

SNOMED CT codes relating to COVID-19 Vaccination

Document Change Log

Date	Version	Description	
13/11/2020	1.0	FINAL document approved by NHS Digital COVID-19 vaccine programme	Jeremy Rogers Jo Goulding Helen Harger
26/11/2020	1.1	Updated dm+d descriptions for 'Courageous' – now 'COVID-19 mRNA Vaccine BNT162b2'	Jo Goulding
07/12/2020	1.2	<ul style="list-style-type: none"> embedded hyperlinks to TermBrowser updated (now agnostic of SNOMED release) minor typo and other text corrections Addition of new pack size for BNT162b2 vaccine to allow GTIN addition (2D datamatrix will be on the outer box of 195vials, not on individual vials) 	Jeremy Rogers Jo Goulding
13/12/2020	1.3	Addition of new dm+d concepts for "Astute" vaccine (Janssen/J&J) <ul style="list-style-type: none"> Additions in dm+d release 14/12/2020 Due in SNOMED CT Browser February 2021 	Jo Goulding
06/01/2021	1.4	Updated descriptions for Project Talent (Oxford/AstraZeneca) vaccine Addition of GTIN information to new pack sizes	Jo Goulding
20/01/2021	1.5	Addition of new dm+d concepts for 'Renown' vaccine (Moderna, Inc) New VTM for all vaccine products Updated descriptions for 'first dose' SNOMED CT codes to reflect use in single dose vaccination schedules	Jo Goulding
01/02/2021	1.6	Amendments to Pfizer ('Courageous') vaccines: <ul style="list-style-type: none"> Pack size change to 6 dose multidose vials (from 5 dose) Note – no change to product, only change to recommendations for use. Therefore, amended pack size descriptions not new products added. Word order update in description to follow pattern from other vaccines Supplier change to Pfizer Ltd 	Jo Goulding
11/02/2021	1.7	Addition of new dm+d concepts for Valneva vaccine.	Jo Goulding
19/03/2021	1.8	Addition of new dm+d concepts for Novavax vaccine Addition of single vial (10 dose) VMPP and AMPP concepts for Moderna vaccines	Jo Goulding
16/06/2021	1.9	Change to description of Janssen vaccine to remove reference to 'Astute' and also strength details concurrent with Reg174 approval	Jo Goulding
28/06/2021	1.10	Addition of new dm+d concepts for Medicago vaccine	Jo Goulding
27/07/2021	1.11	Addition of new SNOMED CT codes for protection maintenance against SARS-CoV-2 Formatting changes Correction of identifier for VMP Generic COVID-19 Vaccine Novavax (adjuvanted) 5micrograms/0.5ml dose suspension for injection multidose vials	Jeremy Rogers Kath Priest Emma Melhuish
08/09/2021	1.12	Change to description and modelling of Janssen, AstraZeneca and Pfizer vaccines for product dose forms as per manufacturers information	Emma Melhuish
08/09/2021	1.13	Addition of new SNOMED CT codes for administration of third, fourth and fifth vaccination events against SARS-CoV-2	Emma Melhuish
13/09/2021	1.14	Update to terms for Pfizer vaccines to reflect Comirnaty branded products now being used	Emma Melhuish
20/09/2021	1.15	Update to terms for Moderna vaccines to reflect Spikevax branded products becoming available in early October	Emma Melhuish
27/10/2021	1.16	Additional GTIN code for Pfizer vaccine added	Emma Melhuish

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Document Purpose

The following is the list of SNOMED CT procedure and product codes intended to support a mass primary immunisation campaign in the UK specifically against COVID-19, including subsequent measures to maintain protection gained as a result of primary immunisation and/or natural infection.

The range and intended use of the codes shown here is similar to that already available for other established mass immunisation campaigns – in particular those for which the primary immunisation schedule also involves more than one vaccine dose administration event.

However, unlike the SNOMED CT codesets available for some other national immunisation programmes, much of the administrative detail relating to a patient’s journey through a call:recall system are *not* covered. This aspect of running the overall campaign will be carried out by a central system that neither needs nor uses SNOMED CT codes specifically in order to represent (for example) when a patient has been sent an urgent SMS notification advising them that they are now eligible to join the campaign, or of a late change to their next immunisation appointment date. Instead, many of the various patient states that this call-recall engine will be required to reason over will be represented only within that system and by some other non-SNOMED CT means, and does not need to be also shared more widely into other live clinical systems as SNOMED CT codes.

The currently available SNOMED CT expressivity, therefore, aims to cover only the core *clinical* information about an individual’s immunisation journey that should be shareable with any other clinician for whom an understanding of the patient’s immunisation status could influence subsequent clinical decisions.

Which specific vaccine preparation was used at any specific vaccination event will be co-recorded as a separate dm+d code for the vaccine preparation.

The codeset is presented twice; first the raw list of codes and preferred terms and then again but with each code further accompanied by text clarifying its intended clinical meaning and scope.

Scope

This document only details SNOMED CT content related directly to COVID-19 Vaccination.

It does not cover other SNOMED CT content pertaining to COVID-19 disease, complications, treatment etc. (e.g., 1325161000000102 Post-COVID-19 syndrome)

Code List for SARS-CoV-2 Vaccination

Codes (and explanatory notes) highlighted in bold are new agreed extensions to the design and released in the 32.4.0 September 2021. (Codes are hyperlinked to termbrowser.nhs.uk)

See following "list with scope notes" for further explanation.

