Digital Imaging and Communications in Medicine (DICOM)

Supplement 53: DICOM Content Mapping Resource (DCMR)

DICOM Standards Committee, Working Group 6 Base Standard

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TABLE OF CONTENTS

Foreword

The American College of Radiology (ACR) and the National Electrical Manufacturers Association (NEMA) formed a joint committee to develop a standard for Digital Imaging and Communications in Medicine (DICOM). This DICOM Standard and the corresponding Supplements to the DICOM Standard were developed according to the NEMA procedures.

This Supplement to the Standard is developed in liaison with other standardization organizations including CEN TC251 in Europe and JIRA in Japan, with review also by other organizations including IEEE, HL7 and ANSI in the USA.

The DICOM Standard is structured as a multi-part document using the guidelines established in the following document:

- ISO/IEC Directives, 1989 Part 3 : Drafting and Presentation of International Standards.

This document is a Supplement to the DICOM Standard. It is an extension to PS 3.3, 3.4 and 3.6 of the published DICOM Standard which consists of the following parts:

PS 3.1	-	Introduction and Overview
PS 3.2	-	Conformance
PS 3.3	-	Information Object Definitions
PS 3.4	-	Service Class Specifications
PS 3.5	-	Data Structures and Encoding
PS 3.6	-	Data Dictionary
PS 3.7	-	Message Exchange
PS 3.8	-	Network Communication Support for Message Exchange
PS 3.9	-	Point-to-Point Communication Support for Message Exchange
PS 3.10	-	Media Storage and File Format for Data Interchange
PS 3.11	-	Media Storage Application Profiles
PS 3.12	-	Media Formats and Physical Media for Data Interchange
PS 3.13	-	Print Management Point-to-Point Communication Support
PS 3.14	-	Grayscale Standard Display Function
PS 3.15	-	Security
PS 3.16	-	Content Mapping Resource

These parts are related but independent documents.

Scope and Field of Application

This supplement:

1) updates PS 3 codes and controlled terminology specifications;

2) regularizes Context Group specifications throughout the Standard;

3) specifies the semantics of Context Group Tables and Template Tables;

4) creates the DCMR (DICOM Content Mapping Resource) as Appendices A and B of PS3.16, which defines Context Groups (context-dependent value set restrictions for code sequence data elements) and Templates (which may be used to specify the content of SR Documents);

5) updates PS 3 Annex D (new nomenclature; removes author names and updates citations)

Changes to:

NEMA Standards Publication PS 3.3-1999

Digital Imaging and Communications in Medicine (DICOM)

Part 3

Revise definitions that are applicable to coded entries

3.13 CODES AND CONTROLLED TERMINOLOGY DEFINITIONS:

The following definitions are used in the specification of Interpretation Data Interchange:

3.13.1 ~~Baseline Context ID: Identifier of the Baseline Context Group~~

3.13.2 Baseline Context Group: Context Group that specifies the suggested Value Set for a Code Sequence Attribute.

3.13.3 ~~Baseline Template: Template that specifies a suggested set of Properties and corresponding Value Sets.~~ Defined Context Group: Context Group that specifies the Value Set for a Code Sequence Attribute that shall be used, but may be extended.

3.13.4 ~~Baseline Template ID: Identifier of the Baseline Template.~~ Enumerated Context Group: Context Group that specifies the Value Set for a Code Sequence Attribute that shall be used and shall not be extended.

3.13.5 Code Sequence Attribute: Attribute that (usually) includes the string "Code Sequence" in the Attribute Name and has a VR of SQ (Sequence of Items). Its purpose is to encode concepts using code values and optional text meanings from coding schemes ~~such as the Systematized Nomenclature of Human and Veterinary Medicine (SNOMED), College of American Pathologists, Northfield, IL~~. Sections 8.1 through 8.8 specify the Attributes of which the Sequence Items (Attribute Sets) of Code Sequence Attributes are constructed ~~See Annex D for further explanation.~~

3.13.6 ~~Concept: An idea. An abstraction of a real-world entity, process, feeling, or sensation.~~

3.13.7 Context Group: Attribute Value Set defined by a ~~**message/terminology**~~ Mapping Resource.

3.13.8 Context Group Version: Version of a Context Group ~~**Expressed as date/time.**~~

3.13.9 Context ID (CID): Identifier of a Context Group.

3.13.10 ~~Enomen: English Nomenclature (field of SNOMED and the **SDM** DCMR).~~

3.13.11 Mapping Resource: ~~**Database that provides**~~ A resource that defines context-dependent usage constraints (i.e. Value Set or Relationship Type restrictions) for Attribute ~~**Information**~~ resource that specifies the mapping of the content of an external controlled terminology to the components of a message standard.

~~**3.13.12 Mapping Resource Version: Date of last revision of the Mapping Resource. The Mapping Resource Version date is the date of last revision of any Context Group, Template, or other item that it contains.**~~

~~**3.13.13 Pick List: The set of strings that are the allowed values of a Code Sequence Attribute in a given clinical or operational context.**~~

~~**3.13.14 Property: One facet of the description of a complex concept. The basic component of a Template.**~~

3.13.15 Relationship Type: The ~~constraints imposed upon~~ ~~nature of~~ the association between two Concepts. Examples ~~**"is a", "has", "is adjacent to"**~~ "HAS PROPERTIES", "CONTAINS", "INFERRED FROM".

3.13.16 ~~SNOMED DICOM Microglossary (SDM): **A Message/terminology Mapping Resource that provides context-dependent Attribute Value Sets for DICOM Attributes from the Systematized Nomenclature of Human and Veterinary Medicine (SNOMED) and other Coding Schemes**~~.

3.13.16 DICOM Content Mapping Resource (DCMR): A Mapping Resource that defines Templates and Context Groups for use in DICOM IODs.

3.13.17 Template: ~~**The set of Properties that fully describe a concept. A Template may be used to specify the categories of information and the corresponding suggested Value Sets for the fields of a document, such as an Image-interpretation Report. A Template may utilize references to Context Groups or to other Templates.**~~ **A pattern that describes the Content Items, Value Types, Relationship Types and Value Sets that may be used in part of a Structured Report content tree, or in other coded entry items, such as Acquisition Context or Waveform Channel Description. Analogous to a Module of an Information Object Definition.**

3.13.18 Template ID (TID): Identifier of a Template~~**Example: SDM Template ID 2 (or TID 2).**~~

~~**3.13.19 Template Version: Version of a Template. Expressed as a date/time.**~~

3.13.20 Value Set: ~~The domain of an Attribute.~~ The ~~set of Concepts and strings that are the~~ allowed values of a Code Sequence Attribute in a giv~~**elinical or operational**~~ context.Specified either as one or more individual values or by reference to a Context Group.

3.13.21 Baseline Template: A template suggested in an IOD which may be used in the creation of a SOP Instance, replaced by another template or extended.

3.13.22 Defined Template: A template defined in an IOD that specifies an extensible set of Content Items and corresponding Value Sets. A SOP Instance may optionally include additional Content Items beyond those specified in the template.

3.13.23 Enumerated Template: A template defined in an IOD that specifies the exact set of Content Items and corresponding Value Sets that shall be used and which shall not be extended. A SOP Instance shall be created according to the exact Template specification and shall not include additional Content Items.

3.13.24 Coding schemes: Dictionaries (lexicons) of terms with well defined meanings.

Note: Examples of coding schemes include SNOMED and LOINC.

Clarify encoding of coded entries:

8 Encoding of Coded Entry Data

The primary method of incorporating coded entry data in DICOM IODs is the Code Sequence Attribute. Code Sequence Attribute~~**are those Attributes whose values**~~ are encoded as a Sequence of Items~~**of the particular form**~~ using a macro which is described in this section. These Attributes typically include the string "Code Sequence" in the Attribute Name. Their purpose is to ~~**encode**~~ terms by using code~~**s**~~ ~~**values and optional text meanings**~~ from coding scheme~~**such as the Systematized Nomenclature of Human and Veterinary Medicine (SNOMED, College of American Pathologists, Northfield, IL)**~~ rather than as free text strings. ~~**Sections 8.1 through 8.6 of this Part specify the Coded Entry Attributes of which Code Sequence Attributes are constructed. Section 8.7 specifies certain dependencies on message/terminology Mapping Resources. Section 8.8 specifies the default set of Attributes encapsulated in the Items of Code Sequence Attributes. See Annex D of this Part for further explanation.**~~

Notes: 1. In this Standard, Code Sequence Attributes are defined for a variety of concepts, for example: Primary Anatomic Structure Sequence (0008,2228) and other Attributes to describe anatomy; Patient's Insurance Plan Code Sequence (0010,0050), to identify insurance plans; and Interventional Drug Code Sequence (0018,0029), to document administration of drugs that have special significance in Imaging Procedures.

2. The VR of Code Sequence Attributes is SQ. Sub-sections 8.1 through 8.6 specify the six Coded Entry Attributes of which Code Sequence Attributes are constructed.

Each Item of a Code Sequence Coded Entry Attribute**s convey** contains **at least** the triplet of Coding Scheme Designator, the Code Value, and **the** Code Meaning**(a textual representation of the coded concept)**. **See Sections 8.3 through 8.6 of this Part for the definition of optional and conditional Coded Entry Attributes.** Other optional and conditional attributes may also be present.

Note: Structured data encoding with standardized coding schemes is widely used in computer-based patient records to enable selective retrieval of information. Many DICOM IODs specify Coded Entry Attributes. The semantics of the mandatory coded entry attributes are compatible with the ANSI HISPP Common Data Types and with the coded entry mechanisms of HL7 and CEN/TC 251 WG3 and WG4.

For any particular Code Sequence Attributes, the range of codes that may be used for that attribute (the Value Set) may be suggested or constrained by specification of a Context Group. The Module or Template in which the attribute is used will specify whether or not the context group is baseline, defined or enumerated. A Baseline Context Group lists codes for terms which are suggested and may be used, but are not required to be used. A Defined Context Group lists codes for terms which shall be used if the term is used, but which may be extended with codes for other terms. An Enumerated Context Group lists codes for terms that shall be used, and no other codes or terms shall be used.

Context Groups are defined in a Mapping Resource, such as the DICOM Content Mapping Resource (DCMR) specified in PS 3.16. Context Groups consist of lists of terms, including the Code Value (0008,0100) and Coding Scheme Designator (0008,0102). Whether a Context Group is used as a Baseline, Defined or Enumerated Context Group is defined not in the mapping resource, but rather in the Template or Module in which the Code Sequence Attribute is used.

Context Groups are identified by labels referred to as Context Group Identifiers (CID).

8.1 CODE VALUE

The Code Value (0008,0100) is a**n computer readable and computer searchable** identifier that is unambiguous within the Coding Scheme denoted by Coding Scheme Designator (0008,0102) and Coding Scheme Version (0008,0103).

Note: The Code Value is typically not a natural language string, e.g. "T-04000".

The suggested Value Set, i.e. the Defined Terms, for a given instance of Code Value (0008,0100) may be defined by an external a Mapping Resource, such as the SNOMED DICOM Microglossary DICOM Content Mapping Resource. See Sections 3.10, 8.4, 8.5, and Annex D of this Part for further explanation of message/terminology Mapping Resources.

Defined Terms may be specified by reference to either a Context Group or a Template defined by a Mapping Resource. A Context Group is denoted by a Context ID Number (CID). A Template is denoted by a Template ID Number (TID). A Context Group or Template that defines the suggested Value Set for a Code Sequence Attribute is, respectively, a Baseline Context Group or a Baseline Template. See Section 3.10 and Annex D of this Part for further explanation. A Baseline Context Group is denoted by a Baseline Context ID Number (Baseline CID). A Baseline Template is denoted by a Baseline Template ID Number (Baseline TID). The suggested Defined Terms for a Code Sequence Attribute may be specified by a Baseline Context ID Number or a Baseline Template ID Number in an Attribute Definition. A Context ID Number value conveyed by Context

~~**Identifier (0008,010F), if present, overrides the Baseline Context ID Number(s) and/or Baseline Template(s) and specifies the Value Set of Defined Terms for the instance of Code Value (0008,0100) in the same sequence Item. Unless otherwise specified, Baseline Context ID Numbers and Baseline Template ID Numbers in this Standard are defined by the SDM**~~**DCMR**~~**.**

8.2 CODING SCHEME DESIGNATOR, CODING SCHEME VERSION, AND PRIVATE CODING SCHEME CREATOR UID

The attribute Coding Scheme Designator (0008,0102) identifies the coding scheme in which the code for a term is defined.

Notes: 1. Typical coding schemes used in DICOM include "DCM" for DICOM defined codes, "SNM3" for SNOMED version 3, "SRT" for SNOMED-RT, and "LN" for LOINC.

2. Coding scheme designators beginning with "99" and the coding scheme designator "L" are defined in HL7 to be private or local coding schemes.

If the Coding Scheme Designator (0008,0102) is not sufficient to identify the coding scheme uniquely and unambiguously, additional attributes may be required.

The attribute Coding Scheme Version (0008,0103) may be used to identify the version of a coding scheme.

The attribute Private Coding Scheme Creator UID (0008,010C) may be used to more precisely identify a private (rather than a standard) coding scheme.

Standard coding schemes are those that are listed in PS 3.16. That context group is based on a similar list in the HL7 and ASTM 2538 standards.

~~The Coding Scheme Designator (0008,0102), Coding Scheme Version (0008,0103), and Private Coding Scheme Creator UID (0008,010C) uniquely identify the table (Coding Scheme) where the Code Value (0008,0100) is linked to its Code Meaning (0008,0104). The **Enomen** Code Value field of the appropriate record from SNOMED DICOM Microglossary DICOM Content Mapping Resource Context Group 167 shall provide the value of Coding Scheme Designator (0008,0102) except for private Coding Scheme Designators. Private Coding Scheme Designators shall be constructed as specified by the current version of the HL7 Standard. See Section 8.8 of this Part for specification of the conditions for use of Coding Scheme Version (0008,0103) and Private Coding Scheme Creator UID (0008,010C).~~

~~Notes: 1. Some of the commonly-used coding schemes in biomedical imaging are CPT-4, ICD-9CM, SNOMED International, LOINC, the ACR Findings Codes, BI-RADS, and the UMLS.~~

~~2. If more than one version of a Coding Scheme exists, the name of the issuing organization or unqualified name of the Coding Scheme is not sufficient to identify the Coding Scheme unambiguously. If the Coding Scheme is a private Coding Scheme, there is no way to ensure uniqueness of the Coding Scheme Designator. Section 8.8 of this Part specifies conditions for the use of Coding Scheme Version (0008,0103) and Private Coding Scheme Creator UID (0008,010C) to resolve these ambiguities.~~

~~3. SDM DCMR Context Group 167 specifies Coding Scheme Designators for Coding Schemes that are relevant to biomedical imaging. When a Coding Scheme Designator for exactly the same Coding Scheme and version is also defined in the Coding Scheme Designator table of the current version of the HL7 Standard, the HL7 Coding Scheme Designator is used.~~

~~4. Coding Scheme Version (0008,0103) is used when a Coding Scheme has multiple versions and the Coding Scheme Designator does not explicitly (or adequately) specify the version number. At the time of this writing, the HL7 Vocabulary SIG is proposing to add a Coding Scheme Version attribute to the next version of the HL7 Standard. The intention of the DICOM Committee is to specify unambiguous identification of Coding Schemes and to use HL7 Coding Scheme Designators wherever possible.~~

~~5. Examples (Informative):~~

~~HL7 Version 2.3 Coding Scheme Designator~~	~~Coding Scheme Version~~	~~Fully Qualified Name~~
~~SNM3~~	~~3.3~~	~~SNOMED International, Version 3.3~~
~~SNM3~~	~~3.4~~	~~SNOMED International, Version 3.4~~
~~LN~~	~~1.01~~	~~Logical Observation Identifier Names and Codes, Version 1.01 (Laboratory LOINC)~~

In previous versions of the DICOM Standard, a provisional Coding Scheme Identifier of "99SDM" was used for SNOMED codes that were used in DICOM. **~~assigned to the SNOMED DICOM Microglossary (SDM), which has now been superceded by the DICOM Content Mapping Resource (DCMR). Subsequently changes in design details of the SDM have been made. The SDM DCMR is used as a message/terminology Mapping Resource rather than a Coding Scheme. A message/terminology Mapping Resource is a database of context-dependent Attribute Value Set specifications. The Semantic Types in the original SDM are now Concept Groups in the DCMR (i.e. Attribute Value Sets) identified by Context ID Numbers. The terms within the Context Groups may come from a variety of coding schemes (BI-RADS, ACR Findings Codes, CPT, ICD, READ), though the predominant ones for clinical data in biomedical imaging are currently SNOMED and LOINC codes.~~**

Consequently, when a Coding Scheme Designator (0008,0102) of "99SDM" is encountered, it shall be treated as equivalent to "SNM3" for the purpose of interpreting Code Value (0008,0100).

~~Notes: 1. This is possible because all codes in the SNOMED DICOM Microglossary defined for use with coded entries in previous versions of the standard were defined in SNOMED International, Version 3.3~~

~~2. The creation of new objects with a Coding Scheme Designator (0008,0102) of "99SDM" is now deprecated.~~

A Coding Scheme Designator (0008,0102) of "99SDM" or "SNM3" is defined to identify the SNOMED Version 3 **~~SNM3~~** Coding Scheme unambiguously, hence the condition for inclusion of Coding Scheme Version (0008,0103) is explicitly not satisfied.

8.3 CODE MEANING

The Code Meaning (0008,0104) is ~~human-readable~~ text which has meaning to a human and which **~~is provided for the convenience of the readers of the Information Object~~** conveys the meaning of the term defined by the combination of Code Value and Coding Scheme Designator. Though such a meaning can be "looked up" in the dictionary for the coding scheme, it is encoded for the convenience of applications that do not have access to such a dictionary.

It should be noted that f**~~F~~**or a particular Coding Scheme Designator (0008,0102) and Code Value (0008,0100), several alternative values for Code Meaning (0008,0104) may be defined. T**~~t~~**hese may be **~~(i.e.~~** synonyms**~~), even for~~** in the same **~~nomenclature~~** language **~~(English, French, etc.). Even when no synonyms are present within a single nomenclature, other nomenclatures may be in use (i.e.~~** or translations of the Coding Scheme into other languages**~~)~~**. Hence the value of Code Meaning (0008,0104) shall never be used as a key, index or decision value, rather the combination of Coding Scheme Designator (0008,0102) and Code Value (0008,0100) may be used. Code Meaning (0008,0104) is a purely annotative, descriptive Attribute.

This does not imply that Code Meaning (0008,0104) can be filled with arbitrary free text. Only values defined by the Coding Scheme shall be used.

8.4 MAPPING RESOURCE

The value of Mapping Resource (0008,0105) denotes the message/terminology Mapping Resource that specifies~~:~~

~~1)~~The Context Group that specifies the Value Set~~(s)~~**, i.e. the Defined Terms, for Code Value (0008,0100) and Code Meaning (0008,0104) of a particular instance of a Code Sequence Attribute or Code Sequence Modifier Attribute; or**

~~2)~~the Template(s) that specify the modifier properties, Context Groups, Observation Classes, and Relationships that apply to a particular instance of a Code Sequence Attribute or Code Sequence Modifier Attribute in a given clinical or operational context. See Annex D of this Part for further explanation. The Defined Terms for the value of Mapping Resource (0008,0105) shall be~~:

"DCMR" = "DICOM Content Mapping Resource",

"SDM" = "SNOMED DICOM Microglossary (Retired),

~~"HL7V"= "HL7 Vocabulary",~~

~~"TERMS" = "Terminology Resource for Message Standards", and~~

~~"PRIVATE" = "Private Controlled Terminology Mapping Resource".~~

PS 3.16 specifies the DICOM Content Mapping Resource (DCMR).

Note: Unless otherwise specified, the DCMR is the source of all Context Groups and Templates specified in this Standard.

8.5 CONTEXT GROUP VERSION

Context Group Version (0008,0106) conveys the versi**~~date/time~~** of the Context Group identified by Context Identifier (0008,010F)**~~,~~ as specified by the standards body that maintains the Mapping Resource in which the Context Group is defined**.

8.6 CONTEXT IDENTIFIER

The value of Context Identifier (0008,010F) identifies the Context Group defined by Mapping Resource (0008,0105) from which the values of Code Value (0008,0100) and Code Meaning (0008,0104) were selected or the Context Group defined by Mapping Resource (0008,0105) to which the Code Value (0008,0100) and Code Meaning (0008,0104) have been added as a private Context Group extension by Context Group Creator UID (0008,010E).

8.7 CODE SET EXTENSIONS

Code Set Extension Flag (0008,010B) may be used to designate a Code Value/Code Meaning pair as a private extension of a Coding Scheme or Context Group. Code Set Extension Creator UID (0008,010D) may be used to identify the person or organization who created an extension to a Context Group and/or Coding Scheme. Context Group Local Version (0008,0107) conveys an implementation-specific private version date/time of a Context Group that contains private code set extensions. See Section 8.8 of this Part for further definition.

Notes: 1. These Attributes provide the means for users to extend code sets conveniently, while preserving referential integrity with respect to the original Context Group Version. These attributes also enable system administrators to track extensions so that they can be submitted to standards bodies as change proposals for controlled terminologies.

