

Guidance for National Interim Clinical Imaging Procedure (NICIP) Mapping Table to OPCS-4

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Glossary of Terms

Term / Abbreviation	What it stands for
CDS	Commissioning Data Sets
HRG	Healthcare Resource Groups
ICD-10	International Statistical Classification of Diseases and Related Health Problems (10 th Revision)
NICIP	National Interim Clinical Imaging Procedures
OPCS-4	Office of Population, Censuses and Surveys, Classification of interventions and Procedures (4 th revision)
SNOMED CT	SNOMED Clinical Terms
TRUD	Terminology Reference Update Distribution

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1 About this Document

The October 2022 National Interim Clinical Imaging Procedures (NICIP) code set content is based on the 35.0.0 - 05 October 2022 SNOMED CT UK Clinical Edition release (Effective Date 20220928).

1.1 Purpose

This document provides guidance and information for Trusts implementing the NICIP code set in their clinical imaging systems who are using the NICIP-OPCS-4 mapping table to support submission of OPCS-4 data for Commissioning Data Sets returns. It provides an overview of the content and structure of the NICIP-OPCS-4 mapping table, along with recommendations for its use.

1.2 Audience

Anyone working with clinical imaging information systems with a requirement to submit data in OPCS-4 coded format.

2 General information

The NICIP-OPCS-4 mapping table is released by NHS Digital to support the collection and submission of accurate and consistent diagnostic imaging data. It is designed to help users transform clinical imaging captured using the NICIP/SNOMED CT code set, into OPCS-4 classification codes as required for the Commissioning Data Sets (CDS), the National Tariff Payment System and any other secondary use purpose.

SNOMED CT to ICD-10 and OPCS-4 maps are released as part to the SNOMED CT UK Edition. The maps are developed and maintained centrally by NHS Digital classification specialists, who apply national clinical coding standards and classification rules and conventions, to ensure compliance with the three dimensions of coding accuracy¹. As with all elements of the terminology release, the classification maps are subject to a rigorous quality control process.

The OPCS-4 maps within the NICIP mapping tables are automatically generated from the SNOMED CT UK Edition OPCS-4 default maps. However, there are instances where the OPCS-4 map provided in the NICIP table will have been manually modified to comply with national coding standards or to better align with the NICIP code description – see section [3.3 Manual modifications](#) for more information.

The NICIP-OPCS-4 mapping table does not have the capacity to include the alternative OPCS-4 target codes provided in the SNOMED CT UK Edition. It is possible that information only available at the point of patient care will affect accurate OPCS-4 code assignment (e.g., the duration of a patient's ultrasound scan – see section [3.2 Ultrasound and fluoroscopy and](#)

¹ Individual codes, totality of codes and sequencing of codes – [National Clinical Coding Standards OPCS-4](#), page 10

OPCS-4 category 'Y98 Radiology procedures'). It is therefore strongly recommended that the NICIP mapping table is subject to local validation and that imaging professionals work closely with their clinical coding departments to ensure the OPCS-4 codes are assigned in accordance with coding national standards and local protocols.

The NICIP-OPCS-4 mapping table is released as part of the NICIP code set and can be downloaded from the [Technology Reference data Update Distribution \(TRUD\)](#) service (registration is required).

Any queries about the OPCS-4 maps, or feedback from any local validation/testing are welcome and can be submitted to information.standards@nhs.net.

Requests for new NICIP codes can be submitted to the [NICIP Request Submission Portal](#).

2.1 Format of mapping table

The data file is in an independent tab delimited text format.

All columns in the mapping table are divided into the following four sections. The specification of columns can be found in [Appendix A](#).

2.2 NICIP codes

The mapping table only includes the short code and preferred term of active codes in the current release. They can be used to identify the rest of the content of the NICIP code set.

2.3 SNOMED CT concepts

The concept ID and Fully Specified Name (FSN) are included to present the NICIP equivalent in SNOMED CT.

2.4 OPCS-4 codes

These columns present the OPCS-4 codes and descriptions mapped from the NICIP codes in the first section of the mapping table.