CLINICAL FINDING

1240601000000108	High priority for SARS-CoV-2 vaccination
1240631000000102	Did not attend SARS-CoV-2 vaccination
1324831000000104	Did not attend for first dose of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine
1324841000000108	Did not attend for second dose of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine
1324661000000105	Adverse reaction to SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine
1324711000000102	Allergy to SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine
870515008	Adverse reaction to polyethylene glycol
1362581000000100	Allergy to polyethylene glycol

PROCEDURE

1324671000000103	Immunisation course to achieve immunity against SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)
1362591000000103	Immunisation course to maintain protection against SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)
1324681000000101	Administration of first dose of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine
1324691000000104	Administration of second dose of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine
1363861000000103	Administration of third dose of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine
1363791000000101	Administration of fourth dose of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine
1363831000000108	Administration of fifth dose of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine

SITUATION WITH EXPLICIT CONTEXT

Primary Immunisation

1324731000000105	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunisation course not indicated
1324761000000100	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunisation course contraindicated
1324811000000107	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunisation course declined
1324821000000101	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunisation course not done
1324851000000106	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunisation course started
1324861000000109	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunisation course abandoned
1362611000000106	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunisation course completed

Maintenance of Protection

1362671000000101	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) protection maintenance course not indicated
1362641000000107	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) protection maintenance course contraindicated
1362651000000105	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) protection maintenance course declined
1362661000000108	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) protection maintenance course not done
1362681000000104	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) protection maintenance course started
1362631000000103	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) protection maintenance course abandoned
1362691000000102	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) protection maintenance course completed

Vaccine Dose Administration Events

1324721000000108	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination dose declined
1324741000000101	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination first dose declined
1324751000000103	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination second dose declined
1324771000000107	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination dose not given
1324781000000109	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination first dose not given
1324791000000106	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination second dose not given
1363771000000100	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination third dose not given

1363781000000103	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination third dose declined
1363821000000106	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination fourth dose not given
1363811000000100	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination fourth dose declined
1363841000000104	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination fifth dose not given
1363851000000101	SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination fifth dose declined

PHARMACEUTICAL / BIOLOGIC PRODUCT

The concept IDs and terms here are taken from the most recent version of NHS dm+d

All COVID-19 Vaccine VMPs linked to:

VTM: [39330711000001103](#) COVID-19 vaccine

For individual vaccine products, see lists below:

Pfizer

VMP: [39116111000001100](#) Generic Comirnaty COVID-19 mRNA Vaccine 30micrograms/0.3ml dose concentrate for dispersion for injection multidose vials

AMP: [39115611000001103](#) Comirnaty COVID-19 mRNA Vaccine 30micrograms/0.3ml dose concentrate for dispersion for injection multidose vials (Pfizer Ltd)

VMPP: [39115311000001108](#) Generic Comirnaty COVID-19 mRNA Vaccine 30micrograms/0.3ml dose concentrate for dispersion for injection multidose vials 6 dose

VMPP: [39214411000001100](#) Generic Comirnaty COVID-19 mRNA Vaccine 30micrograms/0.3ml dose concentrate for dispersion for injection multidose vials 1170 dose – 195 x 6 dose vials

AMPP: [39115711000001107](#) Comirnaty COVID-19 mRNA Vaccine 30micrograms/0.3ml dose concentrate for dispersion for injection multidose vials (Pfizer Ltd) 6 dose

AMPP: [39214511000001101](#) Comirnaty COVID-19 mRNA Vaccine 30micrograms/0.3ml dose concentrate for dispersion for injection multidose vials (Pfizer Ltd) 1170 dose – 195 x 6 dose vials **GTIN:** [00359267100023](#) **GTIN:** [04260703260002](#)

AstraZeneca:

VMP: [39116211000001106](#) Generic COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials

AMP: [39114911000001105](#) COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials (AstraZeneca)

VMPP: [39114711000001108](#) Generic COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials 8 dose

VMPP: [39114811000001100](#) Generic COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials 10 dose

VMPP: [39301011000001100](#) Generic COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials 80 dose 10 x 8 dose vials

VMPP: [39301111000001104](#) Generic COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials 100 dose 10 x 10 dose vials

AMPP: [39115011000001105](#) COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials (AstraZeneca) 8 dose

AMPP: [39115111000001106](#) COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials (AstraZeneca) 10 dose

AMPP: [39301211000001105](#) COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials (AstraZeneca) 80 dose 10 x 8 dose vials **GTIN:** [05000456063876](#)

AMPP: [39301311000001102](#) COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials (AstraZeneca) 100 dose 10 x 10 dose vials **GTIN:** [05000456063821](#)

Janssen

VMP: [39233911000001100](#) Generic COVID-19 Vaccine Janssen (Ad26.COVS-S [recombinant]) 0.5ml dose suspension for injection multidose vials

AMP: [39230211000001104](#) COVID-19 Vaccine Janssen (Ad26.COVS-S [recombinant]) 0.5ml dose suspension for injection multidose vials (Janssen-Cilag Ltd)