2. The locally-defined (private) value of Context Group Local Version (0008,0107) typically would be a more recent date than the standard value of Context Group Version (0008,0106) specified in the standard message/terminology Mapping Resource that defines the Context Group.

8.8 STANDARD ATTRIBUTE SETS FOR CODE SEQUENCE ATTRIBUTES

Table 8.8-1 specifies the default set of Attributes encapsulated in the Items of Code Sequence Attributes. These Attributes comprise the Code Sequence Macro.

Note: The instruction " Include 'Code Sequence Macro' Table 8.8-1" may be used in an Information Object Definition as a concise way to indicate that the attributes of Table 8.8-1 are included in the specification of the Attribute Set of a Sequence of items. Additional constraints on the Code Sequence Data Element (such as a Context Group that defines the value set) may be appended to the "Include 'Code Sequence Macro' Table 8.8-1" instruction.

The default specifications of this Section are overridden within the scope of a Sequence Item or Code Sequence Attribute or IOD by corresponding specifications defined within the scope of that Sequence Item or Code Sequence Attribute or IOD. Additional Attributes may also be specified by the instantiation of the macro.

The Basic Coded Entry Attributes fully define a Coded Entry. If it is desired to convey the list from which a code has been chosen, then the optional Enhanced Encoding Mode Attributes may also be sent.

Table 8.8-1 Common Attribute Set for Code Sequence Attributes
(Invoked as "Code Sequence Macro")

Attribute Name	Tag	Type	Attribute Description
BASIC CODED ENTRY ATTRIBUTES			
Code Value	(0008,0100)	1C	See Section 8.1. Required if a sequence item is present.
Coding Scheme Designator	(0008,0102)	1C	See Section 8.2. Required if a sequence item is present.
Coding Scheme Version	(0008,0103)	1C	See Section 8.2. Required if a sequence item is present and the value of Coding Scheme Designator (0008,0102) is not sufficient to identify the Code Value (0008,0100) unambiguously.
Code Meaning	(0008,0104)	1C	See Section 8.3. Required if a sequence item is present.
ENHANCED ENCODING MODE			
Context Identifier	(0008,010F)	3	See Section 8.6.
Mapping Resource	(0008,0105)	1C	See Section 8.4. Required if Context Identifier (0008,010F) is present.
Context Group Version	(0008,0106)	1C	See Section 8.5. Required if Context Identifier (0008,010F) is present.
Code Set Extension Flag	(0008,010B)	3	Code Set Extension Flag (0008,010B) indicates whether the Code Value/Code Meaning pair encoded in Code Value (0008,0100) and Code Meaning (0008,0104) is a private extension of a Context Group and/or Coding Scheme. See Section 8.7 of this Part. Enumerated Values: "Y", "N" If Context Identifier (0008,010F) is present, then "Y" shall mean "The Code Value/Code Meaning pair is a private extension of the Context Group designated by Context Identifier (0008,010F)." If no value of Context Identifier (0008,010F) is present, then "Y" shall mean "The Code Value/Code Meaning pair is a private extension of the Coding Scheme designated by Coding Scheme Designator (0008,0102) and Coding Scheme Version (0008,0103).
Context Group Local Version	(0008,0107)	1C	See Section 8.7. Required if the value of Code Set Extension Flag (0008,010B) is "Y". May also be present if the Context Group denoted by Context Identifier (0008,010F) contains private code set extensions.
Private Coding Scheme Creator UID	(0008,010C)	3	Private Coding Scheme Creator UID (0008,010C) identifies the organization that created and/or maintains the private Coding Scheme used, if any. See Section 8.2.
Code Set Extension Creator UID	(0008,010D)	1C	Code Set Extension Creator UID (0008,010D) identifies the person or organization who created an extension to a Coding Scheme or Context Group. See Section 8.7. Required if the value of Code Set Extension Flag (0008,010B) is "Y".

Remove all Annex A references to Acquisition Context baseline templates that are not yet defined in the DCMR:

A.32 VISIBLE LIGHT IMAGE INFORMATION OBJECT DEFINITIONS

A.32.1 VL Endoscopic Image Information Object Definition

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A.32.1.3.2 Acquisition Context Module

~~The Baseline Template for Acquisition Context Sequence (0040,0555) is: TID 2.~~

~~The Baseline Context Groups for Concept-name Code Sequence (0040,A043) are: CID 211 (Anatomic frame of reference); and CID 212 (Image-acquisition context).~~

~~Baseline Context Groups for Concept Code Sequence (0040,A168) are specified in Tables: C.7.6.14.1.2-4 (Anatomic frame of reference); and C.7.6.14.1.2-2 (Image-acquisition context).~~

A.32.2 VL Microscopic Image Information Object Definition

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A.32.2.3.2 Acquisition Context Module

~~The Baseline Template for Acquisition Context Sequence (0040,0555) is: TID 2.~~

~~The Baseline Context Groups for Concept-name Code Sequence (0040,A043) are: CID 203 (Specimen-acquisition and specimen-processing properties); CID 207 (Illumination); and CID 209 (Magnification).~~

~~Baseline Context Groups for Concept Code Sequence (0040,A168) are specified by Tables: C.7.1.2.1.4-1 (Specimen-acquisition and specimen-processing), C.7.6.14.1.2-3 (Illumination); and C.7.6.14.1.2-4 (Magnification).~~

A.32.3 VL Slide-Coordinates Microscopic Image Information Object Definition

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A.32.3.3.2 Acquisition Context Module

~~The Baseline Template for Acquisition Context Sequence (0040,0555) is: TID 2.~~

~~The Baseline Context Groups for Concept-name Code Sequence (0040,A043) are: CID 203 (Specimen-acquisition and specimen-processing properties); CID 207 (Illumination); and CID 209 (Magnification).~~

~~Baseline Context Groups for Concept Code Sequence (0040,A168) are specified by Tables: C.7.1.2.1.4-1 (Specimen-acquisition and specimen-processing), C.7.6.14.1.2-3 (Illumination); and C.7.6.14.1.2-4 (Magnification).~~

A.32.4 VL Photographic Image Information Object Definition

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A.32.4.3.2 Acquisition Context Module

~~The Baseline Template for Acquisition Context Sequence (0040,0555) is: TID 2.~~

~~The Baseline Context Groups for Concept-name Code Sequence (0040,A043) are: CID 207 (Illumination); CID 211 (Anatomic frame of reference); and CID 212 (Image-acquisition context).~~

~~Baseline Context Groups for Concept Code Sequence (0040,A168) are specified in Tables: C.7.6.14.1.2-3 (Illumination); C.7.6.14.1.2-4 (Anatomic frame of reference); and C.7.6.14.1.2-2 (Image-acquisition context).~~

Update all Annex C references to use DCMR, and remove context groups which are now in PS 3.16::

Annex C INFORMATION MODULE DEFINITIONS (NORMATIVE)

C.7.6.12.1 Device Attribute Descriptions

C.7.6.12.1.1 Device Type and Size

Depending on the type of device specified by the Code Value (0008,0100) in an item of the Device Sequence (0050,0010), various device size attributes (e.g., Device Length (0050,0014), Device Diameter (0050,0016), Device Volume (0050,0018), Inter Marker Distance (0050,0019)) may be required to fully characterize the device.

~~Note: For example, the attributes required to fully characterize the devices in the SNOMED/DICOM Microglossary Angiographic Device list are specified in SDM DCMR Template #23.~~

…

The context and templates originally envisaged for Acquisition Context have not yet been defined in the standard. Until they are, the references and tables should be removed. The expectation is that groups like the Visible Light WG will define new concept names and context groups in templates and add them to PS 3.16 in a further supplement.

C.7.6.14 Acquisition Context Module

Table C.7.6.14-1 specifies Attributes for description of **~~clinically-relevant~~ Anatomic, Chemical, Functional, Physical, and Spatial** conditions present during data acquisition.

This Module shall not contain descriptions of conditions that replace those that are already described in specific Modules or Attributes that are also contained within the IOD that contains this Module.

Notes: 1. Each item of the Acquisition Context Sequence (0040,0555) contains one item of the Concept-name Code Sequence (0040,A043) and one of the mutually-exclusive Observation-value Attributes: Concept Code Sequence (0040,A168), the pair of Numeric Value (0040,A30A) and Measurement Units Code Sequence (0040,08EA), Date (0040,A121), Time (0040,A122), Person Name (0040,A123) or Text Value (0040,A160).

2. Acquisition Context includes concepts such as: "pre-contrast", "inspiration", "valgus stress", "post-void", and date and time of contrast administration.

3. If this SOP Instance is a Multi-frame SOP Instance, each item of the Acquisition Context Sequence (0040,0555) may be configured to describe one frame, all frames, or any specifically enumerated subset set of frames of the Multi-frame SOP Instance.

~~**4. SNOMED DICOM Microglossary (SDM) Templates and Context Groups provide semantic templates (frames) and controlled terminology for a rich variety of procedure-description concepts, such as Image-Acquisition Context (TID 2), Illumination (TID 5), Magnification (TID 6), Vital Staining (CID 168), Anatomic Frame of Reference (TID 7), Drug or Contrast-agent Administration (TID 8), Geometric Projection (CID 22), and others. See Section C.7.6.14.1.2 for further explanation.**~~

~~**5. The Attributes of Table C.7.6.14-1 can convey clinically-relevant Procedure-Description Attributes in any specific clinical or operational context. A generic "Name/Value pair" mechanism is provided for conveying Acquisition Context Attributes encoded as Coded Values, Text, or**~~

~~**specific Named Types (such as Date, Time, or Numeric Value). For example, the Attributes of radiographic-contrast administration may be documented with Codes drawn from SDM Context Groups such as radiographic contrast agent (CID 12) or administration route (CID 11); or with Numeric Values described by LOINC Codes for fluid volume, drug dose, or administration-rate measurements.**~~

Table C.7.6.14-1 – ACQUISITION CONTEXT MODULE ATTRIBUTES

Attribute Name	Tag	Type	Attribute Description
Acquisition Context Sequence	(0040,0555)	2	A sequence of repeating items that describes the conditions present during the acquisition of an Image. Zero or more items may be included in this sequence.
>Concept-name Code Sequence	(0040,A043)	1C	A concept that constrains the meaning of (i.e. defines the role of) the Observation Value. The "Name" component of a Name/Value pair. This sequence shall contain exactly one item. Required if a sequence item is present.
>>Include 'Code Sequence Macro' Table 8.8-1			~~**Baseline Context ID Numbers are specified in Section C.7.6.14.1.1.**~~ No baseline context is defined.
>Referenced Frame Numbers	(0040,A136)	1C	References one or more frames in a Multi-frame SOP Instance. The first frame shall be denoted as frame number one. Required if Acquisition Context Sequence (0040,0555) is sent and this SOP Instance is a Multi-frame SOP Instance and the values in this sequence item do not apply to all frames.
>Numeric Value	(0040,A30A)	1C	This is the Value component of a Name/Value pair when the Concept implied by Concept-name Code Sequence (0040,A043) is a set of one or more numeric values. Required if Concept-name Code Sequence (0040,A043) is present and the value it requires (implies) is a set of one or more integers or real numbers. Shall not be present otherwise.
>Measurement Units Code Sequence	(0040,08EA)	1C	Units of measurement. Only a single Item shall be permitted in this Sequence. Required if a sequence item is present and Numeric Value (0040,A30A) is sent. Shall not be present otherwise.
>>Include 'Code Sequence Macro' Table 8.8-1			Baseline Context ID is 82.
>Date	(0040,A121)	1C	This is the Value component of a Name/Value pair when the Concept implied by Concept-name Code Sequence (0040,A043) is a date. Note: The purpose or role of the date value could be specified in Concept-name Code Sequence (0040,A043). Required if Concept-name Code Sequence (0040,A043) is present and the value it requires (implies) is a date. Shall not be present otherwise.

>Time	(0040,A122)	1C	This is the Value component of a Name/Value pair when the Concept implied by Concept-name Code Sequence (0040,A043) is a time. Note: The purpose or role of the time value could be specified in Concept-name Code Sequence (0040,A043). Required if Concept-name Code Sequence (0040,A043) is present and the value it requires (implies) is a time. Shall not be present otherwise.
>Person Name	(0040,A123)	1C	This is the Value component of a Name/Value pair when the Concept implied by Concept-name Code Sequence (0040,A043) is a Person Name. Note: The role of the person could be specified in Concept-name Code Sequence (0040,A043). Required if Concept-name Code Sequence (0040,A043) is present and the value it requires (implies) is a person name. Shall not be present otherwise.
>Text Value	(0040,A160)	1C	This is the Value component of a Name/Value pair when the Concept implied by Concept-name Code Sequence (0040,A043) is a Text Observation Value. Required if Date (0040,A121), Time (0040,A122), and Person Name (0040,A123) do not fully describe the concept specified by Concept Name Code Sequence (0040,A043). Shall not be present otherwise.
>Concept Code Sequence	(0040,A168)	1C	This is the Value component of a Name/Value pair when the Concept implied by Concept-name Code Sequence (0040,A043) is a Coded Value. This sequence shall contain exactly one item. Required if a sequence item is present and Date (0040,A121), Time (0040,A122), Person Name (0040,A123), Text Value (0040,A160), and the pair of Numeric Value (0040,A30A) and Measurement Units Code Sequence (0040,08EA) are not present.
>>Include 'Code Sequence Macro' Table 8.8-1			~~**Baseline Context ID Numbers are specified in Section C.7.6.14.1.2.**~~ No baseline context is defined.
Acquisition Context Description	(0040,0556)	3	Free-text description of the image-acquisition context.

~~**C.7.6.14.1 Acquisition Context Module Attribute Descriptions**~~

~~**C.7.6.14.1.1 Concept-name Code Sequence**~~

~~**Table C.7.6.14.1.1-1 specifies the SNOMED DICOM Microglossary Templates and Context Groups that define the Defined Terms for Code Value (0008,0100) of the Concept-name Code Sequence (0040,A043) for naming the Attributes of Image-Acquisition Context, Specimen-acquisition and**~~

~~**Specimen-processing. The Baseline Context Groups provide suggested Value Sets. The Baseline Templates provide suggested Properties and corresponding Value Sets. See clinical data interchange guidelines published by professional specialty societies for recommendations in specific clinical or operational contexts.**~~

~~**Table C.7.6.14.1.1-1 – ATTRIBUTES OF ACQUISITION CONTEXT**~~

~~Concept Type~~	~~Description~~	~~Baseline CID~~	~~Baseline TID~~
~~**Context Group names, SDM**~~	~~**Names of the SNOMED DICOM Microglossary Context Groups**~~	~~**291**~~	
~~**Image-Acquisition Context**~~	~~**General-purpose template of clinically-significant procedure-description concepts. Contains other Templates by reference (i.e TID 5, TID 6, TID 7, and TID 14).**~~	~~**212**~~	~~**2**~~
~~**Chemical agent administration**~~	~~**Concepts describing the delivery (administration) of radiographic contrast agent or other chemical agent.**~~	~~**213**~~	~~**14**~~
~~**Specimen-acquisition and Specimen-processing properties.**~~		~~**203**~~	~~**4**~~
~~**Illumination**~~	~~**For Slide Microscopy**~~	~~**207**~~	~~**5**~~
~~**Magnification**~~	~~**For Slide Microscopy**~~	~~**209**~~	~~**6**~~
~~**Anatomic frame of reference**~~	~~**For description of anatomic location relative to an anatomic structure, space, or region rather than in terms of a gantry-based frame of reference**~~	~~**211**~~	~~**7**~~

~~C.7.6.14.1.2 Concept Code Sequence~~

~~Table C.7.6.14.1.2-1 specifies the SNOMED DICOM Microglossary Context Groups that provide the Defined Terms for Code Value (0008,0100) of the Concept Code Sequence (0040,A168) for description of Image-Acquisition Context, and the acquisition and processing of Specimens. See clinical data interchange guidelines published by professional specialty societies for recommendations in specific clinical or operational contexts. See the SNOMED DICOM Microglossary for subset Context Groups indexed by clinically-significant factors, such as specialty, imaging modality, or anatomic region.~~

~~Note: Each SDM Template provides a detailed specification of the semantic network that describes a complex concept. TID 2 describes Image-Acquisition Context; TID 5 describes Illumination; TID 6 describes Magnification; TID 7 describes Anatomic frame of reference; and TID 14 describes Chemical agent administration.~~

~~Table C.7.6.14.1.2-1 – DESCRIPTORS OF ACQUISITION CONTEXT~~

~~Concept Type~~	~~Examples~~	~~Baseline TID~~	~~Baseline CID~~	~~Modality Constraint~~
~~IMAGE ACQUISITION CONTEXT FOR DIGITAL X-RAY~~				
~~Functional condition present during image acquisition~~	~~breathing, phonation~~	~~2~~	~~91~~	

~~Image labels used commonly to indicate acquisition context (or the role of the image in a procedure)~~	~~post-void, I+, C, non-contrast, flexion, neutral, scout~~	~~2~~	~~171~~	
~~Interventional drug~~	~~epinephrine~~	~~2~~	~~10~~	
~~Physical agent used to apply the physical force during image acquisition~~	~~compression paddle, knee brace~~	~~2~~	~~86~~	
~~Physical force applied during image acquisition~~	~~distraction, valgus stress~~	~~2~~	~~89~~	
~~Radiographic contrast agent~~	~~barium sulfate, meglumine diatrizoate~~	~~2~~	~~12~~	
~~IMAGE ACQUISITION CONTEXT FOR VISIBLE LIGHT~~				
~~Anatomic region or structure examined~~	~~retina, antrum~~	~~2~~	~~1~~	
~~Functional condition present during image acquisition~~	~~breathing, phonation~~	~~2~~	~~91~~	
~~Geometric projection~~	~~antero-posterior, lateral~~	~~2~~	~~22~~	
~~Geometric projection, cranio-caudad angulation modifier~~	~~craniad, caudal~~	~~2~~	~~23~~	
~~Image labels used commonly to indicate acquisition context (or the role of the image in a procedure)~~	~~post-void, I+, C, non-contrast, flexion, neutral, scout~~	~~2~~	~~171~~	
~~Imaging subject orientation with respect to gravity~~	~~erect, recumbent~~	~~2~~	~~19~~	
~~Imaging subject orientation with respect to gravity, modifier of~~	~~standing, prone~~	~~2~~	~~20~~	
~~Interventional drug~~	~~epinephrine~~	~~2~~	~~10~~	
~~Physical agent used to apply the physical force during image acquisition~~	~~compression paddle, knee brace~~	~~2~~	~~86~~	
~~Physical force applied during image acquisition~~	~~distraction, valgus stress~~	~~2~~	~~89~~	
~~Radiographic contrast agent~~	~~barium sulfate, meglumine diatrizoate~~	~~2~~	~~12~~	
~~Radiopharmaceutical~~	~~gallium^67^ citrate~~	~~2~~	~~25~~	
~~Vital stain~~	~~methylene blue, fluorescein~~	~~2~~	~~168~~	
~~CHEMICAL AGENT ADMINISTRATION~~				
~~Active ingredient~~	~~barium sulfate~~	~~14~~	~~56~~	
~~Administration route~~	~~intravenous, oral~~	~~14~~	~~11~~	

Carrier ingredient	normal saline	14	56	
SPECIMEN ACQUISITION AND PROCESSING				
Anatomic region or structure, source of Specimen			1	
Chemical agent used during specimen processing			223	
Functional condition existing during specimen acquisition			219	
Hybridization Amplification			43	
Physical agent used for specimen acquisition			220	
Physical force applied during specimen acquisition			221	
Physical process used during specimen processing			222	
Radiographic contrast agent			12	
Radiopharmaceutical			25	
Specimen artifacts, cytology			216	
Specimen artifacts, gross examination			218	
Specimen artifacts, histology			217	
Specimen Collection Procedure			35	
Specimen Counter-Stain			40	
Specimen Extraction			41	
Specimen Fixation			38	
Specimen Handling Precautions			214	
Specimen Handling Special Requirements			215	
Specimen Hybridization			42	
Specimen Processing Procedure			36	
Specimen Stain			39	
Specimen Type			37	
Vital stain			168	
ILLUMINATION				
Collected Light Type	transmitted, emitted, scattered	5	197	SM
Correction Filter		5	47	SM
Emission Filter		5	49	SM
Excitation Filter		5	48	SM
Illumination Methodology		5	50	SM
Light Source		5	46	SM

Polarization	polarized, non-polarized	5	196	SM
MAGNIFICATION				
Condenser immersion media	air, oil, water	6	251	SM
Objective immersion media	air, oil, water	6	251	SM
Secondary-condenser immersion media	air, oil, water	6	251	SM
Secondary-objective immersion media	air, oil, water	6	251	SM
ANATOMIC FRAME OF REFERENCE				
Anatomic Approach Direction	antegrade	7	32	
Anatomic Location of Examining Instrument	suprapatellar bursa	7	44	
Anatomic location of examining instrument, modifier of	distal	7	2	
Anatomic Portal of Entrance	stoma	7	45	
Anatomic portal of entrance, modifier of	inferior	7	2	
Anatomic Site	pylorus	7	1	
Anatomic Site Modifier	proximal	7	2	
Aspect of the target that is visible	anterior, posterior	7	31	
Orientation of the image collection point of the examining instrument	lateral	7	32	
Anatomic View Perspective	medial, anterior	7	31	

Note: Some examples of the use of Concept-name Code Sequence as applied to common situations encountered in projection radiography are described in the following table. None of these concepts requires a value.

