosis
13012261000006113	Upper respiratory tract infection caused by SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)	2827671000000112	Diagnosis
12990631000006117	Upper respiratory tract infection caused by Wuhan 2019-nCoV (novel coronavirus)	2807981000000114	Diagnosis
12990211000006113	Wuhan 2019-nCoV (novel coronavirus)	2807501000000114	Diagnosis
12990751000006119	Wuhan 2019-nCoV (novel coronavirus) detected	2808101000000118	Tested/ Diagnosis
12990781000006110	Wuhan 2019-nCoV (novel coronavirus) not detected	2808131000000112	Tested
12990511000006110	Wuhan 2019-nCoV (novel coronavirus) vaccination	2807831000000118	Vaccination
12991211000006119	Wuhan 2019-nCoV (novel coronavirus) vaccination invitation short message service text message sent	2809151000000112	Vaccination
12991111000006113	Wuhan 2019-nCoV (novel coronavirus) serology	2808571000000117	Tested