VMPP: [39230011000001109](#) Generic COVID-19 Vaccine Janssen (Ad26.COVS-S [recombinant]) 0.5ml dose suspension for injection multidose vials 5 dose

VMPP: [39230111000001105](#) Generic COVID-19 Vaccine Janssen (Ad26.COVS-S [recombinant]) 0.5ml dose suspension for injection multidose vials 50 dose

AMPP: [39230311000001107](#) COVID-19 Vaccine Janssen (Ad26.COVS-S [recombinant]) 0.5ml dose suspension for injection multidose vials (Janssen-Cilag Ltd) 5 dose

AMPP: [39230411000001100](#) COVID-19 Vaccine Janssen (Ad26.COVS-S [recombinant]) 0.5ml dose suspension for injection multidose vials (Janssen-Cilag Ltd) 50 dose

Moderna:

VMP: [39326811000001106](#) Generic Spikevax COVID-19 mRNA (nucleoside modified) Vaccine 0.1mg/0.5mL dose dispersion for injection multidose vials

AMP: [39326911000001101](#) Spikevax COVID-19 mRNA (nucleoside modified) Vaccine 0.1mg/0.5mL dose dispersion for injection multidose vials (Moderna, Inc)

VMPP: [39375311000001106](#) Generic Spikevax COVID-19 mRNA (nucleoside modified) Vaccine 0.1mg/0.5ml dose dispersion for injection multidose vials 10 dose

VMPP: [39326611000001107](#) Generic Spikevax COVID-19 mRNA (nucleoside modified) Vaccine 0.1mg/0.5ml dose dispersion for injection multidose vials 100 dose 10 x 10 dose vials

AMPP: [39375411000001104](#) Spikevax COVID-19 mRNA (nucleoside modified) Vaccine 0.1mg/0.5ml dose dispersion for injection multidose vials (Moderna, Inc) 10 dose

AMPP: [39327011000001102](#) Spikevax COVID-19 mRNA (nucleoside modified) Vaccine 0.1mg/0.5ml dose dispersion for injection multidose vials (Moderna, Inc) 100 dose 10 x 10 dose vials **GTIN:** [30380777700688](#)

Valneva:

VMP: [39375211000001103](#) Generic COVID-19 Vaccine Valneva (inactivated adjuvanted whole virus) 40antigen units/0.5mL dose suspension for injection multidose vials

AMP: [39373511000001104](#) COVID-19 Vaccine Valneva (inactivated adjuvanted whole virus) 40antigen units/0.5mL dose suspension for injection multidose vials (Valneva UK Ltd)

VMPP: [39373011000001107](#) Generic COVID-19 Vaccine Valneva (inactivated adjuvanted whole virus) 40antigen units/0.5mL dose suspension for injection multidose vials 10 dose

VMPP: [39373111000001108](#) Generic COVID-19 Vaccine Valneva (inactivated adjuvanted whole virus) 40antigen units/0.5mL dose suspension for injection multidose vials 100 dose 10 x 10 dose vials

AMPP: [39374411000001100](#) COVID-19 Vaccine Valneva (inactivated adjuvanted whole virus) 40antigen units/0.5mL dose suspension for injection multidose vials (Valneva UK Ltd) 10 dose

AMPP: [39374711000001106](#) Generic COVID-19 Vaccine Valneva (inactivated adjuvanted whole virus) 40antigen units/0.5mL dose suspension for injection multidose vials (Valneva UK Ltd) 100 dose 10 x 10 dose vials **GTIN:** [09120040710330](#)

Novavax:

VMP: [39478211000001100](#) Generic COVID-19 Vaccine Novavax (adjuvanted) 5micrograms/0.5ml dose suspension for injection multidose vials

VMPP: [39472811000001101](#) Generic COVID-19 Vaccine Novavax (adjuvanted) 5micrograms/0.5ml dose suspension for injection multidose vials 10 dose

VMPP: [39472911000001106](#) Generic COVID-19 Vaccine Novavax (adjuvanted) 5micrograms/0.5ml dose suspension for injection multidose vials 100 dose 10 x 10 dose vials

AMP: [39473011000001103](#) COVID-19 Vaccine Novavax (adjuvanted) 5micrograms/0.5ml dose suspension for injection multidose vials (Baxter Oncology GmbH)

AMPP: [39473111000001102](#) COVID-19 Vaccine Novavax (adjuvanted) 5micrograms/0.5ml dose suspension for injection multidose vials (Baxter Oncology GmbH) 10 dose

AMPP: [39473211000001108](#) COVID-19 Vaccine Novavax (adjuvanted) 5micrograms/0.5ml dose suspension for injection multidose vials (Baxter Oncology GmbH) 100 dose 10 x 10 dose vials **GTIN:** [00380631100103](#)

Medicago:

VMP: 39828011000001104 Generic COVID-19 Vaccine Medicago (CoVLP) 3.75micrograms/0.5ml dose emulsion for injection multidose vials

VMPP: 39826211000001108 Generic COVID-19 Vaccine Medicago (CoVLP) 3.75micrograms/0.5ml dose emulsion for injection multidose vials 10 dose 10x0.5ml (0.25ml+0.25ml) dose

VMPP: 39826411000001107 Generic COVID-19 Vaccine Medicago (CoVLP) 3.75micrograms/0.5ml dose emulsion for injection multidose vials 100 dose 100x0.5ml (0.25ml+0.25ml) dose