Table C.7.6.14.1.2-2 – EXAMPLES OF ACQUISITION CONTEXT (Informative)

Baseline CID	Code Value (0008,0100)	Code Meaning (0008,0104)
27	F-10100	Extension
89	F-10106	Passive extension
89	F-10107	Active extension
27	F-10110	Flexion
89	F-10116	Passive flexion
89	F-10117	Active flexion
27	F-10120	Abduction
89	F-10126	Passive abduction
89	F-10127	Active abduction

~~27~~ ~~89~~ ~~89~~	~~F-10130~~ ~~F-10136~~ ~~F-10137~~	~~Adduction~~ ~~Passive adduction~~ ~~Active adduction~~
~~27~~	~~F-10210~~	~~Internal rotation~~
~~27~~	~~F-10220~~	~~External rotation~~
~~27~~	~~F-10226~~	~~Supination~~
~~27~~	~~F-10216~~	~~Pronation~~
~~89~~	~~F-12300~~	~~Weight bearing~~
~~89~~ ~~171~~	~~A-A2000~~	~~Stress~~
~~171~~	~~F-20010~~	~~Inspiration~~
~~171~~	~~F-20020~~	~~Expiration~~
~~91~~	~~F-F7102~~	~~Valsalva maneuver~~

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C.8.4.6 NM/PET Patient Orientation Module

Table C.8-5 specifies the Attributes that describe the NM/PET Patient Orientation.

Table C.8-5
NM/PET PATIENT ORIENTATION MODULE ATTRIBUTES

Attribute Name	Tag	Type	Attribute Description
Patient Orientation Code Sequence	(0054,0410)	2	Sequence that describes the orientation of the patient with respect to gravity. See C.8.4.6.1.1 for further explanation.
>Include 'Code Sequence Macro' Table 8.8-1		Baseline Context ID is 19. The Coding Scheme Designator (0008,0102) shall have an Enumerated Value of "99SDM" for historical reasons. Code Meaning (0008,0104) shall be Type 3 for historical reasons.	
> Patient Orientation Modifier Code Sequence	(0054,0412)	2C	Patient Orientation Modifier. Required if needed to fully specify the orientation of the patient with respect to gravity. See C.8.4.6.1.2 for further explanation.
>>Include 'Code Sequence Macro' Table 8.8-1		Baseline Context ID is 20. The Coding Scheme Designator (0008,0102) shall have an Enumerated Value of "99SDM" for historical reasons. Code Meaning (0008,0104) shall be Type 3 for historical reasons.	
Patient Gantry Relationship Code Sequence	(0054,0414)	2	Sequence which describes the orientation of the patient with respect to the gantry. See Section C.8.4.6.1.3 for further explanation.
>Include 'Code Sequence Macro' Table 8.8-1		Baseline Context ID is 21. The Coding Scheme Designator (0008,0102) shall have an Enumerated Value of "99SDM" for historical reasons. Code Meaning (0008,0104) shall be Type 3 for historical reasons.	

C.8.4.10 NM Isotope Module

Table C.8-10 contains Attributes that describe the isotope administered for the acquisition.

Table C.8-10
NM ISOTOPE MODULE ATTRIBUTES

Attribute Name	Tag	Type	Attribute Description
Energy Window Information Sequence	(0054,0012)	2	Sequence of Repeating Items that describe the energy window groups used. The number of items shall be equal to Number of Energy Windows (0054,0011). The first item corresponds to frames with value of 1 in the Energy Window Vector (0054,0010), the second item with value 2, etc.
>Energy Window Name	(0054,0018)	3	A user defined name which describes this Energy Window.
>Energy Window Range Sequence	(0054,0013)	3	Sequence of Repeating Items that describes this energy window group.
>>Energy Window Lower Limit	(0054,0014)	3	The lower limit of the energy window in KeV. See C.8.4.10.1.1 for further explanation.
>>Energy Window Upper Limit	(0054,0015)	3	The upper limit of the energy window in KeV. See C.8.4.10.1.2 for further explanation.
Radiopharmaceutical Information Sequence	(0054,0016)	2	Sequence of Repeating Items that describe isotope information. One or more Items may be included in this sequence.
>Radionuclide Code Sequence	(0054,0300)	2C	Sequence that identifies the radionuclide. This sequence shall contain exactly one item. Required if a sequence Item is present.
>>Include 'Code Sequence Macro' Table 8.8-1		Baseline Context ID is 18. The Coding Scheme Designator (0008,0102) shall have an Enumerated Value of "99SDM" for historical reasons. Code Meaning (0008,0104) shall be Type 3 for historical reasons.	
>Radiopharmaceutical Route	(0018,1070)	3	Route of injection.
>Administration Route Code Sequence	(0054,0302)	3	Sequence that identifies the administration route for the radiopharmaceutical. This sequence shall contain exactly one item.
>>Include 'Code Sequence Macro' Table 8.8-1		Baseline Context ID is 11. Code Meaning (0008,0104) shall be Type 3 for historical reasons.	
>Radiopharmaceutical Volume	(0018,1071)	3	Volume of injection in cubic cm.
>Radiopharmaceutical Start Time	(0018,1072)	3	Time of start of injection. See C.8.4.10.1.5 for further explanation.
>Radiopharmaceutical Stop Time	(0018,1073)	3	Time of end of injection. See C.8.4.10.1.6 for further explanation.

>Radionuclide Total Dose	(0018,1074)	3	Total amount of radionuclide injected. See C.8.4.10.1.7 for further explanation.
>Calibration Data Sequence	(0054,0306)	3	Sequence that contains calibration data.
>>Energy Window Number	(0054,0308)	1C	The Item number in the Energy Window Information Sequence to which the following calibration data relates. The Items are numbered starting from 1. Required if a sequence Item is present.
>>Syringe Counts	(0018,1045)	3	Pre-injection syringe count rate in counts/sec. See C.8.4.10.1.8 for further explanation.
>>Residual Syringe Counts	(0054,0017)	3	Post-injection residue syringe count rate in counts/sec. See C.8.4.10.1.9 for further explanation.
>Radiopharmaceutical	(0018,0031)	3	Name of the radiopharmaceutical.
>Radiopharmaceutical Code Sequence	(0054,0304)	3	Sequence that identifies the radiopharmaceutical. This sequence shall contain exactly one item.
>>Include 'Code Sequence Macro' Table 8.8-1		Baseline Context ID is 25. Code Meaning (0008,0104) shall be Type 3 for historical reasons.	
Intervention Drug Information Sequence	(0018,0026)	3	Sequence of Repeating Items that describes the intervention drugs used. Zero or more Items may be included in this sequence.
>Intervention Drug Name	(0018,0034)	3	Name of intervention drug.
>Intervention Drug Code Sequence	(0018,0029)	3	Sequence that identifies the intervention drug name.
>>Include 'Code Sequence Macro' Table 8.8-1		Baseline Context ID is 10. Code Meaning (0008,0104) shall be Type 3 for historical reasons.	
>Administration Route Code Sequence	(0054,0302)	3	Sequence that identifies the administration route for the intervention drug. This sequence shall contain exactly one item.
>>Include 'Code Sequence Macro' Table 8.8-1		Baseline Context ID is 11. Code Meaning (0008,0104) shall be Type 3 for historical reasons.	
>Intervention Drug Start Time	(0018,0035)	3	Time of administration of the intervention drug, using the same time base as for the Acquisition Start Time (0008,0032).
>Intervention Drug Stop Time	(0018,0027)	3	Time of completion of administration of the intervention drug, using the same time base as for the Acquisition Start Time (0008,0032).
>Intervention Drug Dose	(0018,0028)	3	Intervention drug dose, in mg.

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C.8.7.1.1.10 Anatomic Region

The general region of the body (e.g. the anatomic region, organ, or body cavity being examined) may be identified by the Anatomic Region Sequence (0008,2218). Characteristics of the anatomic region being examined, such as its orientation relative to gravity (e.g. prone, supine, semi-erect), sub-region (e.g. medial, lateral, superior, inferior, lobe, quadrant), and laterality (e.g. right, left, both), and so on, may be refined by the Anatomic Region Modifier Sequence (0008,2220). These sequences utilize coded entry data to reference anatomic and modifier terms from a Coding Scheme (e.g. SNOMED).

Note: These Attributes allow the specification of the information encoded by the Body Part Examined (0018,0015) and Patient Position (0018,5100) Attributes (in the General Series Module) in a more robust, consistent way.

C.8.7.1.1.11 Primary Anatomic Structure

The specific anatomic structures of interest within the image (e.g. a particular artery within the anatomic region) is identified by the Primary Anatomic Structure Sequence (0008,2228). Characteristics of the anatomic structure, such as its location (e.g. subcapsular, peripheral, central), configuration (e.g. distended, contracted), and laterality (e.g. right, left, both), and so on, may be refined by the Primary Anatomic Structure Modifier Sequence (0008,2230). These sequences utilize coded entry data to reference anatomic and modifier terms from a Coding Scheme (e.g. SNOMED).

Note: These Attributes are intended to replace the Anatomic Structure (0008,2208) Attribute.

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C.8.11.2.1 DX Anatomy Imaged Attribute Descriptions

The Attributes in this Module extend the function of Body Part Examined (0018,0015) as used in other IODs, and are intended to be used to facilitate the management of images and series in terms of routing, storage and display, as well as to dictate certain Conditions on Attributes and Modules in the DX IOD.

C.8.11.2.1.1 Anatomic Region

The general region of the body (e.g. the anatomic region, organ, or body cavity being examined) may be identified by the Anatomic Region Sequence (0008,2218). Characteristics of the anatomic region being examined may be refined by the Anatomic Region Modifier Sequence (0008,2220).

Note: Value Sets (i.e. Domain Constraints) may be defined for specific clinical contexts.

~~The Coding Scheme Designator (0008,0102) may be SNM3.~~

~~The Code Value (0008,0100) may be drawn from the SNOMED DICOM Microglossary Contexts, or other contexts which are the same or a superset of, the following terms, depending upon the SOP Class in which this module is included.~~

~~Anatomic Region Sequence(0008,2218) for DX Anatomy Imaged from the SNOMED DICOM Microglossary Context ID 4009 (Informative)~~

~~Code Value (0008,0100)~~	~~Code Meaning (0008,0104) (see Note 1)~~	~~Body Part Examined (0018,0015) (see Note 2)~~
~~T-D3000~~	~~Chest~~	~~CHEST~~
~~T-280A0~~	~~Apex of Lung~~	
~~T-25000~~	~~Trachea~~	
~~T-26000~~	~~Bronchus~~	
~~T-24100~~	~~Larynx~~	
~~T-D3300~~	~~Mediastinum~~	
~~T-32000~~	~~Heart~~	~~HEART~~
~~T-D1600~~	~~Neck~~	~~NECK~~
~~T-11210~~	~~Sternum~~	
~~T-15610~~	~~Sternoclavicular joint~~	
~~T-11300~~	~~Rib~~	
~~T-11500~~	~~Spine~~	
~~T-11501~~	~~Cervical spine~~	~~CSPINE~~
~~T-11502~~	~~Thoracic spine~~	~~TSPINE~~
~~T-11503~~	~~Lumbar spine~~	~~LSPINE~~
~~T-11AD0~~	~~Sacrum~~	~~SSPINE~~
~~T-11BF0~~	~~Coccyx~~	~~COCCYX~~
~~T-D4000~~	~~Abdomen~~	~~ABDOMEN~~
~~T-D0300~~	~~Extremity~~	~~EXTREMITY~~
~~T-D8200~~	~~Arm~~	~~ARM~~
~~T-D8810~~	~~Thumb~~	
~~T-D8800~~	~~Finger~~	
~~T-D8700~~	~~Hand~~	~~HAND~~
~~T-D8600~~	~~Wrist~~	
~~T-12402~~	~~Forearm bone~~	
~~T-D8300~~	~~Elbow~~	~~ELBOW~~
~~T-12410~~	~~Humerus~~	
~~T-D2220~~	~~Shoulder~~	~~SHOULDER~~
~~T-12310~~	~~Clavicle~~	~~CLAVICLE~~
~~T-12280~~	~~Scapula~~	
~~T-15420~~	~~Acromioclavicular joint~~	
~~T-D9800~~	~~Toe~~	
~~T-12980~~	~~Sesamoid bones of foot~~	
~~T-D9700~~	~~Foot~~	~~FOOT~~
~~T-12770~~	~~Calcaneus~~	
~~T-15770~~	~~Tarsal joint~~	

T-15750	Ankle joint	ANKLE
T-D9400	Leg	LEG
T-D9200	Knee	KNEE
T-12730	Patella	
T-12710	Femur	
T-15710	Hip joint	HIP
T-D6000	Pelvis	PELVIS
T-15680	Sacroiliac joint	
T-D1100	Head	HEAD
T-11100	Skull	SKULL
T-11196	Facial bones	
T-11167	Zygomatic arch	
T-11149	Nasal bone	
T-D1480	Orbit	
T-11102	Optic canal	
T-11180	Mandible	JAW
T-11170	Maxilla	
T-D1217	Maxilla and mandible	JAW
T-15290	Temporomandibular joint	
T-22000	Paranasal sinus	
T-11133	Mastoid bone	
T-D1460	Sella turcica	
T-04000	Breast	BREAST
T-61100	Parotid gland	
T-61300	Submandibular gland	
T-63000	Gall bladder	
T-60610	Bile duct	
T-56000	Esophagus	
T-57000	Stomach	
T-58200	Duodenum	
T-58000	Small intestine	
T-59000	Large intestine	
T-59600	Rectum	
T-70010	Upper urinary tract	
T-74000	Bladder	
T-75000	Urethra	
T-D6151	Uterus and fallopian tubes	

Notes: 1. The value of the code is determined by Code Value (0008,0100). The text of Code Meaning (0008,0104) may vary for different instances of the same Code Value (0008,0100), and should not

~~be used to determine which code is in use. It is provided only for annotative purposes when the code lexicon is absent.~~

~~2. Not all Defined Terms specified in the other modules for this Attribute have equivalent values from this context.~~

C.8.11.2.1.2 Primary Anatomic Structure

The specific anatomic structures of interest within the image are identified by the Primary Anatomic Structure Sequence (0008,2228). Characteristics of the anatomic structure may be refined by the Primary Anatomic Structure Modifier Sequence (0008,2230).

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C.8.11.5 DX Positioning Module

Table C.8-68 contains IOD Attributes that describe the positioning used in acquiring Digital X-Ray Images.

Table C.8-68
DX POSITIONING MODULE ATTRIBUTES

Attribute Name	Tag	Type	Attribute Description
Projection Eponymous Name Code Sequence	(0018,5104)	3	A Sequence that describes the radiographic method of patient, tube and detector positioning to achieve a well described projection or view. Only a single Item shall be permitted in this Sequence. Shall be consistent with the other Attributes in this Module, if present, but may more specifically describe the image acquisition. **~~See C.8.11.5.1.6 for further explanation.~~**
>Include ‘Code Sequence Macro’ Table 8.8-1		Baseline Context ID 4012	
Patient Position	(0018,5100)	3	Description of imaging subject’s position relative to the equipment. See C.7.3.1.1.2. for Defined Terms and further explanation. If present, shall be consistent with Patient Gantry Relationship Code Sequence (0054,0414) and Patient Orientation Modifier Code Sequence (0054,0412).
View Position	(0018,5101)	3	Radiographic view of the image relative to the imaging subject’s orientation. Shall be consistent with View Code Sequence (0054,0220). See C.8.11.5.1.1 for further explanation.

View Code Sequence	(0054,0220)	3	Sequence that describes the projection of the anatomic region of interest on the image receptor. Note: It is strongly recommended that this Attribute be present, in order to ensure that images may be positioned correctly relative to one another for display. Shall be consistent with View Position (0018,5101). See C.8.11.5.1.1 for further explanation. Only a single Item shall be permitted in this Sequence.
>Include 'Code Sequence Macro' Table 8.8-1		Baseline Context ID 4010	
>View Modifier Code Sequence	(0054,0222)	3	View modifier. ~~**See C.8.11.5.1.2 for further explanation.**~~ Zero or more Items may be included in this Sequence.
>>Include 'Code Sequence Macro' Table 8.8-1		Baseline Context ID 4011	
Patient Orientation Code Sequence	(0054,0410)	3	Sequence that describes the orientation of the patient with respect to gravity. See C.8.11.5.1.3 for further explanation. Only a single Item shall be permitted in this Sequence.
>Include 'Code Sequence Macro' Table 8.8-1		Baseline Context ID 19	
> Patient Orientation Modifier Code Sequence	(0054,0412)	3	Patient Orientation Modifier. Required if needed to fully specify the orientation of the patient with respect to gravity. ~~**See C.8.11.5.1.4 for further explanation.**~~ Only a single Item shall be permitted in this Sequence.
>>Include 'Code Sequence Macro' Table 8.8-1		Baseline Context ID 20	
Patient Gantry Relationship Code Sequence	(0054,0414)	3	Sequence which describes the orientation of the patient with respect to the gantry. ~~**See C.8.11.5.1.5 for further explanation.**~~ Only a single Item shall be permitted in this Sequence.
>Include 'Code Sequence Macro' Table 8.8-1		Baseline Context ID 21	

Distance Source to Patient	(0018,1111)	3	Distance in mm from source to the table, support or bucky side that is closest to the Imaging Subject, as measured along the central ray of the X-Ray beam. Note: 1. This definition is less useful in terms of estimating geometric magnification than a measurement to a defined point within the Imaging Subject, but accounts for what is realistically measurable in an automated fashion in a clinical setting. 2. This measurement does not take into account any air gap between the Imaging Subject and the "front" of the table or bucky. 3. If the detector is not mounted in a table or bucky, then the actual position relative to the patient is implementation or operator defined. 4. This value is traditionally referred to as Source Object Distance (SOD).
….			

C.8.11.5.1.1 View Code Sequence

View Code Sequence (0054,0220) replaces the function of View Position (0018,5101), and describes the radiographic view of the image relative to the real-world patient orientation as described in Annex E.

~~Notes: 1. The Coding Scheme Designator (0008,0102) may be SNM3.~~

~~2. The Code Value (0008,0100) may be drawn from the SNOMED DICOM Microglossary Context ID 4010, or another context which is the same or a superset of, the following terms:~~

~~View Code Sequence(0054,0220) for DX Positioning Module from the SNOMED DICOM Microglossary Context ID 4010 (Informative)~~

~~Code Value (0008,0100)~~	~~Code Meaning (0008,0104) (see note 1)~~	~~View Position (0018,0051) (see note 2)~~
~~R-10202~~	~~frontal~~	
~~R-10204~~	~~frontal oblique~~	
~~R-10206~~	~~antero-posterior~~	~~AP~~
~~R-10208~~	~~antero-posterior oblique~~	
~~R-10210~~	~~right posterior oblique~~	
~~R-10212~~	~~left posterior oblique~~	
~~R-10214~~	~~postero-anterior~~	~~PA~~
~~R-10216~~	~~postero-anterior oblique~~	
~~R-10218~~	~~right anterior oblique~~	
~~R-10220~~	~~left anterior oblique~~	
~~R-10222~~	~~sagittal~~	

R-10224	medial-lateral	
R-10226	lateral oblique	
R-10228	lateral-medial	
R-10230	medial oblique	
R-10232	right lateral	RL or RLD (see note 3)
R-10234	right oblique	RLO
R-10236	left lateral	LL or LLD (see note 3)
R-10238	left oblique	LLO
R-10241	axial	
R-10242	cranio-caudal	
R-10244	caudo-cranial	
R-10246	oblique axial	
R-10248	oblique cranio-caudal	
R-10250	oblique caudo-cranial	
R-10252	frontal-oblique axial	
R-10254	sagittal-oblique axial	
R-102C1	oblique	
R-102CD	lateral	
R-102C2	tangential	
R-10256	submentovertical	
R-10257	verticosubmental	
R-102C3	plantodorsal	
R-102C4	dorsoplantar	
R-102C5	parietoacanthal	
R-102C6	acanthoparietal	
R-102C7	orbitoparietal	
R-102C8	parieto-orbital	

Notes: 1. The value of the code is determined by Code Value (0008,0100). The text of Code Meaning (0008,0104) may vary for different instances of the same Code Value (0008,0100), and should not be used to determine which code is in use. It is provided only for annotative purposes when the code lexicon is absent.

2. Not all Defined Terms specified in the other modules for these Attributes have equivalent values from this context.

3. The decubitus LLD and RLD Defined Terms for View Position (0018,0051) convey two concepts, both the view and the imaging subject's position with respect to gravity. In the DX IOD, the concept of decubitus position is conveyed in Patient Orientation Code Modifier Sequence (0054,0412).

C.8.11.5.1.2 View Modifier Code Sequence (Informative)

The Coding Scheme Designator (0008,0102) may be SNM3.