2.5 Annotation

The letters C (change), N (new addition), and R (retired) in the annotation field denote the status of changes of the NICIP codes since the previous release.

3 Principles and methods for producing the NICIP-OPCS-4 mapping table

3.1 Primary codes²

If during the same radiology visit, multiple body areas are scanned or one area is scanned using multiple types of imaging, a code from the category **U21 Diagnostic imaging procedures** or **U36 Other diagnostic imaging procedures** must be assigned³.

The imaging of multiple body areas using the following modalities will be assigned on the listed codes:

Imaging modality	OPCS-4 code when performed on more than one area	Description of OPCS code
CT	U21.2	Computed tomography NEC
	U36.2	Positron emission tomography with computed tomography NEC
	U36.3	Single photon emission computed tomography with computed tomography NEC
	U36.5	Cone beam computed tomography NEC
Fluoroscopy	U21.5	Contrast fluoroscopy NEC
MRI	U21.1	Magnetic resonance imaging NEC
Ultrasonography	U21.6	Ultrasound scan NEC
X-ray	U21.7	Plain x-ray NEC

For example, to comply with OPCS-4 national coding standards, a CT of the abdomen and pelvis (NICIP code CABPE) must be coded to **U21.2 Computed tomography NEC**, and not **U08.1 Computed tomography of abdomen NEC** plus **U09.1 Computed tomography of pelvis**. Additional OPCS-4 supplementary codes will be assigned with U21.2, to identify the number areas imaged (i.e., two), and sites of the abdomen and pelvis.

A single NICIP procedure code involving more than one body area is assumed to be one visit to the radiology department, within the NICIP-OPCS-4 mapping table. However, as the circumstances of an individual's radiology visit is not part of the NICIP code scheme, final OPCS-4 code selection may need to be modified by the end user. For instance, using local information sources such as the Trust's Radiology Information System (RIS) or the patient's medical record.

3.2 Ultrasound and fluoroscopy and OPCS-4 category 'Y98 Radiology procedures'

For ultrasound and fluoroscopy, fourth-character code assignment from supplementary category **Y98** for **Radiology procedures** is dependent on the duration of the scan. As the NICIP-OPCS-4 table does not provide alternative map targets, the default code provided is

² See [Appendix A](#) for specification of 'Primary codes' within the NICIP mapping table

³ PCSU1: Diagnostic imaging procedures (U01–U21 and U34–U37), National Clinical Coding Standards OPCS-4

Y98.1 Radiology of one body area (or < 20 minutes), but this code would need amending by the end user should the duration of the scan exceed 20 minutes.

3.3 Manual table modifications

The NICIP-OPCS-4 mapping table is autogenerated by linking the SNOMED CT concepts provided in the NICIP codes set with the SNOMED CT to OPCS-4 maps provided in the SNOMED CT UK Edition. However, in some instances there is a requirement to manually modify the OPCS-4 maps to ensure compliance with national coding standards or the selection of a more appropriate OPCS-4 code to align with the NICIP code description.

For instance, fourth-character code assignment from the OPCS-4 supplementary category **Y98 Radiology procedures** is dependent on scan modality. For MRI, CT or X-ray, it is the number of areas imaged that determines **Y98** code selection (for fluoroscopy or ultrasound, it is the duration of the scan - see section 3.2).

In terms of **Y98**, the right leg, left leg, right arm and left arm are each defined as individual body areas. If the SNOMED CT concept fully provided in the NICIP table does not specify 'bilateral', this may lead to disparity between the OPCS-4 map provided in the NICIP table and the corresponding SNOMED CT to OPCS-4 map published in SNOMED CT UK Edition release files.

For example, for 'MKNEB - MRI Knee Both', the SNOMED CT concept provided in the NICIP table is **241641004 Magnetic resonance imaging of knee (procedure)**. As 241641004 does not state 'bilateral' in the fully specified name (FSN), the concept assigned the supplementary code **Y98.1 Radiology of one body area (or < 20 minutes)** within the UK Edition mapping files is, but this has been manually amended to **Y98.2 Radiology of two body areas** in the NICIP table, because MKNEB represents a bilateral procedure.