AMP: 39826711000001101 COVID-19 Vaccine Medicago (CoVLP) 3.75micrograms/0.5ml dose emulsion for injection multidose vials (Medicago Inc)

AMPP: 39826911000001104 COVID-19 Vaccine Medicago (CoVLP) 3.75micrograms/0.5ml dose emulsion for injection multidose vials (Medicago Inc) 10 dose 10x0.5ml (0.25ml+0.25ml) dose

AMPP: 39827011000001100 COVID-19 Vaccine Medicago (CoVLP) 3.75micrograms/0.5ml dose emulsion for injection multidose vials (Medicago Inc)100 dose 100x0.5ml (0.25ml+0.25ml) dose

Code List for SARS-CoV-2 Vaccination – with scope notes

Codes (and explanatory notes) regarding maintenance of protection are new agreed extensions to the design, published in the 32.2.0 release in July 2021.

Codes **Unused** are published but now unlikely to be used.

Codes **Withdrawn** are published but now inactive and should never be used.

CLINICAL FINDING

1240601000000108 High priority for SARS-CoV-2 vaccination

Subject is in one or more cohorts prioritised for vaccination

1240631000000102 Did not attend SARS-CoV-2 vaccination

Subject did not attend a scheduled appointment where they were due to receive a vaccine dose.

New entries into individual patient records should NEVER use this code: they should instead be expressed only using one of its child codes stating exactly *which* dose of the primary immunisation schedule had been missed.

This code has value mainly only when constructing queries to retrieve patients who have missed *either* dose.

1324831000000104 Did not attend for first dose of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine

Subject did not attend a scheduled appointment where they were due to receive the first vaccine dose (or the *only dose of a single dose* schedule vaccine)

1324841000000108 Did not attend for second dose of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine

Subject did not attend a scheduled appointment where they were due to receive the second vaccine dose

1324661000000105 Adverse reaction to SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine

1324711000000102 Allergy to SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine

Subject experienced some kind of adverse or allergic reaction to at least one vaccine dose.

870515008 Adverse reaction to polyethylene glycol

1362581000000100 Allergy to polyethylene glycol

Subject experienced some kind of adverse or allergic reaction to at least one pharmaceutical preparation of which polyethylene glycol is an excipient and believed or proved to have been the causative allergen.

PROCEDURE

1324671000000103 Immunisation course to achieve immunity against SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)

The idea of a course of therapy intended to induce an immune-system based protection against SARS-CoV-2. "Protection" may be partial, and may involve variable reductions in the risk of any or all of: actual infection, severe disease in the event of infection, and onward transmission

This code exists mainly as a technical byproduct of creating the more specific codes (started|abandoned|declined, below) by which the stages of a course of treatment to immunise an individual patient can be recorded.

When recorded on its own and "as is", this code in fact indicates that such a course was completed on that record date; this code **must** therefore NOT be used to record when such a course has merely started.

However, it is recommended that by preference the more explicitly worded 1362611000000106 **SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunisation course completed** should be used in order to record when the primary immunisation course has been completed.

1362591000000103 Immunisation course to maintain protection against SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)

The idea of a course of therapy intended to maintain already established protection against SARS-CoV-2 infection, whether that protection was originally acquired as a result of natural infection or the administration of

vaccine products, and where “protection” may be partial and against a composite of becoming infected at all and against experiencing severe disease if infected.

This code exists mainly as a technical byproduct of creating the more specific codes (started|abandoned|declined, below) by which the stages of a course of treatment to maintain existing protection are to be recorded.

When recorded on its own and “as is”, this code in fact indicates that such a maintenance course was completed on that record date; this code **must** therefore NOT be used to record when such a course has merely started.

Both the primary immunisation course, or any subsequent potentially recurring courses of treatment to subsequently maintain protection, will comprise one or more vaccine dose administration events. These are to be coded as:

1324681000000101 Administration of first dose of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine

The subject was given the first dose of a vaccine against SARS-CoV-2 on the date recorded.

This includes the administration of the only dose of any vaccine whose primary immunisation schedule only requires one dose (need for subsequent doses will therefore be informed by inspecting the record of the specific vaccine used).

Also includes the administration of the only dose required by a schedule intended to maintain established protection (sometimes referred to as a “booster”), where that schedule only requires one dose. In the event that, for example, older individuals required maintenance vaccine doses every 9 months, each should still be recorded as a “First dose” even if such individuals would thereby receive more than one “First dose” within the same calendar year.

Conversely, if protection could be maintained in younger individuals by means of an intervention given e.g. every two years but on each occasion said intervention was comprised of two doses given 8 weeks apart, then the first dose given at each 2-yearly intervention would be a “First dose” and the second a “Second dose”.

The need for further doses beyond “the first” as part of any “protection maintenance course” will therefore be informed only by inspecting the record of the specific vaccine product(s) used in the context of some other currently non-coded information stating the required schedule.