The Code Value (0008,0100) may be drawn from the SNOMED DICOM Microglossary Context ID 4011, or another context which is the same or a superset of, the following terms:

View Modifier Code Sequence(0054,0222) for DX Positioning Module from the SNOMED DICOM Microglossary Context ID 4011 (Informative)

Code Value (0008,0100)	Code Meaning (0008,0104) (see note)
R-10244	cephalad
R-10242	caudad
R-102C9	transthoracic
R-102CA	lordotic
R-102CB	transforamenal
R-102CC	transoral
R-102CE	transorbital

Note: The value of the code is determined by Code Value (0008,0100). The text of Code Meaning (0008,0104) may vary for different instances of the same Code Value (0008,0100), and should not be used to determine which code is in use. It is provided only for annotative purposes when the code lexicon is absent.

C.8.11.5.1.3 Patient Orientation Code Sequence

This Attribute is not related to Patient Orientation (0020,0020) and conveys a different concept entirely.

Notes: 1. The Coding Scheme Designator (0008,0102) may be SNM3.

2, The Code Value (0008,0100) may be drawn from the SNOMED DICOM Microglossary Context ID 19, or another context which is the same or a superset of, the following terms:

Patient Orientation Code Sequence(0054,0410) for DX Positioning Module from the SNOMED DICOM Microglossary Context ID 19 (Informative)

Code Value (0008,0100)	Code Meaning (0008,0104) (see note)
F-10440	erect
F-10450	recumbent
F-10460	semi-erect

Note: The value of the code is determined by Code Value (0008,0100). The text of Code Meaning (0008,0104) may vary for different instances of the same Code Value (0008,0100), and should not be used to determine which code is in use. It is provided only for annotative purposes when the code lexicon is absent.

C.8.11.5.1.4 Patient Orientation Modifier Code Sequence (Informative)

The Coding Scheme Designator (0008,0102) may be SNM3.

The Code Value (0008,0100) may be drawn from the SNOMED DICOM Microglossary Context ID 20, or another context which is the same or a superset of, the following terms:

Patient Orientation Modifier Code Sequence(0054,0412) for DX Positioning Module from the SNOMED DICOM Microglossary Context ID 20 (Informative)

Code Value (0008,0100)	Code Meaning (0008,0104) (see note 1)	View Position (0018,0051) (see note 2)	Patient Position (0018,5100) (see notes 2 and 4)
F-10310	prone		HFP or FFP
F-10316	semi-prone		
F-10318	lateral decubitus		HFDR, FFDR, HFDL or FFDL
F-10320	standing		
F-10326	anatomical		
F-10330	kneeling		
F-10336	knee-chest		
F-10340	supine		HFS or FFS
F-10346	lithotomy		
F-10348	Trendelenburg		
F-10349	inverse Trendelenburg		
F-10380	frog		
F-10390	stooped-over		
F-103A0	sitting		
F-10410	curled-up		
F-10317	right lateral decubitus	RLD (see note 3)	HFDR or FFDR
F-10319	left lateral decubitus	LLD (see note 3)	HFDL or FFDL

Notes: 1. The value of the code is determined by Code Value (0008,0100). The text of Code Meaning (0008,0104) may vary for different instances of the same Code Value (0008,0100), and should not be used to determine which code is in use. It is provided only for annotative purposes when the code lexicon is absent.

2. Not all Defined Terms specified in the other modules for these Attributes have equivalent values from this context.

3. The decubitus LLD and RLD Defined Terms for View Position (0018,0051) convey two concepts, both the view and the imaging subject's position with respect to gravity. In the DX IOD, the concept of view is conveyed in View Code Sequence (0054,0220).

4. The Defined Terms for Patient Position (0018,1500) convey two concepts, both erect/supine and head/feet first. In the DX IOD, the concept of head/feet first is conveyed in Patient Gantry Relationship Code Sequence (0054,0414).

C.8.11.5.1.5 Patient Gantry Relationship Code Sequence (Informative)

The Coding Scheme Designator (0008,0102) may be SNM3.

The Code Value (0008,0100) may be drawn from the SNOMED DICOM Microglossary Context ID 21, or another context which is the same or a superset of, the following terms:

Patient Gantry Relationship Code Sequence(0054,0414) for DX Positioning Module from the SNOMED DICOM Microglossary Context ID 21 (Informative)

Code Value (0008,0100)	Code Meaning (0008,0104) (see note 1)	Patient Position (0018,5100) (see notes 2 and 3)
R-10516	oblique	
F-10470	headfirst	HFP, HFS, HFDL or HFDR
F-10480	feet-first	FFP, FFS, FFDL or FFDR
R-10515	transverse	

Notes: 1. The value of the code is determined by Code Value (0008,0100). The text of Code Meaning (0008,0104) may vary for different instances of the same Code Value (0008,0100), and should not be used to determine which code is in use. It is provided only for annotative purposes when the code lexicon is absent.

2. Not all Defined Terms specified in the other modules for these Attributes have equivalent values from this context.

3. The Defined Terms for Patient Position (0018,1500) convey two concepts, both erect/supine and head/feet first. In the DX IOD, the concept of erect/supine is conveyed in Patient Orientation Modifier Code Sequence (0054,0414).

C.8.11.5.1.6 Projection Eponymous Name Code Sequence (Informative)

The Coding Scheme Designator (0008,0102) may be SNM3.

The Code Value (0008,0100) may be drawn from the SNOMED DICOM Microglossary Context ID 4012, or another context which is the same or a superset of, the following terms:

Patient Gantry Relationship Code Sequence(0018,5104) for DX Positioning Module from the SNOMED DICOM Microglossary Context ID 4012 (Informative)

Code Value (0008,0100)	Code Meaning (0008,0104) (see note)
R-10261	Albers-Schonberg
R-10262	Alexander
R-10263	Arcelin
R-10264	Beclere
R-10265	Bertel
R-10266	Blackett-Healy
R-10267	Broden
R-10268	Cahoon
R-10269	Caldwell
R-1026A	Camp-Coventry
R-1026B	Causton
R-1026C	Chamberlain

~~R-1026D~~	~~Chassard-Lapine~~
~~R-1026E~~	~~Chausse~~
~~R-1026F~~	~~Cleaves~~
~~R-10270~~	~~Clements~~
~~R-10271~~	~~Clements-Nakayama~~
~~R-10272~~	~~Dunlap~~
~~R-10273~~	~~Ferguson~~
~~R-10274~~	~~Fleischner~~
~~R-10275~~	~~Friedman~~
~~R-10276~~	~~Fuchs~~
~~R-10277~~	~~Gaynor-Hart~~
~~R-10278~~	~~Grandy~~
~~R-10279~~	~~Grashey~~
~~R-1027A~~	~~Haas~~
~~R-1027B~~	~~Henschen~~
~~R-1027C~~	~~Hickey~~
~~R-1027D~~	~~Holly~~
~~R-1027E~~	~~Holmblad~~
~~R-1027F~~	~~Hough~~
~~R-10280~~	~~Hsieh~~
~~R-10281~~	~~Hughston~~
~~R-10282~~	~~Isherwood~~
~~R-10283~~	~~Judd~~
~~R-10284~~	~~Kandel~~
~~R-10285~~	~~Kasabach~~
~~R-10286~~	~~Kemp Harper~~
~~R-10287~~	~~Kovacs~~
~~R-10288~~	~~Kuchendorf~~
~~R-10289~~	~~Kurzbauer~~
~~R-1028A~~	~~Laquerriere-Pierquin~~
~~R-1028B~~	~~Lauenstein~~
~~R-1028C~~	~~Law~~
~~R-1028D~~	~~Lawrence~~
~~R-1028E~~	~~Leonard-George~~
~~R-1028F~~	~~Lewis~~
~~R-10290~~	~~Lilienfeld~~
~~R-10291~~	~~Lindblom~~
~~R-10292~~	~~Lorenz~~
~~R-10293~~	~~Low-Beer~~
~~R-10294~~	~~Lysholm~~

~~R-10295~~	~~May~~
~~R-10296~~	~~Mayer~~
~~R-10297~~	~~Merchant~~
~~R-10298~~	~~Miller~~
~~R-10299~~	~~Nolke~~
~~R-1029A~~	~~Norgaard~~
~~R-1029B~~	~~Ottonello~~
~~R-1029C~~	~~Pawlow~~
~~R-1029D~~	~~Pearson~~
~~R-1029E~~	~~Penner~~
~~R-1029F~~	~~Pirie~~
~~R-102A0~~	~~Rhese~~
~~R-102A1~~	~~Schuller~~
~~R-102A2~~	~~Settegast~~
~~R-102A3~~	~~Staunig~~
~~R-102A4~~	~~Stecher~~
~~R-102A5~~	~~Stenvers~~
~~R-102A6~~	~~Swanson~~
~~R-102A7~~	~~Tarrant~~
~~R-102A8~~	~~Taylor~~
~~R-102A9~~	~~Teufel~~
~~R-102AA~~	~~Titterington~~
~~R-102AB~~	~~Towne~~
~~R-102AC~~	~~Twining~~
~~R-102AD~~	~~Valdini~~
~~R-102AE~~	~~Waters~~
~~R-102AF~~	~~West Point~~
~~R-102B0~~	~~Wigby-Taylor~~
~~R-102B1~~	~~Zanelli~~

~~Note: The value of the code is determined by Code Value (0008,0100). The text of Code Meaning (0008,0104) may vary for different instances of the same Code Value (0008,0100), and should not be used to determine which code is in use. It is provided only for annotative purposes when the code lexicon is absent.~~

C.8.11.6 Mammography Series Module

Table C.8-69 specifies the Attributes which identify and describe general information about a Digital Mammography Series.

Table C.8-69
MAMMOGRAPHY SERIES MODULE ATTRIBUTES

Attribute Name	Tag	Type	Attribute Description
Modality	(0008,0060)	1	Type of equipment that originally acquired the data used to create the images in this Series. Enumerated Value: MG See section C.7.3.1.1.1 for further explanation.

C.8.11.7 Mammography Image Module

Table C.8-70 contains IOD Attributes that describe a Digital Mammography X-Ray Image including its acquisition and positioning.

Table C.8-70
MAMMOGRAPHY IMAGE MODULE ATTRIBUTES

Attribute Name	Tag	Type	Attribute Description
Positioner Type	(0018,1508)	1	Enumerated Values: MAMMOGRAPHIC NONE
Positioner Primary Angle	(0018,1510)	3	Position in degrees of the X-Ray beam in the coronal anatomical plane as if the patient were standing where movement of the X-Ray source from right to vertical is positive, and vertical is zero.
Positioner Secondary Angle	(0018,1511)	3	Position in degrees of the X-Ray beam in the sagittal anatomical plane as if the patient were standing where movement of the X-Ray source from anterior to posterior is positive, and vertical is zero.
Image Laterality	(0020,0062)	1	Laterality of the region examined. Enumerated Values: R = right L = left B = both (e.g. cleavage)
Organ Exposed	(0040,0318)	1	Organ to which Organ Dose (0040,0316) applies. Enumerated Value: BREAST Note: In the Mammography IOD, Organ Dose (0040,0316) refers to the mean glandular dose.
Implant Present	(0028,1300)	3	Whether or not an implant is present. Enumerated Values: YES NO

Anatomic Region Sequence	(0008,2218)	1	Sequence that identifies the anatomic region of interest in this image. **~~See C.11.8.7.1.1 for further explanation.~~** Only a single Item shall be permitted in this Sequence.
>Include 'Code Sequence Macro' Table 8.8-1		Enumerated Value for Context ID is 4013.	
View Code Sequence	(0054,0220)	1	Sequence that describes the projection of the anatomic region of interest on the image receptor. **~~See C.11.8.7.1.2 for further explanation.~~** Only a single Item shall be permitted in this Sequence.
>Include 'Code Sequence Macro' Table 8.8-1		Enumerated Value for Context ID is 4014.	
>View Modifier Code Sequence	(0054,0222)	2	View modifier. **~~See C.11.8.7.1.3 for further explanation.~~** Zero or more Items may be included in this Sequence.
>>Include 'Code Sequence Macro' Table 8.8-1		Enumerated Value for Context ID is 4015.	

~~C.8.11.7.1 Mammography Image Attribute Descriptions~~

~~C.8.11.7.1.1 Anatomic Region~~

~~The Coding Scheme Designator (0008,0102) shall be SNM3.~~

~~The Code Value (0008,0100) shall be drawn from the SNOMED DICOM Microglossary Context ID 4013, which consists of the following term:~~

~~Anatomic Region Sequence (0008,2218) for Mammography Image from the SNOMED DICOM Microglossary Context ID 4013~~

~~Code Value (0008,0100)~~	~~Code Meaning (0008,0104) (see Notes)~~
~~T-04000~~	~~Breast~~

~~Note: The value of the code is determined by Code Value (0008,0100). The text of Code Meaning (0008,0104) may vary for different instances of the same Code Value (0008,0100), and should not be used to determine which code is in use. It is provided only for annotative purposes when the code lexicon is absent.~~

~~C.8.11.7.1.2 View Code Sequence~~

~~View Code Sequence (0054,0220) describes the mammographic view of the image relative to the real-world patient orientation.~~

~~The Coding Scheme Designator (0008,0102) shall be SNM3.~~

~~The Code Value (0008,0100) shall be drawn from the SNOMED DICOM Microglossary Context ID 4014, which consists of the following terms:~~

View Code Sequence (0054,0220) for Mammography Image from the SNOMED DICOM Microglossary Context ID 4014

Code Value (0008,0100)	Code Meaning (0008,0104) (see notes 1 and 3)	ACR BI-RADS Equivalent (see note 2)
R-10224	medio-lateral	ML
R-10226	medio-lateral oblique	MLO
R-10228	latero-medial	LM
R-10230	latero-medial oblique	LMO
R-10242	cranio-caudal	CC
R-10244	caudo-cranial (from below)	FB
R-102D0	superolateral to inferomedial oblique	SIO
R-102CF	exaggerated cranio-caudal	XCC
Y-X1770	cranio-caudal exaggerated laterally	XCCL
Y-X1771	cranio-caudal exaggerated medially	XCCM

Notes: 1. The value of the code is determined by Code Value (0008,0100). The text of Code Meaning (0008,0104) may vary for different instances of the same Code Value (0008,0100), and should not be used to determine which code is in use. It is provided only for annotative purposes when the code lexicon is absent.

2. These terms are described in the ACR Breast Imaging Reporting and Data System (BI-RADS) as Mammography Labeling Codes.

3. The presence of a general code for XCC is to be compatible with BI-RADS version 3. In earlier versions of BI-RADS, separate codes are defined for XCCM and XCCL. It is recommended that the more specific codes for XCCM and XCCL always be used.

C.8.11.7.1.3 View Modifier Code Sequence

The Coding Scheme Designator (0008,0102) shall be SNM3.

The Code Value (0008,0100) shall be drawn from the SNOMED DICOM Microglossary Context ID 4015 which consists of the following terms:

~~View Modifier Code Sequence (0054,0222) for Mammography Image from the SNOMED DICOM Microglossary Context ID 4015~~

~~Code Value (0008,0100)~~	~~Code Meaning (0008,0104) (see note 1)~~	~~Applies only when view is:~~	~~ACR BI-RADS Equivalent (see note 2)~~
~~R-102D2~~	~~Cleavage~~	~~CC~~	~~CV~~
~~R-102D1~~	~~Axillary Tail~~	~~MLO~~	~~AT~~
~~R-102D3~~	~~Rolled Lateral~~	~~any~~	~~...RL~~
~~R-102D4~~	~~Rolled Medial~~	~~any~~	~~...RM~~
~~R-102D5~~	~~Implant Displaced~~	~~any~~	~~ID~~
~~R-102D6~~	~~Magnification~~	~~any~~	~~M...~~
~~R-102D7~~	~~Spot Compression~~	~~any~~	~~S~~
~~R-102C2~~	~~Tangential~~	~~any~~	~~TAN~~

~~Notes: 1. The value of the code is determined by Code Value (0008,0100). The text of Code Meaning (0008,0104) may vary for different instances of the same Code Value (0008,0100), and should not be used to determine which code is in use. It is provided only for annotative purposes when the code lexicon is absent.~~

~~2. These terms are described in the ACR Breast Imaging Reporting and Data System (BI-RADS) as Mammography Labeling Codes.~~

C.8.11.8 Intra-oral Series Module

Table C.8-71 specifies the Attributes which identify and describe general information about a Digital Intra-oral X-Ray Series.

Table C.8-71
INTRA-ORAL SERIES MODULE ATTRIBUTES

Attribute Name	Tag	Type	Attribute Description
Modality	(0008,0060)	1	Type of equipment that originally acquired the data used to create the images in this Series. Enumerated Values: IO See section C.7.3.1.1.1 for further explanation.

C.8.11.9 Intra-oral Image Module

Table C.8-72 contains IOD Attributes that describe a Digital Intra-oral X-Ray Image including its acquisition and positioning.

Table C.8-72
INTRA-ORAL IMAGE MODULE ATTRIBUTES

Attribute Name	Tag	Type	Attribute Description
Positioner Type	(0018,1508)	1	Enumerated Values: NONE CEPHALOSTAT RIGID
Image Laterality	(0020,0062)	1	Laterality of the region examined. Enumerated Values: R = right L = left B = both (i.e. midline)
Anatomic Region Sequence	(0008,2218)	1	Sequence that identifies the anatomic region of interest in this image. ~~**See C.11.8.9.1.1 for further explanation.**~~ Only a single Item shall be permitted in this Sequence.
>Include 'Code Sequence Macro' Table 8.8-1		Enumerated Value for Context ID is 4016.	
>Anatomic Region Modifier Sequence	(0008,2220)	1C	Sequence that refines the anatomic region of interest in this image. ~~**See C.11.8.9.1.2 for further explanation.**~~ Required if Primary Anatomic Structure Sequence (0008,2228) is not sent. Only a single Item shall be permitted in this Sequence.
>>Include 'Code Sequence Macro' Table 8.8-1		Enumerated Value for Context ID is 4017.	
Primary Anatomic Structure Sequence	(0008,2228)	1C	Sequence that describes the primary anatomic structures of interest in this image. See C.11.8.9.1.3 for further explanation. Required if Anatomic Region Modifier Sequence (0008,2220) is not sent. One or more Items may be included in this Sequence.
>Include 'Code Sequence Macro' Table 8.8-1		Enumerated Value for Context ID is 4018 or 4019. See C.8.11.9.1.3 for further explanation.	

~~C.8.11.9.1 Intra-oral Image Attribute Descriptions~~

~~C.8.11.9.1.1 Anatomic Region~~

~~The Coding Scheme Designator (0008,0102) shall be SNM3.~~

~~The Code Value (0008,0100) shall be drawn from the SNOMED DICOM Microglossary Context ID 4016, which consists of the following terms:~~

~~Anatomic Region Sequence (0008,2218) for Intra-oral Image from the SNOMED DICOM Microglossary Context ID 4016~~

~~Code Value (0008,0100)~~	~~Code Meaning (0008,0104) (see Note)~~
~~T-D1217~~	~~Maxilla and mandible~~
~~T-11170~~	~~Maxilla~~
~~T-11180~~	~~Mandible~~

~~Note: The value of the code is determined by Code Value (0008,0100). The text of Code Meaning (0008,0104) may vary for different instances of the same Code Value (0008,0100), and should not be used to determine which code is in use. It is provided only for annotative purposes when the code lexicon is absent.~~

~~C.8.11.9.1.2 Anatomic Region Modifier~~

~~Anatomic Region Modifier Sequence (0008,2220) is used in this Module to refine the specificity of the region described in Anatomic Region Sequence (0008,2218).~~

~~The Coding Scheme Designator (0008,0102) shall be SNM3.~~

~~The Code Value (0008,0100) shall be drawn from the SNOMED DICOM Microglossary Context ID 4017, which consists of the following terms:~~

~~Anatomic Region Modifier Sequence (0008,2220) for Intra-oral Image from the SNOMED DICOM Microglossary Context ID 4017~~

~~Code Value (0008,0100)~~	~~Code Meaning (0008,0104) (see note)~~
~~T-51005~~	~~Anterior 1~~
~~T-51006~~	~~Anterior 2~~
~~T-51007~~	~~Anterior 3~~
~~T-51008~~	~~Premolar 1~~
~~T-51009~~	~~Premolar 2~~
~~T-5100A~~	~~Molar 1~~
~~T-5100B~~	~~Molar 2~~
~~T-5100C~~	~~Molar 3~~
~~T-5100D~~	~~Occlusal~~

~~Note: The value of the code is determined by Code Value (0008,0100). The text of Code Meaning (0008,0104) may vary for different instances of the same Code Value (0008,0100), and should not be used to determine which code is in use. It is provided only for annotative purposes when the code lexicon is absent.~~

C.8.11.9.1.3 Primary Anatomic Structure Sequence

~~The Coding Scheme Designator (0008,0102) shall be SNM3.~~

The Code Value (0008,0100) shall be drawn from the ~~SNOMED DICOM Microglossary~~ DICOM Content Mapping Resource, Context ID 4018, for permanent dentition, or Context ID 4019 for deciduous dentition.

These Context Groups correspond to ISO 3950-1984 which describes a designation of permanent and deciduous dentition using a two digit code, the first digit of which designates a quadrant, and the second digit a tooth.

