

UK Classification Maps in the NHS Digital SNOMED CT Browser

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Contents

Purpose of the maps	3
Using the maps	3
Map type 1 – simple map	3
Map type 2 – complex map	4
Map type 3 – complex map	4
Map Blocks, Map Groups and Map Priorities	5
Relation status	8
Map Advice	9
More information	10
Reporting issues	10

Purpose of the maps

The classification maps are one directional, providing a map from the SNOMED CT concept to the corresponding classification target code or codes. The [UK browser](#) maps are provided for reference purposes and may be used to assist coders to identify an appropriate classification code for a diagnostic or procedural term, where no specific ICD-10 or OPCS-4 code or index trail exists.

It is not the intention that the browser is used by coders to input SNOMED CT concepts into the Trust coding system. SNOMED CT concepts are designed to be used by clinicians in an Electronic Patient Record (please see [SNOMED CT](#) and [Classification Maps](#) for more information).

Please note the dagger and asterisk symbols (D/* and A/*) are not displayed within the classification maps. The dagger and asterisk symbols are included in the release mapping tables allowing them to be automatically added as meta data within the coding software. Users of this browser will need to remember to add the dagger/asterisk where appropriate.

Using the maps

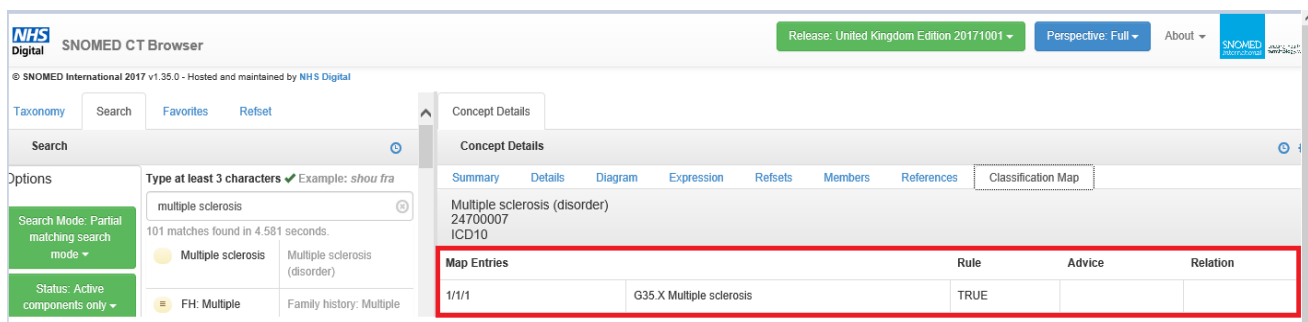
The classification maps can be viewed by selecting the Classification Map tab in the browser, after selecting a SNOMED CT concept:



The map may be presented as a simple map (map type 1) or a complex map (map types 2 & 3).

Map type 1 – simple map

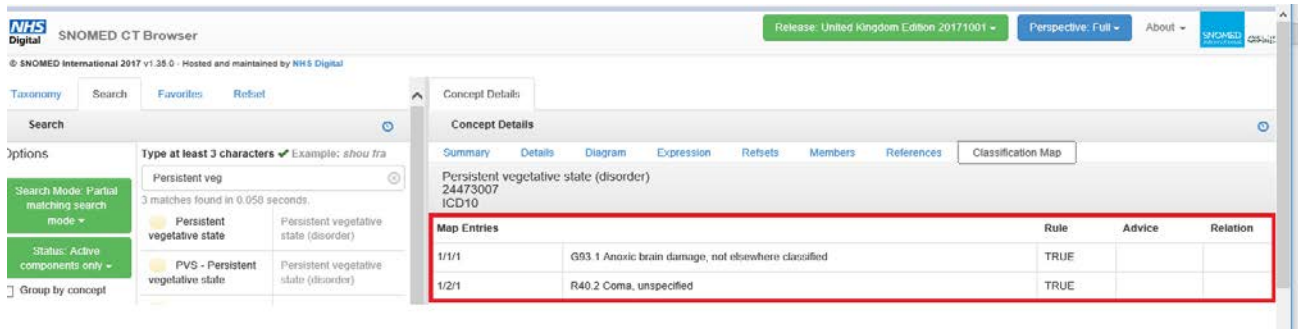
Links a single SNOMED CT concept to a single target classification code.