1324691000000104 Administration of second dose of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine

The subject was given the second dose of a vaccine against SARS-CoV-2 on the date recorded

1363861000000103 Administration of third dose of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine

The subject was given the third dose of a vaccine against SARS-CoV-2 on the date recorded

1363791000000101 Administration of fourth dose of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine

The subject was given the fourth dose of a vaccine against SARS-CoV-2 on the date recorded

1363831000000108 Administration of fifth dose of SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccine

The subject was given the fifth dose of a vaccine against SARS-CoV-2 on the date recorded

SITUATION WITH EXPLICIT CONTEXT

Primary Immunisation Schedule

1324731000000105 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunisation course not indicated

The subject has no clinical indication for commencing a primary immunisation schedule against SARS-CoV-2 e.g. because they are not at (sufficient) risk.

The course may be indicated at the start, but at some later point in time one of its doses is not.

Conversely, however, if the course is not indicated at the outset then by implication none of its doses are either – though it is usually considered redundant to record *both* that the course as a whole is not indicated and also separately that neither dose is.

1324761000000100 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunisation course contraindicated

The entire primary immunisation schedule was not started because it would be unsafe to do so e.g. because of Immunosuppression or other pre-existing comorbidity.

Although usually permanent, such contraindications may be only temporary, and so the subject is not necessarily permanently excluded from all future enrolment in a course of vaccination.

By contrast, contraindication to a dose (see below) is more likely to be only temporary .. but a more permanent contraindication to completing the schedule is also not excluded.

Operationally, the presence of this code in the EPR as an active problem implies that no future vaccine doses should be given, at least not without careful clinical scrutiny of the record

Note that other codes also carry this or a similar implication.

1324811000000107 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunisation course declined

The subject declined an offer to begin the primary immunisation schedule against SARS-CoV-2, and so was never invited to receive even the first dose

Different from declining individual dosing events, for which separate codes exist.

A subject may agree to being immunised, decline the first dose event due to temporary illness, be rescheduled and then go on to complete the course as planned

1324851000000106 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunisation course started

The subject accepted an offer to begin the primary immunisation schedule against SARS-CoV-2, and either has been or will be invited to receive at least the first dose

1324821000000101 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunisation course not done

The patient has a valid indication and did not decline vaccination, but the vaccination course was never started for some other reason (e.g. policy change)

Different from “abandoned” (see below), which implies that the course WAS started

1324861000000109 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunisation course abandoned

A primary immunisation course was started, but either zero or only the first dose was ever actually given before the attempt was permanently abandoned. No further doses will be given.

Valid reasons for recording “abandoned” could include e.g. that the patient has unfortunately already contracted COVID-19 or developed a new contraindication; the patient withdraws consent to proceed; the vaccine product has to be withdrawn from the market

NB. If a new contraindication emerges, this should always be recorded as *at least* a contraindication code.

1362611000000106 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) immunisation course completed

The patient has completed a course of vaccine dose administration events as per the schedule for primary immunisation using the specific product (specifically one or more doses, depending on product).

Note it is also legitimate to record exactly the same “schedule completed” status for a patient but using only the code **1324671000000103 Immunisation course to achieve immunity against SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)**. **The two codes mean exactly the same thing. Although therefore technically redundant, this code is provided for ergonomic usability reasons: to provide a more consistently labelled and more obviously discoverable code that includes the word “completed”**

Maintenance of Protection

1362671000000101 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) protection maintenance course not indicated

The subject has no clinical indication for commencing a schedule or treatment to maintain their already established protection against SARS-CoV-2, for example because they are not at (sufficient) risk.

Different from saying that a specific vaccine administration dose is not indicated, for which other codes exist.

The maintenance course may be indicated at the start, but at some later point in time one of its doses is not.

Conversely, however, if the protection maintenance course is not indicated at the outset then by implication none of its doses are either – though it is usually considered redundant to record *both* that the course as a whole is not indicated and also separately that none of its doses is.

1362641000000107 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) protection maintenance course contraindicated

The entire protection maintenance schedule was not started because of, for example Immunosuppression or other comorbidity.

Although usually permanent, such contraindications may be only temporary, and so the subject is not necessarily permanently excluded from all future enrolment in schedules of interventions intended to maintain, or otherwise revitalise, previously established protection against SARS-CoV-2.

By contrast, contraindication to an individual dose within the context of an overarching protection maintenance schedule (see below) is more likely to be only temporary... but a more permanent contraindication to continuing with (or completing) the schedule is also not excluded.

Operationally, the presence of this code in the EPR as an active problem implies that no future interventions such as vaccine doses should be given, at least not without careful clinical scrutiny of the record. Note that other codes also carry this or a similar implication.

See also the 'vaccine dose contraindicated' codes below.

1362651000000105 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) protection maintenance course declined

The subject declined an offer to begin a schedule of interventions intended to maintain their established protection against SARS-CoV-2, and so was never invited to receive even the first intervention (for example a vaccine dose within the schedule).

Different from declining individual intervention events such as administering a vaccine dose, for which separate codes exist.

A subject may agree to an ongoing schedule of interventions intended to maintain their protection, decline one or more interventions (for example vaccine dose events) within that schedule due to temporary illness, be rescheduled and then go on to continue with (or complete) the treatment schedule as planned.

1362681000000104 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) protection maintenance course started

The subject accepted an offer to begin a schedule of interventions to maintain their established protection against SARS-CoV-2, and either has been or will be invited to receive at least the first intervention (for example first vaccine dose within the schedule).

1362661000000108 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) protection maintenance course not done

The patient has a valid indication and did not decline the entire schedule of interventions intended to maintain their established protection against SARS-CoV-2, but that schedule of interventions was never started for some other reason (for example policy change).