The teeth imaged shall be listed as multiple Items in the Primary Anatomic Structure Sequence (0008,2228).

~~C.8.11.9.1.3.1 Designation of Permanent Dentition~~

~~The designation of permanent dentition is described in the following table and illustrated in figure C.8-X.~~

~~Primary Anatomic Structure Sequence (0008,2228) from the SNOMED DICOM Microglossary Context ID 4018 Permanent Dentition – Designation of Teeth~~

~~Code Value (0008,0100)~~	~~Code Meaning (0008,0104) (see Note)~~	~~ISO 3950 Designation of Quadrant~~	~~ISO 3950 Designation of Tooth~~
~~T-54210~~	~~Maxillary right third molar tooth~~	~~1~~	~~8~~
~~T-54220~~	~~Maxillary right second molar tooth~~	~~1~~	~~7~~
~~T-54230~~	~~Maxillary right first molar tooth~~	~~1~~	~~6~~
~~T-54240~~	~~Maxillary right second premolar tooth~~	~~1~~	~~5~~
~~T-54250~~	~~Maxillary right first premolar tooth~~	~~1~~	~~4~~
~~T-54260~~	~~Maxillary right canine tooth~~	~~1~~	~~3~~
~~T-54270~~	~~Maxillary right lateral incisor tooth~~	~~1~~	~~2~~
~~T-54280~~	~~Maxillary right central incisor tooth~~	~~1~~	~~1~~
~~T-54290~~	~~Maxillary left central incisor tooth~~	~~2~~	~~1~~
~~T-54300~~	~~Maxillary left lateral incisor tooth~~	~~2~~	~~2~~
~~T-54310~~	~~Maxillary left canine tooth~~	~~2~~	~~3~~
~~T-54320~~	~~Maxillary left first premolar tooth~~	~~2~~	~~4~~
~~T-54330~~	~~Maxillary left second premolar tooth~~	~~2~~	~~5~~
~~T-54340~~	~~Maxillary left first molar tooth~~	~~2~~	~~6~~
~~T-54350~~	~~Maxillary left second molar tooth~~	~~2~~	~~7~~
~~T-54360~~	~~Maxillary left third molar tooth~~	~~2~~	~~8~~
~~T-54370~~	~~Mandibular left third molar tooth~~	~~3~~	~~8~~
~~T-54380~~	~~Mandibular left second molar tooth~~	~~3~~	~~7~~
~~T-54390~~	~~Mandibular left first molar tooth~~	~~3~~	~~6~~
~~T-54400~~	~~Mandibular left second premolar tooth~~	~~3~~	~~5~~
~~T-54410~~	~~Mandibular left first premolar tooth~~	~~3~~	~~4~~
~~T-54420~~	~~Mandibular left canine tooth~~	~~3~~	~~3~~
~~T-54430~~	~~Mandibular left lateral tooth~~	~~3~~	~~2~~
~~T-54440~~	~~Mandibular left central incisor tooth~~	~~3~~	~~1~~

T-54450	Mandibular right central incisor tooth	4	1
T-54460	Mandibular right lateral incisor tooth	4	2
T-54470	Mandibular right canine tooth	4	3
T-54480	Mandibular right first premolar tooth	4	4
T-54490	Mandibular right second premolar tooth	4	5
T-54500	Mandibular right first molar tooth	4	6
T-54510	Mandibular right second molar tooth	4	7
T-54520	Mandibular right third molar tooth	4	8

Note: The value of the code is determined by Code Value (0008,0100). The text of Code Meaning (0008,0104) may vary for different instances of the same Code Value (0008,0100), and should not be used to determine which code is in use. It is provided only for annotative purposes when the code lexicon is absent.

Figure C.8-8
ISO 3950-1984 Designation of Permanent Dentition

~~C.8.11.9.1.3.2 Designation of Deciduous Dentition~~

~~Primary Anatomic Structure Sequence (0008,2228) from the SNOMED DICOM Microglossary Context ID 4019 Deciduous Dentition – Designation of Teeth~~

~~Code Value (0008,0100)~~	~~Code Meaning (0008,0104) (see Note)~~	~~ISO 3950 Designation of Quadrant~~	~~ISO 3950 Designation of Tooth~~
~~T-54610~~	~~Deciduous maxillary right central incisor tooth~~	~~5~~	~~1~~
~~T-54620~~	~~Deciduous maxillary right lateral incisor tooth~~	~~5~~	~~2~~
~~T-54630~~	~~Deciduous maxillary right canine tooth~~	~~5~~	~~3~~
~~T-54640~~	~~Deciduous maxillary right first molar tooth~~	~~5~~	~~4~~
~~T-54650~~	~~Deciduous maxillary right second molar tooth~~	~~5~~	~~5~~
~~T-54660~~	~~Deciduous maxillary left central incisor tooth~~	~~6~~	~~1~~
~~T-54670~~	~~Deciduous maxillary left lateral incisor tooth~~	~~6~~	~~2~~
~~T-54680~~	~~Deciduous maxillary left canine tooth~~	~~6~~	~~3~~
~~T-54690~~	~~Deciduous maxillary left first molar tooth~~	~~6~~	~~4~~
~~T-54700~~	~~Deciduous maxillary left second molar tooth~~	~~6~~	~~5~~
~~T-54760~~	~~Deciduous mandibular left central incisor tooth~~	~~7~~	~~1~~
~~T-54770~~	~~Deciduous mandibular left lateral incisor tooth~~	~~7~~	~~2~~
~~T-54780~~	~~Deciduous mandibular left canine tooth~~	~~7~~	~~3~~
~~T-54790~~	~~Deciduous mandibular left first molar tooth~~	~~7~~	~~4~~
~~T-54800~~	~~Deciduous mandibular left second molar tooth~~	~~7~~	~~5~~
~~T-54710~~	~~Deciduous mandibular right central incisor tooth~~	~~8~~	~~1~~
~~T-54720~~	~~Deciduous mandibular right lateral incisor tooth~~	~~8~~	~~2~~
~~T-54730~~	~~Deciduous mandibular right canine tooth~~	~~8~~	~~3~~
~~T-54740~~	~~Deciduous mandibular right first molar tooth~~	~~8~~	~~4~~
~~T-54750~~	~~Deciduous mandibular right second molar tooth~~	~~8~~	~~5~~

~~Note: The value of the code is determined by Code Value (0008,0100). The text of Code Meaning (0008,0104) may vary for different instances of the same Code Value (0008,0100), and should not be used to determine which code is in use. It is provided only for annotative purposes when the code lexicon is absent.~~

Change template identification condition:

Table C.17.3-4
DOCUMENT RELATIONSHIP MACRO ATTRIBUTES

Attribute Name	Tag	Type	Attribute Description
Observation DateTime	(0040,A032)	1C	The date and time on which this Content Item was completed. Required if the date and time are different from the Content Date (0008,0023) and Content Time (0008,0033) or the Observation DateTime (0040,A032) defined in higher items. Note: When Content Items are copied into successor reports, the Content Date (0008,0023) and Content Time (0008,0033) of the new report are likely to be different than the date and time of the original observation. Therefore this attribute may need to be included in any copied Content Items to satisfy the condition.
Content Template Sequence	(0040,A504)	1C	Template that describes the content of this Content Item. Only a single Item shall be permitted in this sequence. Required if a template was used to define the content of this Item and the template consists of a single CONTAINER with nested content, and it is the outermost invocation of a set of nested templates that start with the same CONTAINER.
>Include 'Template Identification Macro' Table 9-1		No Baseline Template ID is defined.	

Change Inheritence of Observation Context to allow overriding:

C.17.5 OBSERVATION CONTEXT ENCODING

Observation Context describes who or what is performing the interpretation, whether the examination of evidence is direct or quoted, what procedure generated the evidence that is being interpreted, and who or what is the subject of the evidence that is being interpreted.

Initial Observation Context is defined outside the SR Document Content tree by other modules in the SR IOD (i.e., Patient Module, Specimen Identification, General Study, Patient Study, SR Document Series, General Equipment and SR Document General modules). Observation Context defined by attributes in these modules applies to all Content Items in the SR Document Content tree and need not be explicitly coded in the tree. The initial Observation Context from outside the tree can be explicitly replaced ~~than inherited if it is ambiguous~~.

If a Content Item in the SR Document Content tree has Observation Context ~~above and beyond~~ different from the context already encoded elsewhere in the IOD, the context information applying to that

Content Item shall be encoded as child nodes of the Content Item in the tree using the HAS OBS CONTEXT relationship. That is, Observation Context is a property of its parent Content Item.

The context information specified in the Observation Context child nodes (i.e. target of the HAS OBS CONTEXT relationship) adds to the Observation Context of their parent node Content item ~~is~~ and ~~**inherited by**~~ shall apply to all the by-value descendant nodes of that parent node regardless of the relationship type between the parent and the descendant nodes. Observation Context is encoded in the same manner as any other Content Item. See the example in Figure C.17.5-1. ~~**A Content Item inherits the accumulated Observation Context of its parent. Observation Context is never extended or replaced as the tree of Content Items is traversed top-down from the root, only extended, and shall not be ambiguous or contradictory.**~~ Observation Context shall not be inherited across by-reference relationships.

Notes: 1. For example, the "subject context" may be defined by attaching an appropriate content item to the root node with a HAS OBS CONTEXT relationship. This "subject context" then applies not only to the root node, but to all its descendants, until such time as a content item explicitly replaces the "subject context" attribute, the new value of which is then inherited by all of that nodes descendants.

2. For example, one can extend the observation context that specifies the procedure being interpreted, either from that inherited from outside the tree or from ancestors within the tree, by adding further content items that specify identifying information, such as HL7 placer and filler order numers.

Observation DateTime is not included as part of the HAS OBS CONTEXT relationship, and therefore is not inherited along with other Observation Context. The Observation DateTime Attribute is included in each Content Item which allows different observation dates and times to be attached to different Content Items ~~without the issue of contradictory Observation Context being inherited by descendant nodes~~.

The IOD may specify restrictions on Content Items and Relationship Types that also constrain the flexibility with which Observation Context may be described.

The IOD may specify Templates that offer or restrict patterns and content in Observation Content.

~~**Note: Template Ids 24 "Direct Observation Context", 25 "Quoted Document Observation Context" and 26 "Quoted Verbal Observation Context" are defined.**~~

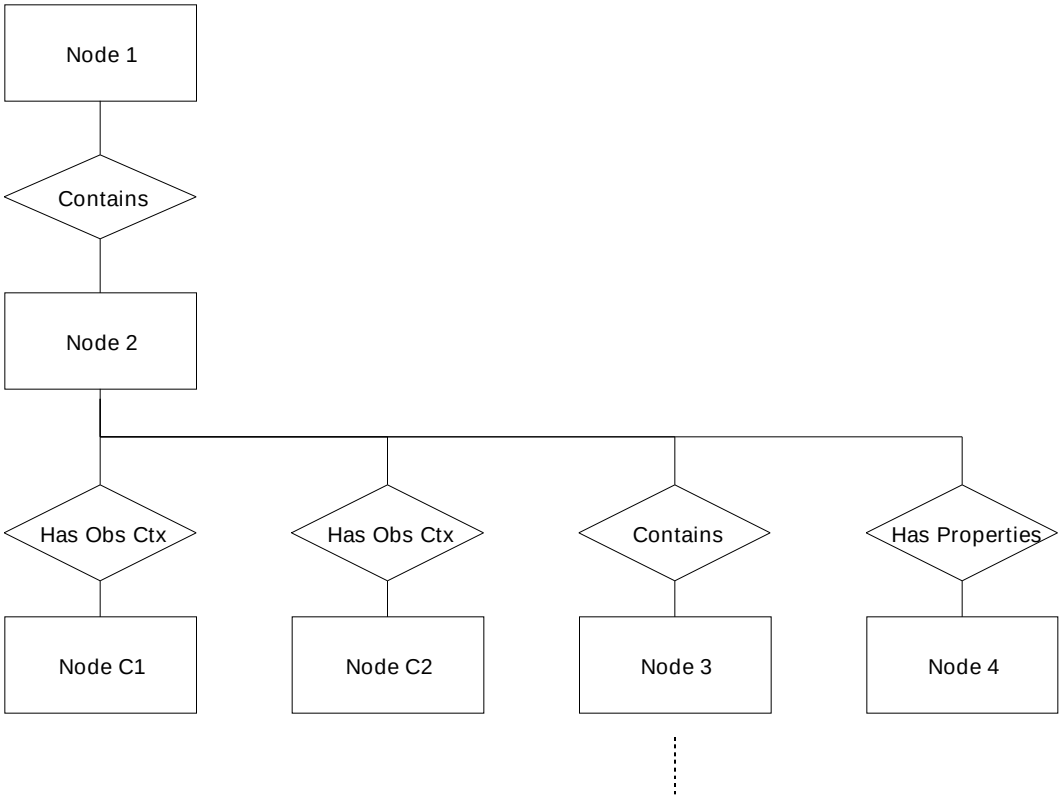
Patient Module
Patient Name
Patient ID
Patient Sex
Patient Date Of Birth

General Study Module
Study Instance UID
Accession Number

SR Document Series Module
Modality

SR Document General Module
Referenced Request Sequence
>Requested Procedure ID
>Requested Procedure Description

SR Document Content Module



Notes: 1. Node 2 inherits any Observation Context of Node 1, which is then extended or replaced by the additional Observation Context defined in Nodes C1 and C2 (that is C1 and C2 are properties of 2).

2. Node 3 and its descendents inherit the Observation Context of Node 2, which includes C1 and C2.

3. Node 4 inherits the Observation Context of Node 2, which includes C1 and C2.

Annex D Codes and Controlled Terminology (Informative)

Retired.

~~D.1 BASIC CODED ENTRY~~

~~Coded entry can streamline reporting by reducing the need for text entries. However, the most valuable long term benefit of controlled terminology is improved information retrieval. For example, when the user at some future date needs to retrieve all cases of intermittently bleeding gastric ulcers, the query in a structured observations database will be far more effective than in either a paper record system or a full text computerized reporting system where descriptions may have completely arbitrary content.~~

~~Code Sequence Attributes support the interchange of coded information, such as controlled terminology, procedure codes, or diagnosis codes in messages specified by this Standard. Section 8 specifies a set of Coded Entry Attributes of which Code Sequence Attributes are constructed.~~

~~PS 3.3-1996 defined a Basic Mode of Semantic Description in which Code Sequence Attributes using a basic mechanism (three Coded Entry Attributes: Coding Scheme, Code Value, Code Meaning) plus the optional Coding Scheme Version (0008,0103) to convey discrete units of coded information. See Table D.1-1. The basic mechanism allows a user to select a code, designated by Code Value (0008,0100), from a specified list of codes (Coding Scheme), designated by Coding Scheme Designator (0008,0102). The first 64 characters of the textual representation of the meaning of Code Value (0008,0100) could optionally be conveyed by Code Meaning (0008,0104). Since PS 3.3-1998, Code Meaning (0008,0104) is required.~~

~~Table D.1-1. Basic Coded Entry Attributes~~

~~Section~~	~~Attribute Name~~	~~Tag~~
~~8.1~~	~~Code Value~~	~~(0008,0100)~~
~~8.2~~	~~Coding Scheme Designator~~	~~(0008,0102)~~
~~8.2~~	~~Coding Scheme Version~~	~~(0008,0103)~~
~~8.3~~	~~Code Meaning~~	~~(0008,0104)~~

~~This set of coded entry Attributes supports the basic representation of any coded concept from any coding scheme, including locally defined coding schemes. The coding scheme and code value Attributes are necessary for basic interchange of coded entry data. However, the Basic Mode of Semantic Description does not provide mechanisms to: 1) Represent the semantic relationships among encoded concepts, 2) constrain the set of relationships applicable to specified concepts or 3) constrain the Value Set of Attributes. The Extended Mode of Semantic Description is specified to provide these three semantic functions. See Sections D.3 and D.4 for further description of the Extended Mode of Semantic Description.~~

~~D.2 MESSAGE/TERMINOLOGY MAPPING RESOURCES~~

~~To obtain the maximum benefit (accuracy, precision, reduction of ambiguity) of controlled terminology for description of complex concepts, such as anatomy and morphology, additional descriptive power is needed. This need for additional descriptive power is met by the extended set of Code Sequence Attributes. The enhanced mode of semantic description defined in Section 8 allows the sender to specify a Message Standard-to-Lexicon Mapping Resource for specification of the mapping of the concepts from one or more Lexicons (controlled terminology resources) to~~

Coded Entry Attributes. A Mapping Resource is a controlled terminology resource that defines semantic Relationship Types, constrains the set of relationships applicable to specified concepts, and constrains the Value Set of Attributes under specified conditions.

Three Mapping Resources are specified as the preferred Mapping Resources for the DICOM Standard: The SNOMED DICOM Microglossary DICOM Content Mapping Resource (SDM: Systematized Nomenclature of Human and Veterinary Medicine DICOM Microglossary), the HL7 Vocabulary (HL7V), and the Terminology Resource for Message Standards (TeRMS). In addition to the preferred Mapping Resources, DICOM also supports the use of locally defined Mapping Resources. The intention of DICOM is to utilize Code Values and Code Meanings from standards such as SNOMED, LOINC and BIRADS whenever possible.

Previous versions of the DICOM Standard used the value 99SDM as a Coding Scheme Designator referring to the predecessor of the DCMR, the SNOMED DICOM Microglossary (SDM) message/terminology Mapping Resource created in 1995. In some cases, the use of 99SDM was required as an Enumerated Value. Generally, wherever the value 99SDM was mentioned as a Coding Scheme Designator there was also a note mentioning that it was expected to be replaced when an appropriate authority for registering these designators is available. The symbol SDM DCMR is used to represent the SNOMED DICOM Microglossary DICOM Content Mapping Resource in the Mapping Resource Attribute. Coding Scheme Designator values represent the source terminology standard. 99SDM is no longer specified for Coding Scheme Designator.

The notion of Semantic Type in the 1995 SNOMED DICOM Microglossary has been replaced by the notion of Concept Groups which are referred to by Context Group Identifiers (CIDs). In addition, the SNOMED DICOM Microglossary DICOM Content Mapping Resource is now referred to as a Mapping Resource, which links Context Group Identifiers to Pick Lists of coded terms. The terms within the Pick Lists may come from a variety of coding schemes, though the predominant schemes are expected to be SNOMED, LOINC, and BI-RADS. Each record within a Context Group includes the designator for the source coding scheme drawn from the list of coding schemes included in the SDM DCMR. The lists of terms in the original SNOMED DICOM Microglossary defined for and utilized by several current DICOM Information Object Definitions have been transferred intact to the new format in the DICOM Content Mapping Resource as Context Groups, and have been given Context ID numbers.

The IODs defined in previous versions of the DICOM Standard have been revised to accommodate the notion of Mapping Resource and to support the new "pick list" referencing mechanism. The requirements or recommendations to use particular Semantic Types to derive lists from which Code Values are chosen ("picked") have been transformed into references to the appropriate Context ID in the new revision of the SDM DCMR. When a Code Value is selected from a Context Group in the revised SDM DCMR, the Coding Scheme Designator for that Code Value will be the source terminology designator listed in the SDM DCMR record to allow for the different coding schemes referenced by the SDM DCMR. The use of 99SDM has been retired and is now deprecated, though its meaning is defined.

As an example of how specific code sequences have changed, consider the Radionuclide Code Sequence (0054,0300) used in the Nuclear Medicine Isotope Module. Previously its description stated that the Code Value should be drawn from the Semantic Type value of diagnostic radionuclide. It has been revised to state that the Code Value shall be drawn from the SDM DCMR Context Group identified by Context ID 18. Within that Context Group are the same terms that were previously in the "diagnostic radionuclide" Semantic Type.

The new mechanism does not invalidate existing implementations. The same lists of terms are used, with different means used to identify them.

The Value Set (domain) of an Attribute defines the full meaning of an Attribute. An important goal of the Mapping Resource is to increase the likelihood that systems will share a common understanding of the full meaning of shared concepts by explicitly defining the value set of Coded Entry Attributes. Therefore, one of the functions of a Mapping Resource is to specify

recommended Attribute Value Sets (baseline Defined Terms) for Coded Entry Attributes. Coded Entry Attribute Value Sets are specified in tables (Context Groups).

Attribute Value Sets from Mapping Resources are typically specified as Defined Terms rather than as Enumerated Values in this Standard, so that the lists can be modified locally if necessary, without violation of DICOM conformance. However, it is hoped that the community will contribute to the definition of Context Groups and will adopt the generally accepted ones whenever possible, rather than "re-inventing the wheel".

With the SDM DCMR, HL7V, or TeRMS Mapping Resources, this Standard can reuse externally-captured and maintained domain knowledge. Without these Mapping Resources, the definitions of the full value set of all the Modifier Properties would need to be developed and maintained by the DICOM Standard Committee in order to support structured encoding of commonly used concepts, such as morphology. This would require a heavy expenditure of time and effort and would require a vast enlargement of the DICOM specification. Changes would be frequent and any update of a single term or phrase would require re-ballot of Parts of the DICOM Standard. Thus, the DICOM Standard Committee has entered into a joint development relationship with the College of American Pathologists (CAP) to ensure that the SDM DCMR Mapping Resource is comprehensive. The DICOM Standard Committee also collaborates with HL7 in the development of the HL7 Vocabulary. The intention of both groups is the develop mutually compatible controlled terminology resources.