3.4 OPCS-4 laterality codes

Where the NICIP code expresses laterality and the associated SNOMED CT imaging concept includes the laterality within the fully specified name (FSN), the OPCS-4 laterality code is provided.

Where the SNOMED CT concept provided does not express laterality within the FSN and instead relies on post-coordination, the OPCS-4 laterality code is not provided.

4 Codes marked #NC or #HLT

It will not always be possible to provide an OPCS-4 map for a procedure listed in the NICIP-OPCS-4 mapping table and such instances will contain either #NC or #HLT⁴ in the 'Primary' field within the table. However, it is possible that some procedures marked as #NC/#HLT could be assigned an OPCS-4 code manually by the end user, using local information

⁴ For more information see section 3.6 of [SNOMED CT to ICD-10 and OPCS-4 Map Table Technical Specification and Implementation Guidance \(UK Edition\)](#)

sources such as the RIS system or patient medical record. For example, CABLTA CT Guided ablation is marked as #HLT as the site of ablation is required to assign an OPCS-4 ablation code and this information should be available locally.

5 Recommendations for using the NICIP-OPCS-4 mapping table

The OPCS-4 codes provided can be used directly for the appropriate CDS submissions with minor or no modifications. However, it is possible that an NICIP code could have alternative map targets that would be dependent on information that is only be available locally (e.g. from RIS or the patient medical record).

- Trusts should always ensure that they assign the most appropriate OPCS-4 codes based any additional information available to them, rather than automatically assigning the OPCS-4 codes provided on the spreadsheet.
- Imaging professionals should work closely with their clinical coding departments to ensure the OPCS-4 codes are assigned in accordance with coding national standards and local protocols.

(See sections [3.2 Ultrasound and fluoroscopy](#) and [OPCS-4 category 'Y98 Radiology procedures'](#) and [4 Codes marked #NC or #HLT](#) for further information.)

For Casemix grouping purposes, all diagnostic imaging procedures (Radiology - MRI, CT, DEXA, Fluoroscopy, US, Nuclear Medicine - apart from plain film) will generate unbundled HRGs across all settings (e.g., inpatient, day case, outpatients, services accessed directly), when recorded using OPCS-4 procedure codes.

- Users should follow the guidance for HRG derivation from NHS Digital to obtain appropriate results⁵

⁵ <https://digital.nhs.uk/services/national-casemix-office>

6 Appendix A: The specification of data items

Column Number	Name	Data Type	Description
1	DI_Code	String	The unique identifier of short code for active descriptions and data items in the NICIP code set
2	DI_Term	String	The preferred term description in the NICIP code set
3	SCT_ID	Integer	The unique identifier for SNOMED CT concept
4	SCT_Description	String	The fully specified name of a SNOMED CT concept
5	Primary_Code1	String	The first OPCS-4 code listed in the entire string of codes.
6	Primary_Term1	String	
7	Primary_Code2	String	
8	Primary_Term2	String	
9	Primary_Code3	String	
10	Primary_Term3	String	
11	Primary_Code4	String	
12	Primary_Term4	String	
13	Y_Code1	String	
14	Y_Term1	String	
15	Y_Code2	String	
16	Y_Term2	String	
17	Y_Code3	String	
18	Y_Term3	String	
19	Y_Code4	String	
20	Y_Term4	String	
21	Z_Code1	String	
22	Z_Term1	String	
23	Z_Code2	String	
24	Z_Term2	String	
25	Z_Code3	String	
26	Z_Term3	String	
27	Z_Code4	String	
28	Z_Term4	String	
29	Z_Code5	String	
30	Z_Term5	String	
31	O_Code	String	Only includes O11 – O14, O16, O28, O30, O31, O33 – O34, O36, O43, O45 codes
32	O_Term	String	Only includes O11 – O14, O16, O28, O30, O31, O33 – O34, O36, O43, O45 terms
33	Annotation	String	C(change), N(New addition), R(Retired)