SNOMED CT concept **24700009 Multiple Sclerosis** maps to the single ICD-10 default target code **G35.X Multiple sclerosis**. A default target code is always marked as 'TRUE' in the rule column.

Map type 2 – complex map

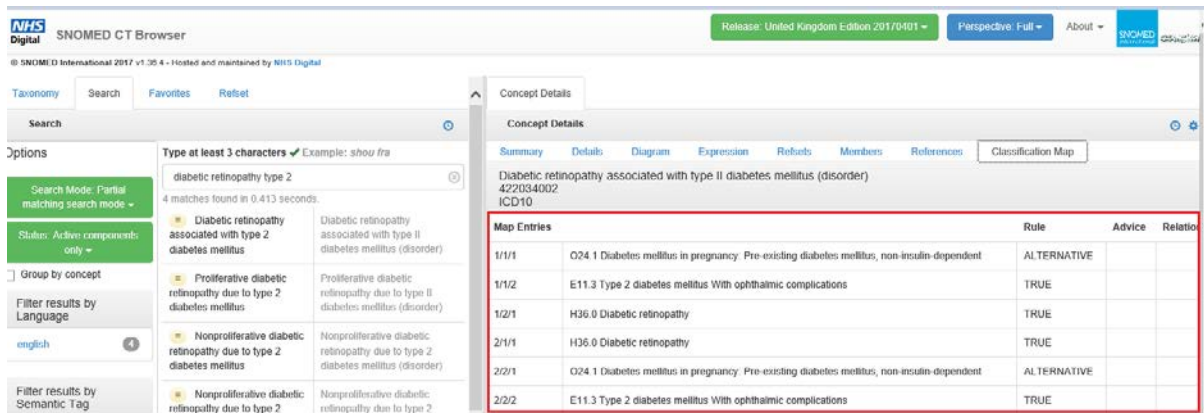
Links a single SNOMED CT concept to a combination of target classification codes. Collectively, these codes represent the full clinical meaning of the concept:



The SNOMED CT concept **24473007 Persistent vegetative state** maps to two ICD-10 default target codes. To comply with national coding standards (**DCS.VI.5**), **G93.1 Anoxic brain damage** and **R40.2 Coma, unspecified** are both required to be assigned, in the sequence shown.

Map type 3 – complex map

Links a single SNOMED CT concept to a choice of target codes (marked as 'ALTERNATIVE' in the Rule column in the browser). This is to allow final selection, informed by clinical detail found within the medical record, and application of classification expertise by the clinical coder:



Map Blocks, Map Groups and Map Priorities

The maps are presented how they appear in the mapping tables, which are designed to be read by system software.

Each classification map will contain at least one map block, one map group and one map priority. Map Blocks, Map Group and Map Priority are numbered sequentially, starting at 1.

A **Map Block** signifies a code or string of codes that represent the SNOMED CT concept's fully specified name (FSN). Multiple Map Blocks will be included within the map if it is necessary to represent the concept in multiple ways (e.g. sequencing of dagger and asterisk codes).

A **Map Group** signifies each individual target code within a Map Block. Each individual code within a Map Block will be allocated to its own Map Group *unless* it is an Alternative code. Where multiple codes are required, the Map Groups builds in any required classification sequencing rules.

*A **Map Priority** signifies the priority of the code within the group based on the order in which the codes are presented within mapping tables to enable the information to be read by computer software systems. In a complex map, where alternative targets are provided within a block or a group, an ALTERNATIVE target code is always listed before the TRUE target code.

Each Map Block, Map Group and Map Priority is identified in the 'Map Entries' column in the browser. The first digit in the map entry indicates the Map Block, the second digit the Map Group and the third digit the Map Priority.