Different from "abandoned" (see below), which implies that the course of interventions WAS started.

1362631000000103 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) protection maintenance course abandoned

A schedule of interventions intended to maintain protection against SARS-CoV-2 was started, but either zero or only some interventions within that schedule was ever actually given before the attempt was permanently abandoned. No further interventions (e.g. vaccine doses) will be given.

Valid reasons for recording "abandoned" could include, for example that the patient has developed a new contraindication; the patient withdraws consent to proceed; a significant component of the schedule as originally consented to has to be withdrawn from the market or is otherwise no longer available.

NB. If a new contraindication emerges, this should always be recorded as *at least* a contraindication code.

1362691000000102 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) protection maintenance course completed

A schedule of interventions intended to maintain protection against SARS-CoV-2 was completed. The patient may receive further schedules to maintain protection in the future, each of which will be identified by a "maintenance course started" code, one or more procedure and/or vaccine product codes as required by the course schedule, and a closing code such as "maintenance course ended" or "maintenance course abandoned". **Note** it is also legitimate to record exactly the same "maintenance schedule completed" status for a patient but using only the code **1362591000000103 Immunisation course to maintain protection against SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2)**. The two codes mean exactly the same thing. Although therefore technically redundant, this code is provided for ergonomic usability reasons: to provide a more consistently labelled and more obviously discoverable code that includes the word "completed".

Vaccine Dose Administration Events

1324721000000108 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination dose declined

The subject declined to receive at least one vaccine dose.

Technically different from contraindicated but note that the reason a subject may decline an individual dose could include that they currently feel unwell, and the underlying suspected condition causing that illness may *also* be a contraindication.

More common reasons could include e.g. that the appointment slot has become inconvenient or impractical for them to access, or that a child subject or needle phobic adult became too distressed to receive it
New entries into individual patient records should however ideally not be made using this code but instead only using one of its child codes that specify *which* vaccine dose was declined.

This code has value mainly only when constructing queries to retrieve patients for whom *either* dose was ever specifically declined

1324741000000101 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination first dose declined

The subject declined to receive the first vaccine dose (or the only dose of a single dose schedule vaccine), on the record date

Where the vaccinator declines to administer the vaccine to the subject for any reason (for example physical aggression from an elderly and confused subject), a different “not given” code should be used

1324751000000103 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination second dose declined

The subject declined to receive the second vaccine dose, on the record date

Where the vaccinator declines to administer the vaccine to the subject for any reason (for example physical aggression from an elderly and confused subject), a different “not given” code should be used

1324771000000107 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination dose not given

Administration of at least one vaccine dose could not be performed

New entries into individual patient records should however ideally not be made using this code but instead only using one of its child codes that specify *which* vaccine dose was declined.

This code has value mainly only when constructing queries to retrieve patients for whom *either* dose could not be given for any reason

1324781000000109 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination first dose not given

A scheduled administration of the first vaccine dose (or the only dose of a single dose schedule vaccine) could not be performed, on the record date, for any reason EXCEPT those separately codeable (did not attend, contraindicated, declined)

Reasons could include, for example lack of vaccine dose supply; aggressive behaviour toward the vaccinator by the subject

1324791000000106 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination second dose not given

A scheduled administration of the second vaccine dose could not be performed, on the record date, for any reason EXCEPT those separately codeable (did not attend, contraindicated, declined)

Reasons could include, for example lack of vaccine dose supply; aggressive behaviour toward the vaccinator by the subject

1363771000000100 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination third dose not given

A scheduled administration of the third vaccine dose could not be performed, on the record date, for any reason EXCEPT those separately codeable (did not attend, contraindicated, declined)

Reasons could include, for example lack of vaccine dose supply; aggressive behaviour toward the vaccinator by the subject

1363781000000103 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination third dose declined

The subject declined to receive the third vaccine dose, on the record date

Where the vaccinator declines to administer the vaccine to the subject for any reason (for example physical aggression from an elderly and confused subject), a different “not given” code should be used

1363821000000106 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination fourth dose not given

A scheduled administration of the fourth vaccine dose could not be performed, on the record date, for any reason EXCEPT those separately codeable (did not attend, contraindicated, declined)

Reasons could include, for example lack of vaccine dose supply; aggressive behaviour toward the vaccinator by the subject

1363811000000100 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination fourth dose declined

The subject declined to receive the fourth vaccine dose, on the record date

Where the vaccinator declines to administer the vaccine to the subject for any reason (for example physical aggression from an elderly and confused subject), a different “not given” code should be used

1363841000000104 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination fifth dose not given

A scheduled administration of the fifth vaccine dose could not be performed, on the record date, for any reason EXCEPT those separately codeable (did not attend, contraindicated, declined)

Reasons could include, for example lack of vaccine dose supply; aggressive behaviour toward the vaccinator by the subject

136385100000101 SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) vaccination fifth dose declined

The subject declined to receive the fifth vaccine dose, on the record date. Where the vaccinator declines to administer the vaccine to the subject for any reason (for example physical aggression from an elderly and confused subject), a different “not given” code should be used

PHARMACEUTICAL / BIOLOGIC PRODUCT

39115611000001103 Comirnaty COVID-19 mRNA Vaccine 30micrograms/0.3ml dose concentrate for dispersion for injection multidose vials (Pfizer Ltd)