Since an accurate, current list of Coding Scheme Designators is essential to implementors of the Standard, the Coding Scheme Designators are published in the SNOMED DICOM Microglossary DICOM Content Mapping Resource (in the Enomen field) and updated on a regular basis. The Context ID Number is 167. SDM DCMR Context Group 167 contains a subset of the Coding Scheme Designators table of the current Version of HL7. The intention of the DICOM Standards Committee is to ensure that systems mediated by HL7 and the DICOM Standard utilize the same Coding Scheme Designators for identical Coding Schemes and Versions.

The DICOM Content Mapping Resource is defined in PS 3.16.

D.3 ENHANCED ENCODING MODE

The Extended Coded Entry Attributes allow a Code Sequence to convey from which list of codes a code was selected ("picked").

Sections 8.4 through 8.6 specify the Coded Entry Attributes that may be used to convey additional semantic description of coded concepts in the Sequence Items of Code Sequence Attributes. Sections 8.7 and 8.8 specify the Extended Mode of Semantic Description. The Extended Mode Code Sequence Attributes in conjunction with a Mapping Resource (e.g. SDM, HL7V, or TeRMS) and an SDM DCMR aware message template provide enhanced descriptive power for complex concepts. Table D.3-1 shows the extended set of Coded Entry Attributes.

Table D.3-1. Extended Coded Entry Attributes

Section	Attribute Name	Tag
8.4	Mapping Resource	(0008,0105)
8.5	Context Group Version	(0008,0106)
8.7	Context Group Local Version	(0008,0107)
8.6	Context Identifier	(0008,010F)
8.2	Private Coding Scheme Creator UID	(0008,010C)
8.7	Code Set Extension Flag	(0008,010B)
8.7	Code Set Extension Creator UID	(0008,010D)

~~Context Identifier (0008,010F), Mapping Resource (0008,0105), and Context Group Version (0008,0106) uniquely designate the context dependent Value Set from which the coded value was selected. If a private Coding Scheme is used, the Private Coding Scheme Creator UID (0008,010C) may also be specified. These Attributes preserve the semantic context of the value conveyed in Code Value (0008,0100). Preservation of the original clinical or operational encoding context is valuable because medical knowledge and natural language evolve constantly. Two illustrative examples are provided in the following paragraph.~~

~~Example 1: An early version of the SDM DCMR might list two modifier properties for the morphology of a neoplastic mass. A later version, modified subsequent to further research and increased knowledge of that type of neoplasm, might include three or four modifier properties.~~

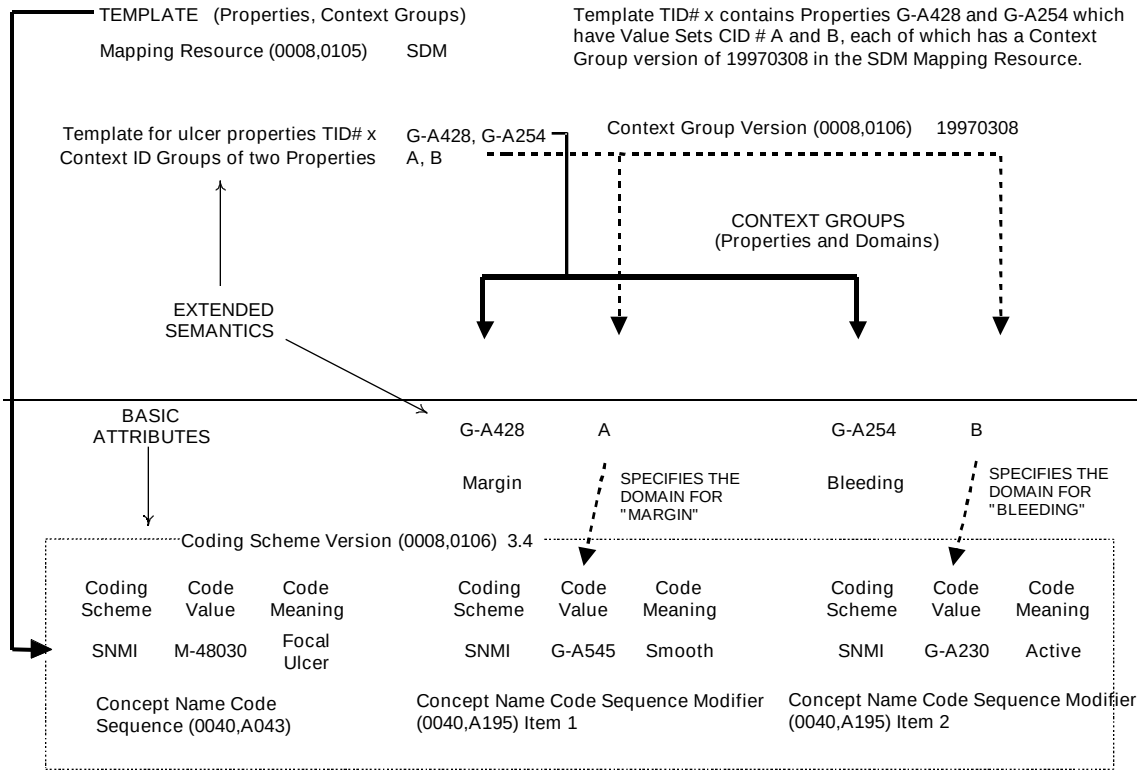
~~Example 2: The list of iodinated contrast agents available for use in radiological procedures changes as new agents are developed and obsolete agents are retired. The record of the context from which a value was selected may enable a future reviewer of a procedure report to understand why a certain agent might not have been used (e.g. the agent might not have been available at the time of the historical procedure). Thus, the ability to record the version of the terminology resource is useful for accurate representation of current medical knowledge. The Mapping Resource and Version Attributes also enhance interoperability by ensuring shared understanding of Attribute Value Sets and the appropriate sets of context dependent concept relationships (modifier properties) as biomedical knowledge and biomedical language evolve.~~

~~The Context Identifier (0008,010F) specifies the Context ID Number, the identification number of a message/terminology Mapping Resource Context Group that specifies the Value Set of Code Sequence Attribute. A Context Group is essentially a list of terms. A separate record in the Mapping Resource is defined for each unique concept in each Context Group. Concepts in the SDM DCMR and TeRMS are identified by unique internal keys and by external (foreign) keys that map the concept to the source Lexicon and to the UMLS Metathesaurus (Trademark, U.S. National Library of Medicine, Bethesda, MD). The SDM DCMR is the DICOM/SNOMED subset of the TeRMS. TeRMS and SDM DCMR records are mappable via the Concept Unique Identifier (CUI) and String Unique Identifier (SUI) of the UMLS Metathesaurus (Trademark, U.S. National Library of Medicine, Bethesda, MD). At the Value Set level (i.e. context-dependent Attribute value-set specifications) SDM DCMR Context ID Numbers map to the DICOM/SNOMED subset of TeRMS Context ID Numbers.~~

~~Example 3. Figure D.3-1 illustrates the semantic dependencies involved in the specification of two properties of an ulcer: Margination and Bleeding Activity. These two properties are the "Modifier Property Group" that is specified by an SDM DCMR Template. The fact that these two properties are significant for ulcers is an example of the type of domain knowledge stored in SDM DCMR Templates. Each SDM DCMR Template is identified by a Template ID Number (TID). Templates specify sets of Properties (attributes) that are useful in a particular clinical or operational context. Templates also specify Context Groups that define the Value Set of the coded Properties. The Value Set (i.e. domain or "answer-set") of each Property is specified by the Template as a Context Group, each of which is identified with a Context ID Number. The set of Context Groups for all properties in the Template is the "Modifier Property Context ID Group". Template x used in the example of Figure D.3-1 specifies the properties that modify the Concept Name Attribute.~~

~~Figure D.3-1~~

~~EDITORIAL NOTE: REPLACE "SDM" WITH "DCMR" IN FIGURE D.3.1~~



~~Note that the Coding Scheme Designator (0008,0102), Code Value (0800,0100) and Code Meaning (0008,0104) are essential (and therefore mandatory) for information transfer. [Note: Code Meaning is optional in HL7 V.2.3.] . Coding Scheme Version (0008,0103) is also conditional if necessary to prevent problems caused by version-incompatibility and private coding schemes. The Mapping Resource (0008,0105), Context Group Version (0008,0106), and Context Identifier (0008,010F) are not critical for immediate information transfer. However, they preserve the original semantic context for future reference in the longitudinal record. Related Code Sequence Attribute, Modifier Item Count, Modifier Property Group, and Modifier Property Context ID Group are not conveyed in messages. They are application software logical attributes that represent context dependent domain knowledge in the user interface, message parser, or database manager. These internal attributes may be used by the data acquisition environment of the sending application or to expedite the presentation of complex concepts by the receiving application.~~

~~For further definition of Mapping Resource dependencies and constraints on Coded Entry Attributes see Section 8.8 (Standard Attribute Sets for Coded Entry Attributes). Section 8.8 provides generic specifications for the Attribute Sets of Code Sequence Attributes. Section 8.8 is referenced by Attribute Definitions that use the concise macro form to specify the Sequence Items of Coded Entry Attributes.~~

~~Provision is made for adding private extensions to Context Groups and/or Coding Schemes by using Code Set Extension Flag (0008,010B) and Code Set Extension Creator UID (0008,010D). The source of a private Coding Scheme is identified by Private Coding Scheme Creator UID (0008,010C). The version date and time of a privately extended version of a standard Context Group is denoted by Context Group Local Version (0008,0107).~~

~~SNOMED DICOM Microglossary~~ DICOM Content Mapping Resource ~~Templates provide the ability for the system designer to specify the number and type of Properties that need to be conveyed and the Context Groups that define the Value Set of the Property in various clinical contexts. For~~

example, this allows the observer to fully describe of the concept of "ulcer" with an automatically presented tailored (context dependent) set of Modifier Properties (e.g. diameter, presence or absence of mass effect, margination, bleeding activity). The value set for the "bleeding activity" Modifier Property (e.g. active, inactive, intermittent) and other Modifier Properties could be presented to the user via convenient "pick lists" generated by the software from the appropriate Context Groups. Diameter measurement and other numerical measurements of a Template would be conveyed as Name/Value pairs using the Concept Name Code Sequence (0040,A043) and the Numeric Value (0040,A30A). For further explanation, see the Acquisition Context Module (Section C.7.6.14).

D.4 REFERENCES

1. Bidgood WD Jr. The SNOMED DICOM Microglossary: Controlled Terminology Resource for Data Interchange in Biomedical Imaging. **In press (**1998;37:404-414.**)**: Methods of Information in Medicine. **Preprint published in the Proceedings of the Conference on Natural Language and Medical Concept Recognition. International Medical Informatics Association, Working Group Six. Ponte Vedra, FL. January 19-22, 1997.**

2. Cotè RA, Rothwell DJ, Palotay JL, Beckett RS, Brochu L, (editors) The Systematized Nomenclature of Human and Veterinary Medicine. Northfield, IL. College of American Pathologists 1993.

3. Bidgood WD Jr, (editor) The SNOMED DICOM Microglossary. Northfield, IL. College of American Pathologists 1998.

34. Bidgood WD Jr. Documenting the Information Content of Images. Journal of the American Medical Informatics Association. Symposium Supplement: Proceedings of the 1997 AMIA Annual Fall Symposium. 1997:424-428.**5**.

45. Bidgood WD Jr., et al. Controlled Terminology for Clinically-Relevant Indexing and Selective Retrieval of Biomedical Images. Int'l Journal on Digital Libraries. 1997, 1(3):278-287.**6**.

56. Bidgood WD Jr., et al. Image-Acquisition Context: Procedure-Description Attributes for Clinically-Relevant Indexing and Selective Retrieval of Biomedical Images. **In Press (1998):** Journal of the American Medical Informatics Association. 1999;6:61-75.

6. Conceptual schemata for terminology: a continuum from headings to values in patient records and messages. Journal of the American Medical Informatics Association. Symposium Supplement: Proceedings of the 1997 AMIA Annual Fall Symposium. 1997:650-654.

7. Clinical Importance of the DICOM Structured Reporting Standard. International Journal of Cardiac Imaging. 14:307-315, 1998.

New:

NEMA Standards Publication PS 3.16-xxxx

Digital Imaging and Communications in Medicine (DICOM)

Part 16: Content Mapping Resource

FOREWORD

The American College of Radiology (ACR) and the National Electrical Manufacturers Association (NEMA) formed a joint committee to develop a standard for Digital Imaging and Communications in Medicine (DICOM). This DICOM Standard was developed according to the NEMA procedures.

This standard is developed in liaison with other standardization organizations including CEN TC251 in Europe, and JIRA and MEDIS-DC in Japan, with review also by other organizations including IEEE, HL7 and ANSI in the USA.

The DICOM Standard is structured as a multi-part document using the guidelines established in the following document:

- ISO/IEC Directives, 1989 Part 3 : Drafting and Presentation of International Standards.

This document is one part of the DICOM Standard, which consists of the following parts:

PS 3.1: Introduction and Overview

PS 3.2: Conformance

PS 3.3: Information Object Definitions

PS 3.4: Service Class Specifications

PS 3.5: Data Structures and Encoding

PS 3.6: Data Dictionary

PS 3.7: Message Exchange

PS 3.8: Network Communication Support for Message Exchange

PS 3.9: Point-to-Point Communication Support for Message Exchange

PS 3.10: Media Storage and File Format for Media Interchange

PS 3.11: Media Storage Application Profiles

PS 3.12: Formats and Physical Media

PS 3.13: Print Management Point-to-Point Communication Support

PS 3.14: Grayscale Standard Display Function

PS 3.15: Security Profiles

PS 3.16: Content Mapping Resource

These parts are related but independent documents. Their development level and approval status may differ. Additional parts may be added to this multi-part standard. PS 3.1 should be used as the base reference for the current parts of this standard.

1 Scope and field of application

This part of the DICOM Standard specifies the DICOM Content Mapping Resource (DCMR) which defines the templates and context groups used elsewhere in the standard.

2 Normative references

The following standards contain provisions that, through reference in this text, constitute provisions of this Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this Standard are encouraged to investigate the possibilities of applying the most recent editions of the standards indicated below.

UCUM	Unified Code for Units of Measure, Regenstrief Institute for Health Care, Indianapolis 2000.
LOINC®	Logical Observation Identifier Names and Codes, Regenstrief Institute for Health Care, Indianapolis 2000.
SNOMED↓	Systematized Nomenclature of Medicine, Version 3, College of American Pathologists
SNOMED↓	Systematized Nomenclature of Medicine – RT, College of American Pathologists

This DICOM Standard incorporates a subset of terms from SNOMED RT – The Systematized Nomenclature of Medicine Clinical Terms, used by permission of the College of American Pathologists

All the SNOMED terms used in this Standard are the subject of a royalty pre-paid licensing agreement between NEMA and CAP that allows their use in DICOM applications without further license or payment of fee.

3 Definitions

For the purposes of this Standard the following definitions apply.

3.1 CODES AND CONTROLLED TERMINOLOGY DEFINITIONS:

The following definitions are used in the specification of Interpretation Data Interchange:

3.1.1 Baseline Context Group: Context Group that specifies the suggested Value Set for a Code Sequence Attribute.

3.1.2 Defined Context Group: Context Group that specifies the Value Set for a Code Sequence Attribute that shall be used, but may be extended.

3.1.3 Enumerated Context Group: Context Group that specifies the Value Set for a Code Sequence Attribute that shall be used and shall not be extended.

3.1.4 Code Sequence Attribute: Attribute that (usually) includes the string "Code Sequence" in the Attribute Name and has a VR of SQ (Sequence of Items). Its purpose is to encode concepts

using code values and optional text meanings from coding schemes. Sections 8.1 through 8.8 specify the Attributes of which the Sequence Items (Attribute Sets) of Code Sequence Attributes are constructed.

3.1.5 Context Group: Attribute Value Set defined by a Mapping Resource.

3.1.6 Context Group Version: Version of a Context Group.

3.1.7 Context ID (CID): Identifier of a Context Group.

3.1.8 Mapping Resource: A resource that defines context-dependent usage constraints (i.e. Value Set or Relationship Type restrictions) for Attributes. A resource that specifies the mapping of the content of an external controlled terminology to the components of a message standard.

3.1.9 Relationship Type: The association between two Concepts. Examples: "HAS PROPERTIES", "CONTAINS", "INFERRED FROM".

3.1.10 DICOM Content Mapping Resource (DCMR): A Mapping Resource that defines Templates and Context Groups for use in DICOM IODs.

3.1.11 Template: A pattern that describes the Content Items, Value Types, Relationship Types and Value Sets that may be used in part of a Structured Report content tree, or in other coded entry items, such as Acquisition Context or Waveform Channel Description. Analogous to a Module of an Information Object Definition.

3.1.12 Template ID (TID): Identifier of a Template.

3.1.13 Value Set: The allowed values of a Code Sequence Attribute in a given context. Specified either as one or more individual values or by reference to a Context Group.

3.1.14 Baseline Template: A template suggested in an IOD which may be used in the creation of a SOP Instance, replaced by another template or extended.

3.1.15 Defined Template: A template defined in an IOD that specifies an extensible set of Content Items and corresponding Value Sets. A SOP Instance may optionally include additional Content Items beyond those specified in the template.

3.1.16 Enumerated Template: A template defined in an IOD that specifies the exact set of Content Items and corresponding Value Sets that shall be used and which shall not be extended. A SOP Instance shall be created according to the exact Template specification and shall not include additional Content Items.

3.1.17 Coding schemes: Dictionaries (lexicons) of terms with well defined meanings.

Note: Examples of coding schemes include SNOMED and LOINC

4 Symbols and abbreviations

The following symbols and abbreviations are used in this Part of the Standard.

ACR	American College of Radiology
CAP	College of American Pathologists
DCMR	DICOM Content Mapping Resource

NEMA	National Electrical Manufacturers Association
SNOMED	Systematized Nomenclature of Medicine
UCUM	Unified Code for Units of Measure

EV	Enumerated Value
DT	Defined Term
CNAME	Context Group Name
TNAME	Template Name
BCID	Baseline Context Group ID
DCID	Defined Context Group ID
ECID	Enumerated Context Group ID
BTID	Baseline Template ID
DTID	Defined Template ID
ETID	Enumerated Template ID

The following upper-case abbreviations represent specific Attributes:

CV	Code Value (0008,0100)
CSD	Coding Scheme Designator (0008,0102)
CM	Code Meaning (0008,0104)
CSV	Coding Scheme Version (0008,0103)

5 Conventions

Terms listed in Section 3 Definitions are capitalized throughout the document.

6 Form of Template Specifications

Templates are patterns that specify the Concept Names, Requirements, Conditions, Value Types, Value Multiplicity, Value Set restrictions, Relationship Types and other attributes of Content Items for a particular application.

An IOD may specify that particular Standard Templates shall be used or may be used to define or constrain the content of SR Documents or Acquisition Context. Annex A of this Part defines Standard Templates.

Note: Standard Extended and Private Templates may be defined by implementors of the Standard. The rules for definition of Standard Extended and Private SR Templates are similar to the rules for definition of Standard Extended and Private SOP Classes. One row of a Template definition table corresponds to one row of a Module table.

Each Standard Template is specified by a Template table in this Part. Each Template table specifes exactly one Template, corresponding to a type of SR Document or a pattern of content within an SR Document or Acquisition Context Module.

The range of concepts and the options that are permitted in a family of SR Documents vary inversely with the level of constraint that is applied by the corresponding SR Template. The more narrow the range of concepts and the more restricted the options permitted by a Template, the more predictable the content of the SR Documents will be.

Notes: 1. A very specific Template defines a family of SR Documents that are very similar to each other. They have a narrow range of content options (e.g. high level of constraint of Content Item values; use of CODE or NUM with Enumerated Context Groups) and their content is therefore highly predictable. A very general (e.g. permissive or broad) Template defines a family of SR Documents that may differ considerably from one another. They have a broader range of content options (e.g. low level of constraint of Content Item values; use of TEXT and relatively little restriction of Content Item values) and their content is less predictable.

2. The degree of interoperability that may be achieved with a family of SR Documents generated from a Template may be determined intentionally and precisely at a desired level by appropriate Template design to achieve the necessary degree of predictability of SR Document contents.

6.1 TEMPLATE TABLE FIELD DEFINITION

SR Templates are described using tables of the following form:

TID #
Template Name

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1								
2								
3								

Acquisition Context and Waveform Channel Definition Templates are described using tables of the following form:

TID #
Template Name

	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1						
2						
3						

The semantics of the fields (columns) of Template tables are defined by subsections of this Section. A row of a Template table specifies either one Content Item or inclusion of another Template that may specify any number of Content Items (see Section 6.2.3 for definition of Included Templates). Each Template table is named by a title, identified by a TID number and further explained by a description such as explanation of Template contents, purpose and use cases.

The folllowing conventions are defined for the form of references to coded concepts, Context Groups and Templates.

Code Meanings are enclosed in quotation marks (for example “cm”). Code Values and Coding Scheme Designators are not enclosed in quotation marks unless a comma occurs in the string.