Example 1 – Persistent vegetative state:

Concept Details		Rule	Advice	Relation
Persistent vegetative state (disorder) 24473007 ICD10				
Map Entries		Rule	Advice	Relation
1/1/1	G93.1 Anoxic brain damage, not elsewhere classified	TRUE		
1/2/1	R40.2 Coma, unspecified	TRUE		

As shown above the map for 'Persistent vegetative state' contains one Map Block **1/1/1** and **1/2/1**. Within the block there are two Map Groups **1/1/1** and **1/2/1** which enforces the sequencing of the target classifications codes. In this instance **G93.1** is sequenced before **R40.2** to comply with **DCS.VI.5**. As both target codes **G93.1** and **R40.2** are required to represent the meaning of the concept they are both default target codes (**TRUE**) and both have a Map Priority of one – **1/1/1** and **1/2/1**.

Example 2 – Diabetic retinopathy associated with type II diabetes mellitus:

a) Map Block 1

Concept Details		
Concept Details		
Summary	Details	Diagram
Expression	Refsets	Members
References	Classification Map	
Diabetic retinopathy associated with type II diabetes mellitus (disorder) 422034002 ICD10		
Map Entries		Rule
1/1/1	O24.1 Diabetes mellitus in pregnancy: Pre-existing diabetes mellitus, non-insulin-dependent	ALTERNATIVE
1/1/2	E11.3 Type 2 diabetes mellitus With ophthalmic complications	TRUE
1/2/1	H36.0 Diabetic retinopathy	TRUE
2/1/1	H36.0 Diabetic retinopathy	TRUE
2/2/1	O24.1 Diabetes mellitus in pregnancy: Pre-existing diabetes mellitus, non-insulin-dependent	ALTERNATIVE
2/2/2	E11.3 Type 2 diabetes mellitus With ophthalmic complications	TRUE

The classification map for **SNOMED CT concept 422034002 Diabetic retinopathy associated with type II diabetes** contains two Map Blocks.

Map Block 1 contains the default target (**TRUE**) codes **E11.3** and **H36.0**. Map Block 1 also contains code **O24.1** (**ALTERNATIVE**) which allows the coder to select this option, should there be further information within the medical record that confirms the patient is pregnant.

As two classification codes are required to represent the meaning of the concept, Map Block 1 contains two Map Groups and the map entry 1/2/1 signifies that **H36.0** will be sequenced after either **E11.3** (1/1/2) or **O24.1** (1/1/1), depending which diabetes code is selected. Map Group “Alternatives” are presented in the Map before the default target code (TRUE). Therefore, in this example ‘Alternative’ target code **O24.1** has a Map Priority of one, shown as 1/1/1.

b) Map Block 2

Concept Details			
Concept Details			
Summary	Details	Diagram	Expression
Refsets	Members	References	Classification Map
Diabetic retinopathy associated with type II diabetes mellitus (disorder) 422034002 ICD10			
Map Entries		Rule	Ad
1/1/1	O24.1 Diabetes mellitus in pregnancy: Pre-existing diabetes mellitus, non-insulin-dependent	ALTERNATIVE	
1/1/2	E11.3 Type 2 diabetes mellitus With ophthalmic complications	TRUE	
1/2/1	H36.0 Diabetic retinopathy	TRUE	
2/1/1	H36.0 Diabetic retinopathy	TRUE	
2/2/1	O24.1 Diabetes mellitus in pregnancy: Pre-existing diabetes mellitus, non-insulin-dependent	ALTERNATIVE	
2/2/2	E11.3 Type 2 diabetes mellitus With ophthalmic complications	TRUE	

Map Block 2 contains the default (**TRUE**) classification codes **H36.0** (2/1/1) and **E11.3** (2/2/1). The purpose of this Map Block is to allow diabetic retinopathy to be recorded in a primary position as per the primary diagnosis standard (**DGCS.1**) and dagger and asterisk (**DGCS.5**) standard. The Map Group (2/1/1) confirms the classification sequencing of **H36.0** within this Map Block. As either **O24.1** or **E11.3** could be assigned in the secondary position they both have the same Map Group (2/2/1 and 2/2/2 respectively). As **O24.1** is the Map Group 2 Alternative, the Map Priority is 2/2/1 (please see above*).