39114911000001105 COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials (AstraZeneca)

39230211000001104 COVID-19 Vaccine Janssen (Ad26.COVS-2 S [recombinant]) 0.5ml dose suspension for injection multidose vials (Janssen-Cilag Ltd)

39326911000001101 Spikevax COVID-19 mRNA (nucleoside modified) Vaccine 0.1mg/0.5mL dose dispersion for injection multidose vials (Moderna, Inc)

39373511000001104 COVID-19 Vaccine Valneva (inactivated adjuvanted whole virus) 40antigen units/0.5mL dose suspension for injection multidose vials (Valneva UK Ltd)

39473011000001103 COVID-19 Vaccine Novavax (adjuvanted) 5micrograms/0.5ml dose suspension for injection multidose vials (Baxter Oncology GmbH)

39826711000001101 COVID-19 Vaccine Medicago (CoVLP) 3.75micrograms/0.5ml dose emulsion for injection multidose vials (Medicago Inc)

The above codes correspond to the actual manufactured vaccine products (AMP) and should be used to share information concerning vaccine administration (i.e. to represent which vaccine was given to an individual patient). They must not be confused with other related codes (see below) corresponding to manufacturer packs containing more than one vaccine dose (VMPP and AMPP below) or to the abstract notion of a manufacturer-agnostic formulation (VMP).

However, the GTIN ('barcode'), when available, will be linked to the AMPP code and therefore AMPPs will need to be recognised for scanned input of product. Using relationships provided within dm+d natively and in its SNOMEDised derivative, AMPP codes obtained by scanning should then be coerced into a related AMP code (as above) in order for the AMP code only to be communicated as the record of the vaccine product actually administered to an individual patient.

VMP: 39116111000001100 Generic Comirnaty COVID-19 mRNA Vaccine 30micrograms/0.3ml dose concentrate for dispersion for injection multidose vials

AMP: 39115611000001103 Comirnaty COVID-19 mRNA Vaccine 30micrograms/0.3ml dose concentrate for dispersion for injection multidose vials (Pfizer Ltd)

VMPP: 39115311000001108 Generic Comirnaty COVID-19 mRNA Vaccine 30micrograms/0.3ml dose concentrate for dispersion for injection multidose vials 6 dose

VMPP: 39214411000001100 Generic Comirnaty COVID-19 mRNA Vaccine 30micrograms/0.3ml dose concentrate for dispersion for injection multidose vials 1170 dose – 195 x 6 dose vials

AMPP: 39115711000001107 Comirnaty COVID-19 mRNA Vaccine 30micrograms/0.3ml dose concentrate for dispersion for injection multidose vials (Pfizer Ltd) 6 dose

AMPP: 39214511000001101 Comirnaty COVID-19 mRNA Vaccine 30micrograms/0.3ml dose concentrate for dispersion for injection multidose vials (Pfizer Ltd) 1170 dose – 195 x 6 dose vials **GTIN:** 00359267100023 **GTIN:** 04260703260002

VMP: 39116211000001106 Generic COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials

VMPP: 39114711000001108 Generic COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials 8 dose

VMPP: 39114811000001100 Generic COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials 10 dose

VMPP: 39301011000001100 Generic COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials 80 dose 10 x 8 dose vials

VMPP: 39301111000001104 Generic COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials 100 dose 10 x 10 dose vials

AMPP: 39115011000001105 COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials (AstraZeneca) 8 dose

AMPP: 39115111000001106 COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials (AstraZeneca) 10 dose

AMPP: 39301211000001105 COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials (AstraZeneca) 80 dose 10 x 8 dose vials **GTIN:** 05000456063876

AMPP: 39301311000001102 COVID-19 Vaccine AstraZeneca (ChAdOx1 S [recombinant]) 5x10,000,000,000 viral particles/0.5ml dose suspension for injection multidose vials (AstraZeneca) 100 dose 10 x 10 dose vials **GTIN:** 05000456063821

VMP: 39233911000001100 Generic COVID-19 Vaccine Janssen (Ad26.COV2-S [recombinant]) 0.5ml dose suspension for injection multidose vials

VMPP: 39230011000001109 Generic COVID-19 Vaccine Janssen (Ad26.COV2-S [recombinant]) 0.5ml dose suspension for injection multidose vials 5 dose

VMPP: 39230111000001105 Generic COVID-19 Vaccine Janssen (Ad26.COV2-S [recombinant]) 0.5ml dose suspension for injection multidose vials 50 dose

AMPP: 39230311000001107 COVID-19 Vaccine Janssen (Ad26.COV2-S [recombinant]) 0.5ml dose suspension for injection multidose vials (Janssen-Cilag Ltd) 5 dose

AMPP: 39230411000001100 COVID-19 Vaccine Janssen (Ad26.COV2-S [recombinant]) 0.5ml dose suspension for injection multidose vials (Janssen-Cilag Ltd) 50 dose

VMP: 39326811000001106 Generic Spikevax COVID-19 mRNA (nucleoside modified) Vaccine 0.1mg/0.5mL dose dispersion for injection multidose vials

VMPP: 39375311000001106 Generic Spikevax COVID-19 mRNA (nucleoside modified) Vaccine 0.1mg/0.5ml dose dispersion for injection multidose vials 10 dose