References to coded concepts take the following form:

EV or DT (CV, CSD, "CM")

e.g. an Enumerated Value with only CV, CSD, and CM defined is represented as follows: EV (CV, CSD, "CM"), for example EV (T-04000, SNM3, "Breast").

References to Context Groups take the following form:

BCID, DCID or ECID (CID) CNAME

e.g. Defined Context Group 5000 is represented as follows: DCID (5000) Language.

References to Templates take the following form:

BTID, DTID or ETID (TID) TNAME

e.g. Enumerated Template 1000 is represented as follows: ETID (1000) Quotation.

6.1.1 Row Number

Each row of a Template Table is denoted by a row number. The first row is numbered 1 and subsequent rows are numbered in ascending order with increments of 1. This number denotes a row for convenient description as well as reference in conditions. The Row Number of a Content Item in a Template may or may not be the same as the ordinal position of the corresponding Sequence Item (representing the Content Item) in a Content Sequence (0040,A730), depending on the number of times the Content Item is repeated.

The Content Item specified in the first row of a Template table may be of any Value Type. Specifically, it is not constrained to be a CONTAINER.

6.1.2 Nesting Level (NL)

The nesting level of Content Items is denoted by ">" symbols, one per level of nesting below the initial Source Content Item (of the Template) in a manner similar to the depiction of nested Sequences of Items in Modules Tables in PS 3.3. When it is necessary to specify the Target Content Item(s) of a relationship, they are specified in the row(s) immediately following the corresponding Source Content Item. The Nesting Level of a Target Content Item is one greater than the Nesting Level of the corresponding (parent) Source Content Item. The Content Item specified in row 1 of a Template Table is at the top level (i.e. no ">" symbol is ever present in the NL field for the first Content Item in the table).

Acquisition context templates have no Nesting Level field.

6.1.3 Relationship with Source Content Item (Parent)

Relationship Type and Relationship Mode (i.e. By-value or By-reference) constraints, if defined, are specified in this field, as described in Table 6.1.3-1.

Relationship Type and Mode are specified for each row that specifies a target content item.

Relationship Type and Mode may also be specified when another Template is included, either "top-down" or "bottom-up" or both (i.e. in the "INCLUDE Template" row of the calling Template, or in all rows of the included Template, or in both places). There shall be no conflict between the Relationship Type and Mode of a row that includes another Template and the Relationship Type and Mode of the rows of the included Template.

Note: SR IODs specify Enumerated Values for Relationship Types. If a Relationship Type other than one of the Defined Terms for Relationship Type (0040,A010) is specified in a Private SOP Class, there is a significant risk to interoperability. Documentation accompanying Templates for Private SOP Classes should define any Relationship-type extensions in the manner that the Standard Relationship Types are defined in PS 3.3.

Acquisition context templates have no Relationship field.

Table 6.1.3-1
Syntax of Relationship Constraints

Expression	Definition
RTYPE	Relationship Mode is By-value and Relationship Type is RTYPE. For example, "INFERRED FROM".
R-RTYPE	Relationship Mode is By-reference and Relationship Type is RTYPE. For example, "R-INFERRED FROM".

6.1.4 Value Type (VT)

The Value Type field specifies the SR Value Type of the Content Item or conveys the word "INCLUDE" to indicate that another Template is to be included (substituted for the row). See Section 6.2.3 for further description of "Included Templates".

6.1.5 Concept Name

Any constraints on Concept Name are specified in this field as defined or enumerated coded entries, or as baseline, defined or enumerated context groups. Alternatively, when the VT field is "INCLUDE", the Concept Name field specifies the template to be included.

6.1.6 Value Multiplicity (VM)

The VM field indicates the number of times that either a Content Item of the specified pattern or an included Template may appear in this position. Table 6.1.6-1 specifies the values that are permitted in this field.

Table 6.1.6-1
Permitted Values for VM

Expression	Definition
i (where 'i' represents an integer)	Exactly i occurrences, where i>=1. E.g. when i=1 there shall be one occurrence of the Content Item in this position.
i-j	From i to j occurrences, where i and j are >=1 and j>i.
1-n	One or more occurrences

6.1.7 Requirement Type

The Requirement Type field specifies the requirements on the presence or absence of the Content Item or included Template.

Note: There is typically no need to specify Requirement Type separately for SCU and SCP of the Basic SR SOP Classes, because the SCP is required to support the entire content of any SR Document it receives. Therefore, for Basic SR SOP Classes, Requirement Type effectively only applies to the SCU.

The following symbols are used:

M – Mandatory. Shall be present.

MC – Mandatory Conditional. Shall be present if the specified condition is satisfied.

U – User Option. May or may not be present.

UC – User Option Conditional. May not be present. May be present according to the specified condition.

Note: There is an interaction between the VM and the Requirement Type with respect to the number of times that a content item (or included Template) may actually be present, as follows:

Req Type	VM	Actual number of occurences in the content tree
M	1	1
M	1-n	1 to n
U	1	0 or 1
U	1-n	0 to n

6.1.8 Condition

The Condition field specifies any conditions upon which presence or absence of the Content Item or its values depends. This field specifies any Concept Name(s) or Values upon which there are dependencies.

References in Condition statements to coded concepts or values, whether to select a content item to test or to specify a value to test against, are of the form (CV, CSD, "CM"). As is always the case for coded entries, the matching is performed against CV and CSD, irrespective of the string value of CM.

References may also be made to row numbers (e.g. to specify exclusive OR conditions that span multiple rows of a Template table)

The following abbreviations are used:

XOR = Exclusive OR. One and only one row shall be selected from mutually-exclusive options.

Note: For example, if one of rows 1, 2, 3 or 4 may be included, then for row 2, the abbreviation "XOR rows 1,3,4" is specified for the condition.

IF = Shall be present if the condition is TRUE; may be present otherwise.

IFF = If and only if . Shall be present if the condition is TRUE; shall not be present otherwise.

6.1.9 Value Set Constraint

Value Set Constraints, if any, are specified in this field as defined or enumerated coded entries, or as baseline, defined or enumerated context groups.

The Value Set Constraint column may specify a default value for the Content Item if the Content Item is not present, either as a fixed value, or by reference to another Content Item, or by reference to an Attribute from the dataset other than within the Content Sequence (0040,A730).

6.1.9.1 NUM Units Constraint

Constraints on units of measurement, if any, are specified in the Value Set Constraint field if and only if the Value Type is NUM. The constraints are specified either as defined or enumerated coded entries, or as baseline, defined or enumerated context groups.

6.1.9.2 CONTAINER Continuation Flag Constraint

The value of the Continuity of Content Flag (0040,A050) may be specified in the Value Set Constraint field if and only if the Value Type is CONTAINER.

Note: The SR Document Content Module specifies "SEPARATE" and "CONTINUOUS" as the Enumerated Values for Continuity of Content Flag (0040,A050).

6.2 SPECIAL CONVENTIONS FOR TEMPLATE TABLES

6.2.1 Multiple Value Sets Depending on Different Conditions

When a Content Item may have different value sets, each depending on different conditions, the description of each different case begins in a separate row of the Template Table.

6.2.2 Target Content Items of Relationships

When it is necessary to specify the Target Content Item(s) of a relationship, they are specified in the row(s) immediately following the Source Content Item. The Nesting level of a Target Content Item (or set of Target Content Items specified indirectly via an 'include Template' macro) is one greater than the Nesting Level of the corresponding Source Content Item, as indicated by an increase in the number of ">" characters in the nesting level.

When a Content Item may be the Source of multiple relationships having different Relationship Types and/or different Relationship Modes and/or different patterns of Target Content Item(s), the description of each different case begins in a separate row of the Template Table.

When the Source Content Item of a relationship has VM of greater than 1, the specified pattern of Target Content Items applies to all instantiations of the Source Content Item.

Note: For example, if a Template specifies that the VM of a Source Content Item is 1-n and specifies a By-value relationship to two CODE Content Items with particular value set constraints, then each instantiation of the Source Content Item has a By-value relationship to two CODE Content Items with the specified value constraints.

When a Source Content Item that has a Requirement Type of U, UC or MC is not present (is not instantiated), no Target Content Items of that Source Content Item are present, even if one or more of the Target Content Items is designated with a Requirement Type of M or MC.

Note: In otherwords, potential children are not present when there is no parent.

6.2.3 Inclusion of Templates

A Template may specify another Template to be included by specifying "INCLUDE" in the Value Type field and the identifier of the included Template in the Concept Name field. All of the rows of the specified Template are in included in the invoking Template, effectively substituting the specified template for the row where the inclusion is invoked. Whether or not the inclusion is user optional, mandatory or conditional is specified in the Requirement and Condition fields. The number of times the included Template may be repeated is specified in the VM field. The Value Set constraint field is not used.

6.2.4 Post-coordinated Codes and Has Concept Modifier Relationship

Though it may not be explicitly shown in a particular Template, the use of any coded Concept Name in any Content Item may be defined in a post-coordinated rather than pre-coordinated manner, unless explicitly forbidden by the IOD or the Template.

Accordingly, any such Content Item may have any number of Target Content Items via a "HAS CONCEPT MOD" relationship, even if not explicitly specifed in a Template. Each Target Content Item of such a relationship may be more complicated than a single Content Item if the IOD permits (i.e. the post-coordinated concept may potentially be defined by a complex sub-tree).

7 DCMR Context Group Specifications

Context Groups specify Value Set restrictions for Code Value (0008,0100) and Code Meaning (0008,0104) of Code Sequence Attributes for given functional or operational contexts. This Section specifies the semantics of DCMR Context Group Tables.

7.1 CONTEXT GROUP TABLE FIELD DEFINITION

A row of a Context Group table specifies one coded concept. The semantics of the fields (i.e. Columns) of Context Group tables are defined by subsections of this Section. Each Context Group table is named by a title and identified by a CID number.

The columns of the tables consist of:

- Coding Scheme Designator (0008,0102)
- Code Value (0008,0100)
- Code Meaning (0008,0104)

In those cases where it is necessary, Coding Scheme Version (0008,0103) may also be specified.

If further description of the concept represented by the code is required in the DCMR (rather than referring to an external coding scheme), it is included in a separate table.

7.2 SPECIAL CONVENTIONS FOR CONTEXT GROUP TABLES

7.2.1 Include Context Group

The ‘Include Context Group’ macro is a concise mechanism for including (by-reference) all of the rows of a specified Context Group in the invoking Context Group, effectively substituting the specified Context Group for the row where the macro is invoked. If an ‘Include Context Group’ is specified, it shall be specified in the Concept Name column of a Context Group Table. Table 7.2.1-1 specifies the syntax of the ‘Include Context Group macro.

Table 7.2.1-1
Include Context Group Macro

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
…	…	…
Include CID nnn		
…	…	…

7.2.2 Units Of Measurement

Context Group 82 is defined to include all units of measurement relevant to DICOM IODs. In the past it was envisaged that an extensible list of pre-coordinated codes would be included in the mapping resource.

DICOM has now adopted the Unified Codes for Units of Measurement (UCUM) standard for all units of measurement. This coding scheme allows for the “construction” of pre-coordinated codes from atomic components.

The specialization of the UCUM standard as it is used in DICOM involves the following rules:

- the Coding Scheme Designator is specified as “UCUM”
- the version of UCUM from which a code is constructed is specified in Coding Scheme Version
- the Code Value will be constructed from UCUM and make use of the “case-sensitive” form of UCUM code (e.g. “ml/s”)
- the Code Meaning may be one of three classes of synonyms:

- the same string as sent in the Code Value when an abbreviation is required (e.g. "ml/s")
- constructed from the "names" of individual components using the Americanized form of name (e.g. "milliliters/second")
- constructed from the "names" of individual components using the European form of name (e.g. "millilitres/second")

7.2.3 Extension of Context Groups

As the standard evolves, those Context Groups that are used in IODs or Templates only as baseline context groups may be modified to use additional or different terms.

Those Context Groups that are used anywhere as defined context groups may be modified to use additional, but not different terms.

Those Context Groups that are used anywhere as enumerated context groups may not be modified.

Whether a particular Context Group is used as a baseline, defined or enumerated Context Group is determined at the point where the Context Group is invoked, and the most restrictive use is indicated where the Context Group is defined.

8 Coding Schemes

Table 8-1 list the coding schemes (and their designators) that have been used in HL7, ASTM and DICOM. An earlier version of this table was formerly contained in Annex D of PS 3.3.

Table 8-1 Coding Schemes

Coding Scheme Designator	Description
ACR	ACR Index for Radiological Diagnosis Revised, 2rd Edition 1986
AS4	American Society for Testing & Materials and CPT4 (see Appendix A of ASTM E1238 and its codes revisions).
ART	WHO Adverse Reaction terms
ATC	American Type Culture Collection
C4	CPT-4
C5	CPT-5
CD2	ADA Current Dental Terminology (CDT-2)
CDCA	CDC Analyte Codes
CDCM	CDC Methods/Instruments Codes
CDS	CDC Surveillance Codes
CST	COSTART coding system for adverse drug reactions
CVX	CDC Vaccine Codes
CAS	Chemical abstract codes – United States Pharmacopeial Convention
CE	CEN PT007 ECG Diagnostic Codes.
DCL	DICOM – never used
DCM	DICOM PS 3.16 Content Mapping Resource defined codes
DQL	DICOM – never used

E	Euclides AFP Codes
E5	Euclides kind of quantity codes
E6	Euclides Lab method codes
E7	Euclides Lab equipment codes
ENZC	Enzyme Codes
FDDC	First DataBank Drug Codes
FDDX	First DataBank Diagnostic Codes
FDK	FDA K10 (device & analyte process codes).
HB	Health Industry Business Communications Council (HIBCC)
HHC	Home Health Care Classification System
HI	Health Outcomes Institute codes for outcome variables
HPC	HCFA Procedure Codes (HCPCS)
I10	ICD-10
I10P	ICD-10 Procedure Codes
I9	ICD-9
I9C	ICD-9-CM
IBT	International Society of Blood Transfusion (ISBT). Blood Group Terminology “1990”
IC2	International Classification of Health Problems in Primary Care (ICHPPC-2)
ICS	ICCS
IUPC	IUPAC component (analyte) codes
IUPP	IUPAC property codes
ISO639_1	Two-letter language codes
ISO639_2	Three-letter language codes
ISO3166_1	Countries
ISO5218_1	Representation of Human Sexes
IUC	IUPAC/IFCC Recommendations of Quantities and Units in Clinical Chemistry
JC8	Japanese Chemistry Clinical examination classification code. Japan Association of Clinical Pathology. Version 8, 1990.
LN	Logical Observation Identifier Names and Codes, Version 1.01 (Laboratory LOINC)
MCD	Medicaid billing codes/names.
MCR	Medicare billing codes/names.
MDDX	Medispan diagnostic codes (drug-diagnosis interaction)
MDNS	Universal Medical Device (UMD) Nomenclature System
MEDC	Medical Economics Drug Codes
MEDR	Medical Dictionary for Drug Regulatory Affairs (MEDDRA)
MEDX	Medical Economics Diagnostic Codes
MGPI	Medispan GPI – hierarchical drug codes
MVX	CDC Vaccine Codes
NDC	National drug codes, FDA
NIC	Nursing Interventions – Iowa Intervention Project
NPI	HCFA National Provider Identifier

OHA	Omaha System – Omaha Visiting Nurse Association
POS	HCFA Place of Service (POS) Codes for Professional Claims
RC	Read Clinical Classification of Medicine
99SDM	SNOMED Version 3 (Retired)
S3	SNOMED Version 3 (never used in DICOM)
SNM	SNOMED (never used in DICOM)
SNM3	SNOMED Version 3
SNT	SNOMED topology codes (never used in DICOM)
SRT	SNOMED-RT
UC	UCDS Uniform Clinical Data Systems
UCUM	Unified Code for Units of Measure
UMD	Universal Medical Device Nomenclature System (MDNS).
UML	Unified Medical Language
UPC	Universal Product Code - Universal Code Council
UPIN	HCFA Universal Physician Identification Numbers
W1	World Health organization record number drug codes - six digit code
W2	World Health organization record number drug codes - eight digit code
W4	World Health organization record number drug codes with ASTM extensions (see appendix A of ASTM 1238-91)
WC	WHO's ATC codes provide a hierarchical classification of drugs by therapeutic class.

Annex A Structured Reporting Templates (Normative)

This Annex specifies the content of Standard Templates that may be used by DICOM SR IODs.

TID 1000 QUOTATION

Unless otherwise specified, content in an SR tree is "directly" observed. When material is quoted (from a source that is either a document or something spoken), then it is necessary to specify:

- the fact that one is quoting
- who is doing the quoting
- the source of the quote
- who is being quoted, and who and what the quote is about

This template establishes a mechanism for quoting by specifying:

- the fact that one is quoting, by the presence of the contents of the template in the tree
- that the "observer context" above the invocation of this template establishes who is doing the quoting
- the source of the quote, by the values of the content items in this template
- who is being quoted, and who and what the quote is about, by the observation context that is established at the start of the quoted material

This template may be invoked recursively, to nest quotes within quotes. In essence, the chain of who is quoting whom can be established by maintaining a "stack" of observer context.

If a dimension of observation context is the same in the quoted material as in the enclosing tree, then the observation context does not need to be respecified (e.g. the quote may be about the same subject or procedure). Typically, the observer context would change (unless one were quoting oneself).

In the case of quoting something that was spoken, the "observer" is the person speaking.

TID 1000 is attached using HAS OBS CONTEXT relationships to the top node of the material that is being quoted. The presence of the Quoted Source concept signals the fact that the material is quoted rather than directly observed.

TID 1000
QUOTATION

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1		HAS OBS CONTEXT	CODE	EV (121001, DCM, "Quotation Mode")	1	M		EV (121003, DCM, "Document") EV (121004, DCM, "Verbal")
2		HAS OBS CONTEXT	COMPOSITE	EV(121002,DCM,"Quoted Source")	1	MC	Required if quoted material source is a DICOM composite object	
3		HAS OBS CONTEXT	INCLUDE	DTID (1001) "Observation Context"	1	M		

TID 1001 OBSERVATION CONTEXT

Specifies attributes of observation context that may be defined, extended or replaced at any location in the SR tree.

This includes attributes that specify:

- who or what the observation is about ("subject context")
- what procedure the observation is about ("procedure context")
- who or what is making the observation ("observer context")

Establishing context includes two aspects of each dimension: identification and description (e.g. patient name and ID vs. patient's age, height or weight).

Whenever one dimension of context is changed or an attribute is added, all attributes of that dimension of context are "flushed", that is they need to be repeated in their entirety. For example, when the subject is changed from patient (name, id) to fetus (number), then the parameters of the patient are discarded. E.g. the patient's ID does not apply to the fetus.

"Extending" the same class and dimension of observation context isn't feasible, since one cannot "null out" or remove a previously set attribute. Any time a dimension of observation context is "replaced", any attributes that are unspecified remain unspecified (i.e. they are not inherited).

TID 1001
OBSERVATION CONTEXT

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1		HAS OBS CONTEXT	INCLUDE	ETID (1002) "Observer Context"	1	MC	Required if all aspects of observer context are not inherited.	
2		HAS OBS CONTEXT	INCLUDE	ETID (1005) "Procedure Context"	1	MC	Required if all aspects of procedure context are not inherited.	
3		HAS OBS CONTEXT	INCLUDE	ETID (1006) "Subject Context"	1	MC	Required if all aspects of observation subject context are not inherited.	

TID 1002 OBSERVER CONTEXT

The observer (person or device) that created the Content Items to which this context applies.

Whenever this template is invoked, all previously inherited attributes of Observer Context are discarded and replaced.

There may be more than one observer, and both person and device observers.

TID 1002
OBSERVER CONTEXT

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1		HAS OBS CONTEXT	CODE	EV (121005,DCM, "Observer Type")	1-n	U		EV (121006,DCM, "Person") EV (121007,DCM, "Device") Defaults to Person
2		HAS OBS CONTEXT	INCLUDE	DTID (1003) "Person observer identifying attributes"	1-n	MC	IFF (121005,DCM, "Observer Type") = (121006,DCM, "Person")	
3		HAS OBS CONTEXT	INCLUDE	DTID (1004) "Device observer identifying attributes"	1-n	MC	IFF (121005,DCM, "Observer Type") = (121007,DCM, "Device")	

TID 1003 PERSON OBSERVER IDENTIFYING ATTRIBUTES

This template contains identifying (and optionally descriptive) attributes of persons that are observers.

TID 1003
PERSON OBSERVER IDENTIFYING ATTRIBUTES

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			PNAME	EV (121008,DCM, "Person Observer Name")	1	M		
2			TEXT	EV (121009,DCM, " Person Observer's Organization Name")	1	U		Defaults to Institution Name (0008,0080) of the General Equipment Module
3			CODE	EV (121010,DCM, " Person Observer's Role in the Organization")	1	U		BCID(7452) Organizational Roles
4			CODE	EV (121011,DCM, " Person Observer's Role in this Procedure")	1	U		BCID(7453) Performing Roles

TID 1004 DEVICE OBSERVER IDENTIFYING ATTRIBUTES

This template (derived from the DICOM General Equipment Module, Section C.7.5.1 of PS3.3) contains identifying (and optionally descriptive) attributes of devices that are observers.