Relation status

SNOMED CT concepts that cannot be mapped to a classification code will be marked with one of the following statuses. The status text will be shown in the 'Relation' column in the browser.

1. High level concept

A high level concept is a concept that lacks enough detail to be mapped to a classification code:

Example - Infertility

Concept Details							
Concept Details							
Summary	Details	Diagram	Expression	Refsets	Members	References	Classification Map
Infertile (finding) 8619003 ICD10							
Map Entries		Rule	Advice	Relation			
1/1/1	No target	TRUE		High level concept			

The gender of the patient is required to classify infertility in ICD-10

2. Map source concept cannot be classified with available data

A concept that cannot be represented in the classifications.

Example – Referral to respiratory clinic

Concept Details							
Concept Details							
Summary	Details	Diagram	Expression	Refsets	Members	References	Classification Map
Referral to respiratory clinic (procedure) 809371000000100 OPCS4.8							
Map Entries		Rule	Advice	Relation			
1/1/1	No target	TRUE		MAP SOURCE CONCEPT CANNOT BE CLASSIFIED WITH AVAILABLE DATA			

This concept would never be classified in OPCS-4.

3. Eponym

The use of eponyms is discouraged for mapping purposes and concepts containing eponymous terms are considered unsafe to map.

Example – Watson-Jones operation

Map Entries	Rule	Advice	Relation
1/1/1	No target	TRUE	Eponym

4. No complex map found for...

This message is found on new concepts that are in scope of the classifications and will be mapped in a future release.

No complex map found for 723963004

Map Advice

The map advice provides information about classification rules. It is included in the maps to allow system suppliers to build classification rules and coding standards into systems:

Example 1 – Laparoscopic approach to abdominal cavity

Map Entries	Rule	Advice	Relation
1/1/1	Y53.2 Approach to organ under ultrasonic control	ALTERNATIVE	ADDITIONAL CODE MANDATORY
1/1/2	Y75.5 Laparoscopic ultrasonic approach to abdominal cavity	TRUE	ADDITIONAL CODE MANDATORY

Codes from OPCS-4 Chapter Y are used to enhance codes from the body systems chapter and must only be used in a secondary position.

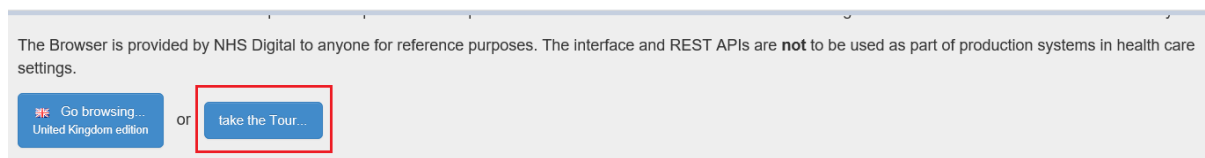
Example 2 - Postoperative wound infection

Concept Details			
Concept Details			
Summary	Details	Diagram	Expression
Postoperative wound infection (disorder) 58126003 ICD10			
Map Entries	Rule	Advice	Relation
1/1/1	T81.4 Infection following a procedure, not elsewhere classified	TRUE	ADDITIONAL CODE POSSIBLE

It may be necessary to add an additional code e.g. an external cause code to identify the specific procedure that was carried out and which is associated with the postoperative infection.

More information

For a perspective of other features in the NHS Digital SNOMED CT Browser [take the tour](#):



The maps and associated technical specification documentation is available for download from [TRUD](#).

Reporting issues

Users of the maps who have a query about an existing map or wish to request a new map for an existing SNOMED CT concept should submit a request via information.standards@nhs.net