VMPP: 39326611000001107 Generic Spikevax COVID-19 mRNA (nucleoside modified) Vaccine 0.1mg/0.5ml dose dispersion for injection multidose vials 100 dose 10 x 10 dose vials

AMPP: 39375411000001104 Spikevax COVID-19 mRNA (nucleoside modified) Vaccine 0.1mg/0.5ml dose dispersion for injection multidose vials (Moderna, Inc) 10 dose

AMPP: 39327011000001102 Spikevax COVID-19 mRNA (nucleoside modified) Vaccine 0.1mg/0.5ml dose dispersion for injection multidose vials (Moderna, Inc) 100 dose 10 x 10 dose vials **GTIN:** 30380777700688

VMP: 39375211000001103 Generic COVID-19 Vaccine Valneva (inactivated adjuvanted whole virus) 40antigen units/0.5mL dose suspension for injection multidose vials

VMPP: 39373011000001107 Generic COVID-19 Vaccine Valneva (inactivated adjuvanted whole virus) 40antigen units/0.5mL dose suspension for injection multidose vials 10 dose

VMPP: 39373111000001108 Generic COVID-19 Vaccine Valneva (inactivated adjuvanted whole virus) 40antigen units/0.5mL dose suspension for injection multidose vials 100 dose 10 x 10 dose vials

AMPP: 39374411000001100 COVID-19 Vaccine Valneva (inactivated adjuvanted whole virus) 40antigen units/0.5mL dose suspension for injection multidose vials (Valneva UK Ltd) 10 dose

AMPP: 39374711000001106 Generic COVID-19 Vaccine Valneva (inactivated adjuvanted whole virus) 40antigen units/0.5mL dose suspension for injection multidose vials (Valneva UK Ltd) 100 dose 10 x 10 dose vials **GTIN:** 09120040710330

VMP: 39330711000001103 Generic COVID-19 Vaccine Novavax (adjuvanted) 5micrograms/0.5ml dose suspension for injection multidose vials

VMPP: 39472811000001101 Generic COVID-19 Vaccine Novavax (adjuvanted) 5micrograms/0.5ml dose suspension for injection multidose vials 10 dose

VMPP: 39472911000001106 Generic COVID-19 Vaccine Novavax (adjuvanted) 5micrograms/0.5ml dose suspension for injection multidose vials 100 dose 10 x 10 dose vials

AMPP: 39473111000001102 COVID-19 Vaccine Novavax (adjuvanted) 5micrograms/0.5ml dose suspension for injection multidose vials (Baxter Oncology GmbH) 10 dose

AMPP: 39473211000001108 COVID-19 Vaccine Novavax (adjuvanted) 5micrograms/0.5ml dose suspension for injection multidose vials (Baxter Oncology GmbH) 100 dose 10 x 10 dose vials **GTIN:** 00380631100103

VMP: 39828011000001104 Generic COVID-19 Vaccine Medicago (CoVLP) 3.75micrograms/0.5ml dose emulsion for injection multidose vials

VMPP: 39826211000001108 Generic COVID-19 Vaccine Medicago (CoVLP) 3.75micrograms/0.5ml dose emulsion for injection multidose vials 10 dose 10x0.5ml (0.25ml+0.25ml) dose

VMPP: 39826411000001107 Generic COVID-19 Vaccine Medicago (CoVLP) 3.75micrograms/0.5ml dose emulsion for injection multidose vials 100 dose 100x0.5ml (0.25ml+0.25ml) dose

AMPP: 39826911000001104 COVID-19 Vaccine Medicago (CoVLP) 3.75micrograms/0.5ml dose emulsion for injection multidose vials (Medicago Inc) 10 dose 10x0.5ml (0.25ml+0.25ml) dose

AMPP: 39827011000001100 COVID-19 Vaccine Medicago (CoVLP) 3.75micrograms/0.5ml dose emulsion for injection multidose vials (Medicago Inc)100 dose 100x0.5ml (0.25ml+0.25ml) dose

Unused codes

The codes below, although both published and still active in SNOMED CT, are considered now unlikely to be used within the UK:

1240781000000106 **SARS-CoV-2 vaccination invitation short message service text message sent**

This code is expected to be supplanted within the national immunisation system by codes internal to that system.

It is believed that this level of administrative detail does not need sharing into the wider clinical systems

1240701000000101 **SARS-CoV-2 vaccine not available**

This code is expected to be supplanted within the national immunisation system by codes internal to that system.

It is believed that this level of administrative detail does not need sharing into the wider clinical systems.

If a vaccine dose could not be administered because no dose was available, this may be messaged to the wider clinical system using one of the “dose not given” codes above.

Withdrawn codes

The codes below were added earlier in 2020 to the UK SNOMED Edition but are now made inactive and should not be used.

1240491000000103 Severe acute respiratory syndrome coronavirus 2 vaccination (procedure)

1240661000000107 Severe acute respiratory syndrome coronavirus 2 vaccination contraindicated (situation)

1240651000000109 Severe acute respiratory syndrome coronavirus 2 vaccination declined (situation)

1240681000000103 Severe acute respiratory syndrome coronavirus 2 vaccination not done (situation)

1240671000000100 Severe acute respiratory syndrome coronavirus 2 vaccination not indicated (situation)

END.