TID 1004
DEVICE OBSERVER IDENTIFYING ATTRIBUTES

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			UIDREF	EV (121012,DCM, "Device Observer UID")	1	M		
2			TEXT	EV (121013,DCM, "Device Observer Name")	1	U		Defaults to value of Station Name (0008,1010) in General Equipment Module
3			TEXT	EV (121014,DCM, "Device Observer Manufacturer")	1	U		Defaults to value of Manufacturer (0008,0070) in General Equipment Module
4			TEXT	EV (121015,DCM, "Device Observer Model Name")	1	U		Defaults to value of Manufacturer's Model Name (0008,1090) in General Equipment Module

5			TEXT	EV (121016,DCM, "Device Observer Serial Number")	1	U		Defaults to value of Device Serial Number (0018,1000) in General Equipment Module
6			TEXT	EV (121017,DCM, "Device Observer Physical Location during observation")	1	U		

TID 1005 PROCEDURE CONTEXT

This template contains identifying (and optionally descriptive) attributes of the procedure that is the source of evidence being interpreted.

Whenever this template is invoked, all previously inherited attributes of Procedure Context are discarded and replaced.

Note: If an observed digital image is identified by other than a DICOM UID, a Study Instance UID must be generated for the non-DICOM evidence. The same must be done to document interpretation of hard-copy radiographs generated outside of the scope of the DICOM system.

TID 1005
PROCEDURE CONTEXT

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			UIDREF	EV (121018,DCM, "Procedure Study Instance UID")	1	U		Defaults to Study Instance UID (0020,000D) of General Study Module
2			UIDREF	EV (121019,DCM, "Procedure Study Component UID")	1-n	U		Defaults to Referenced SOP Instance UID (0008,1155) in Referenced Study Component UID (0008,1111) of General Series Module
3			TEXT	EV (121020,DCM, "Procedure HL7 Placer Number of Evidence")	1	U		Defaults to (0040,2016)
4			TEXT	EV (121021,DCM, "Procedure HL7 Filler Number of Evidence")	1	U		Defaults to (0040,2017)
5			TEXT	EV(121022,DCM,"Procedure Accession Number")	1	U		Defaults to (0008,0050)
6			CODE	EV(121023,DCM,"Procedure Code")	1	U		Defaults to Procedure Code Sequence (0008,1032) of General Study Module

TID 1006 SUBJECT CONTEXT

This template contains identifying (and optionally descriptive) attributes of the subject of the interpretation.

Subject context identifies (and optionally) describes the subject of the interpretation, whether it be a patient (human or animal), a fetus (human or animal), or a specimen.

TID 1006
SUBJECT CONTEXT

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			CODE	EV (121024, DCM, "Subject Class")	1	U		EV (121025, DCM, "Patient") EV (121026, DCM, "Fetus") EV (121027, DCM, "Specimen") Defaults to Patient
2			INCLUDE	DTID (1007) "Subject Context, Patient"	1	UC	IFF (121024, DCM, "Subject Class") = (121025,DCM, "Patient")	May be used for human or animal patients
3			INCLUDE	DTID (1008) "Subject Context, Fetus"	1	UC	IFF (121024, DCM, "Subject Class") = (121026,DCM, "Fetus")	May be used for human or animal fetuses
4			INCLUDE	DTID (1009) "Subject Context, Specimen"	1	UC	IFF (121024, DCM, "Subject Class") = (121026, DCM, "Specimen")	

TID 1007 SUBJECT CONTEXT, PATIENT

Identifies (and optionally describes) a patient who is the subject.

TID 1007
SUBJECT CONTEXT, PATIENT

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			UIDREF	EV (121028,DCM, "Subject UID")	1	U		E.g. SOP Instance UID of Detached Patient Instance
2			PNAME	EV (121029,DCM, "Subject Name")	1	MC	Required if not inherited.	Defaults to value of Patient's Name (0010,0010) in Patient Module
3			CODE	EV (121030,DCM, "Subject ID")	1	MC	Required if not inherited.	Defaults to value of Patient ID (0010,0020) in Patient Module
4			DATE	EV (121031,DCM, "Subject Birth Date")	1	U		Defaults to value of Patient's Birth Date (0010,0030) in Patient Module
5			CODE	EV (121032,DCM, "Subject Sex")	1	U		Defaults to value of Patient's Sex (0010,0040) in Patient Module ECID 7455
6			NUM	EV (121033,DCM, "Subject Age")	1	U		Defaults to value ofPatient's Age (0010,1010) in Patient Study Module Units ECID 7456
7			CODE	EV (121034,DCM, "Subject Species")	1	MC	Required if not inherited.	DCID 7454 to define various animals or plants, e.g. veterinary or research. Defaults to (L-85B00,SNM3,"homo sapiens").

TID 1008 SUBJECT CONTEXT, FETUS

Identifies (and optionally describes) a fetus who is the subject.

TID 1008
SUBJECT CONTEXT, FETUS

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			PNAME	EV (121036,DCM, "Mother of fetus")	1	U		Defaults to an observation subject that is a patient prior to replacing the Observation Subject Class with Fetus.
2			UIDREF	EV (121028,DCM, "Subject UID")	1	U		For longitudinal tracking of individual fetuses
3			TEXT	EV (121030,DCM, "Subject ID")	1	U		For longitudinal tracking of individual fetuses (human readable value e.g. "A" or "1")
4			NUM	EV (121037,DCM, "Fetus Number")	1	M		For separation of multiplte fetuses during this procedure e.g. fetus '1" of '2" ... not for longitudinal comparisons.; ie. the "m" of fetus "m" of "n" Units EV (1,UCUM,"1")
5			NUM	EV (121038,DCM, "Number of Fetuses")	1	M		i.e. the "n" of fetus "m" of "n" Units EV (1,UCUM,"1")

TID 1009 SUBJECT CONTEXT, SPECIMEN

Identifies (and optionally describes) a specimen that is the subject.

TID 1009
SUBJECT CONTEXT, SPECIMEN

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			UIDREF	EV (121039,DCM, "Specimen UID")	1	U		
2			TEXT	EV (121040,DCM, "Specimen Accession Number")	1	U		Defaults to value of Specimen Accession Number (0040,050A) in Specimen Identification Module
3			INCLUDE	DTID (1007) "patient subject context"	1	UC	IFF the source of the specimen is a human or animal patient	
4			TEXT	EV (121041,DCM, "Specimen Identifier")	1	U		Defaults to value of Specimen Identifier (0040,0551) if a single item of Specimen Sequence (0040,0550) is present in Specimen Identification Module
5			CODE	EV (121042,DCM, "Specimen Type")	1	U		Defaults to value of Specimen Type Code Sequence (0040,059A) if a single item of Specimen Sequence (0040,0550) is present in Specimen Identification Module
6			TEXT	EV (121043,DCM, "Slide Identifier")	1	U		Defaults to value of Slide Identifier (0040,06FA) if a single item of Specimen Sequence (0040,0550) is present in Specimen Identification Module
7			UIDREF	EV (121044,DCM, "Slide UID")	1	U		

TID 1200 LANGUAGE DESIGNATION

Defines a mechanism for specifying a language, optionally with designation of the country in which that language applies.

Note: For example, the French language could be specified unmodified, or French as written in France or Canada could be distinguished.

TID 1200
LANGUAGE DESIGNATION

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			CODE	(121045,DCM,"Language")	1	M		DCID(5000)
2	>	HAS CONCEPT MOD	CODE	(121046,DCM,"Country of Language")	1	U		DCID(5001)

TID 1201 LANGUAGE OF VALUE

Defines a mechanism for specifying the language in which the value of the parent content item (only) is written. Does not specify the language of the Concept Name of the parent content item, nor of any other descendants of the parent content item.

TID 1201
LANGUAGE OF VALUE

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1		HAS CONCEPT MOD	CODE	(121047,DCM,"Language of Value")	1	M		DCID(5000)
2	>	HAS CONCEPT MOD	CODE	(121046,DCM,"Country of Language")	1	U		DCID(5001)

TID 1202 LANGUAGE OF NAME AND VALUE

Defines a mechanism for specifying the language in which the value and the Concept Name of the parent content item (only) is written. Does not specify the language of any other descendants of the parent content item.

TID 1203
LANGUAGE OF NAME AND VALUE

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1		HAS CONCEPT MOD	CODE	(121048,DCM,"Language of Name and Value")	1	M		DCID(5000)
2	>	HAS CONCEPT MOD	CODE	(121046,DCM,"Country of Language")	1	U		DCID(5001)

TID 1204 LANGUAGE OF CONTENT ITEM AND DESCENDANTS

Defines a mechanism for specifying the language in which the value and the Concept Name of the parent content item and any other descendants of the parent content item is written.

TID 1204
LANGUAGE OF CONTENT ITEM AND DESCENDANTS

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1		HAS CONCEPT MOD	CODE	(121049,DCM,"Language of Content Item and Descendants")	1	M		DCID(5000)
2	>	HAS CONCEPT MOD	CODE	(121046,DCM,"Country of Language")	1	U		DCID(5001)

TID 1210 EQUIVALENT MEANING(S) OF CONCEPT NAME

Defines a mechanism for specifying one or more equivalent meanings for the Concept Name of the parent content item.

TID 1210
EQUIVALENT MEANING(S) OF CONCEPT NAME

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1		HAS CONCEPT MOD	TEXT	(121050,DCM,"Equivalent Meaning of Concept Name")	1-n	MC	XOR Row 3	Plain text equivalent of code meaning of the concept name of the content item being modified, in the specified language from the specified country, using the default character set or a character set selected from Specified Character Set
2	>		INCLUDE	ETID(1201) Language of Value	1	U		
3		HAS CONCEPT MOD	CODE	(121050,DCM,"Equivalent Meaning of Concept Name")	1-n	MC	XOR Row 1	
4	>		INCLUDE	ETID(1201) Language of Value	1	U		

TID 1211 EQUIVALENT MEANING(S) OF VALUE

Defines a mechanism for specifying one or more equivalent meanings for the Value of the parent content item.

TID 1211
EQUIVALENT MEANING(S) OF VALUE

NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint

1		HAS CONCEPT MOD	TEXT	(121051,DCM,"Equivalent Meaning of Value")	1-n	MC	XOR Row 3	Plain text equivalent of code meaning of the value of the content item being modified, in the specified language from the specified country, using the default character set or a character set selected from Specified Character Set
2	>		INCLUDE	ETID(1201) Language of Value	1	U		
3		HAS CONCEPT MOD	CODE	(121051,DCM,"Equivalent Meaning of Value")	1-n	MC	XOR Row 1	
4	>		INCLUDE	ETID(1201) Language of Value	1	U		

Notes. 1. For example, to describe a longer, more meaningful equivalent (in the same language) for a procedure code than is defined in a coding scheme:

CODE:(121023,DCM,"Procedure Code")=
(50291CC,ICD10PCS,"IMAGING:CNS:CT:SELLA:LOWOSMOLAR:IT,U,E:2PLANE3D")

> Has Concept ModTEXT:(121051,DCM,"Equivalent meaning of value")="imaging study central nervous system of the sella turcica/pituitary gland with low osmolar contrast intrathecal, unenhanced and enhanced, in two planes with 3D reconstructions"

2. For example, to specify a concept name and value in both French and English in Canada:

CODE:(cv,csd,"Anatomy")=(T-04000,SNM3,"Breast")

> Has Concept ModCODE:(121048,DCM,"Language of name and value")=(eng,ISO639_2,"English")

>> Has Concept ModCODE:(121046,DCM,"Country of language")=(CA,ISO3166_1,"Canada")

> Has Concept ModCODE: (121050,DCM,"Equivalent meaning of concept name")=(cv,csd,"Anatomie")

>> Has Concept ModCODE: (121047,DCM,"Langue de la valeur")=(fra,ISO639_2,"Français")

>>> Has Concept ModCODE: (121046,DCM,"Pays de la langue")=(CA,ISO3166_1,"Canada")

> Has Concept ModCODE: (121051,DCM,"Equivalent meaning of value")=(T-04000,SNM3,"Sein")

>> Has Concept ModCODE: (121047,DCM,"Langue de la valeur")=(fra,ISO639_2,"Français")

>>> Has Concept ModCODE: (121046,DCM,"Pays de la langue")=(CA,ISO3166_1,"Canada")

TID 1350 NEGATION MODIFIER, PRESENCE OF FINDING

Concept Name Modifier for negation of the presence of a finding represented by a post-coordinated concept.

Notes. 1. For example, negation modifier applied to "sclera" in the post-coordinated structure:

CODE: anatomic location = "bile duct"

> HAS PROPERTY -- CODE: morphology = "distention"

>> HAS CONCEPT MOD -- CODE – "presence of property" = "absent"

means: "bile duct distention not present"

2. The presence-negation modifier modifies the entire post-coordinated concept, not just the source content item of the HAS CONCEPT MOD relationship. The entire branch of the tree from the content item is included in the post-coordinated structure that is negated.

TID 1350
NEGATION MODIFIER, PRESENCE OF FINDING

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1		HAS CONCEPT MOD	CODE	EV(121052,DCM,"Presence of property")	1	M		EV (121053,DCM, "Present") or EV (121054,DCM, "Absent")

TID 1400 LINEAR MEASUREMENT TEMPLATE

TID 1400
LINEAR MEASUREMENT

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			NUM	DCID (7470) "Linear Measurements"	1	M		UNITS = DCID(7460) "Units of Linear Measurement"
2	>	INFERRED FROM	SCOORD	(121055,DCM, "Path")	1	M		
3	>>	R-SELECTED FROM	IMAGE		1	MC	XOR Row 4	
4	>>	SELECTED FROM	IMAGE		1	MC	XOR Row 3	

Content Item Descriptions

Path — Path can be:

- an open POLYLINE with two different points (to measure length, diameter, distance, proximity, etc),
- a CIRCLE or ELLIPSE (to measure circumference) or
- an open or closed POLYLINE (closed polygon) to measure path length (open) or perimeter (closed).

TID 1401 AREA MEASUREMENT TEMPLATE

TID 1401
AREA MEASUREMENT

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			NUM	DCID(CID 7471) "Area Measurements"	1	M		Value shall be > 0 UNITS = DCID(7461) "Units of Area Measurement"
2	>	INFERRED FROM	SCOORD	(121056,DCM, "Area Outline")	1	MC	Shall be present if concept name of Row 1 is (121202,DCM, "Area of Defined Region"). May be present otherwise.	Graphic data type shall not be MULTIPOINT
3	>>	R-SELECTED FROM	IMAGE		1	MC	XOR Row 4	
4	>>	SELECTED FROM	IMAGE		1	MC	XOR Row 3	

Content Item Descriptions

Area Outline — A Graphic Data Type of POINT implies that the object is a single pixel and the object's area is the area of the pixel. Otherwise the type shall be a closed POLYLINE (start and end point the same) or a CIRCLE or an ELLIPSE.

TID 1402 VOLUME MEASUREMENT TEMPLATE

TID 1402
VOLUME MEASUREMENT

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			NUM	DCID(CID 7472) "Volume Measurements"	1	M		Value shall be > 0 UNITS = DCID(7462) "Units of Volume Measurement"
2	>	INFERRED FROM	SCOORD	(121057,DCM, "Perimeter Outline")	1-n	U		Graphic data type shall not be MULTIPOINT
3	>>	R-SELECTED FROM	IMAGE		1	MC	XOR Row 4	
4	>>	SELECTED FROM	IMAGE		1	MC	XOR Row 3	

Content Item Descriptions

Perimeter Outline — The two dimensional perimeter of the volume's projection into the image. A Graphic Data Type of POINT implies that the volume's projection in a plane is a single pixel. A single pixel projection perimeter cannot cause a volume calculation to become 0.

Otherwise the type shall be a closed POLYLINE (start and end point the same) or a CIRCLE or an ELLIPSE.

TID 2000 BASIC DIAGNOSTIC IMAGING REPORT

Basic report template for general diagnostic imaging interpretation reports.

Can only be instantiated at the root node and cannot be included in other templates.

Is not extensible. That is, no other content items may be added to this template, or the templates that are included, recursively.

TID 2000
BASIC DIAGNOSTIC IMAGING REPORT

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			CONTAINER	BCID(7000) Diagnostic Imaging Report Document Titles	1	M		Root node
2	>	HAS CONCEPT MOD	CODE	EV (121058,DCM,"Procedure reported")	1-n	U		
3	>	HAS CONCEPT MOD	INCLUDE	ETID(1204) Language of Content Item and Descendants	1	M		
4	>	HAS CONCEPT MOD	INCLUDE	ETID (1210) Equivalent Meaning of Concept Name	1-n	U		
5	>	HAS OBS CONTEXT	INCLUDE	ETID(1001) Observation Context	1	M		
6	>	CONTAINS	CONTAINER	BCID(7001) Diagnostic Imaging Report Headings	1-n	U		
7	>>	HAS OBS CONTEXT	INCLUDE	ETID(1001) Observation Context	1	U		
8	>>	CONTAINS	CODE	BCID(7002) Diagnostic Imaging Report Elements	1-n	U		
9	>>>	INFERRED FROM	INCLUDE	ETID(2001)Basic Diagnostic Imaging Report Observations	1-n	U		
10	>>	CONTAINS	TEXT	BCID(7002) Diagnostic Imaging Report Elements	1-n	U		
11	>>>	INFERRED FROM	INCLUDE	ETID(2001)Basic Diagnostic Imaging Report Observations	1-n	U		
12	>>	CONTAINS	INCLUDE	ETID(2001)Basic Diagnostic Imaging Report Observations	1-n	U		

No content items other than those defined in Observation Context TID 1001 may be the target of a HAS OBS CONTEXT relationship when TID 2000 is invoked.

TID 2001 BASIC DIAGNOSTIC IMAGING REPORT OBSERVATIONS

Individual numeric or image observations that may be useful for inclusion as individual findings or as the source of inferences in a report.

TID 2001
BASIC DIAGNOSTIC IMAGING REPORT OBSERVATIONS

	NL	Rel with Parent	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1			IMAGE	BCID(7003) Diagnostic Imaging Report Purposes of Reference	1	MC	XOR Rows 2,3,4	

2			INCLUDE	TID(1400) Linear Measurements	1	MC	XOR Rows 1,3,4. Shall not be present if the NUM value type is not supported by the IOD.	
3			INCLUDE	TID(1401) Area Measurements	1	MC	XOR Rows 1,2,4. Shall not be present if the NUM value type is not supported by the IOD.	
4			INCLUDE	TID(1402) Volume Measurements	1	MC	XOR Rows 1,2,3. Shall not be present if the NUM value type is not supported by the IOD.	

Annex B DCMR Context Groups (Normative)

This Annex specifies the content of Context Groups required by DICOM IODs.

Note: Section 2.1 of this Part defines the fields of Context Group tables.

Context ID 2
Anatomic Modifier
(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	G-A100	Right
SNM3	G-A100	Right lateral
SNM3	G-A101	Left
SNM3	G-A101	Left lateral
SNM3	G-A102	Right and left
SNM3	G-A102	Bilateral
SNM3	G-A103	Unilateral
SNM3	G-A103	One-sided
SNM3	G-A104	Lateral
SNM3	G-A105	Anterior
SNM3	G-A105	Ventral
SNM3	G-A106	Posterior
SNM3	G-A106	Dorsal
SNM3	G-A107	Cephalic
SNM3	G-A107	Cephalad
SNM3	G-A107	Rostral
SNM3	G-A108	Caudal
SNM3	G-A108	Caudad
SNM3	G-A109	Medial
SNM3	G-A109	Median
SNM3	G-A109	Middle
SNM3	G-A110	Central
SNM3	G-A111	Peripheral
SNM3	G-A112	External
SNM3	G-A112	Outer
SNM3	G-A113	Internal
SNM3	G-A113	Inner
SNM3	G-A114	Intermediate
SNM3	G-A115	Inferior
SNM3	G-A116	Superior

SNM3	G-A116	Upper
SNM3	G-A117	Transverse
SNM3	G-A118	Proximal
SNM3	G-A119	Distal
SNM3	G-A120	Postaxial
SNM3	G-A121	Preaxial
SNM3	G-A122	Apical
SNM3	G-A123	Basal
SNM3	G-A127	Afferent
SNM3	G-A128	Efferent
SNM3	G-A138	Coronal
SNM3	G-A138	Frontal
SNM3	G-A139	Superficial
SNM3	G-A140	Deep
SNM3	G-A140	Profundis
SNM3	G-A142	Horizontal
SNM3	G-A143	Longitudinal
SNM3	G-A144	Vertical
SNM3	G-A145	Sagittal
SNM3	G-A147	Axial
SNM3	G-A151	Extra-articular
SNM3	G-A168	Surface
SNM3	G-A169	Gutter
SNM3	G-A170	Hilar
SNM3	G-A170	Hilus
SNM3	G-A171	Capsular
SNM3	G-A172	Subcapsular
SNM3	G-A174	Along edge
SNM3	G-A174	Edge
SNM3	G-A180	Anterolateral
SNM3	G-A182	Posterolateral
SNM3	G-A15A	Intra-articular
SNM3	G-A428	Marginal

Context ID 4

Anatomic Region

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	T-04000	Breast, NOS
SNM3	T-04002	Upper inner quadrant of breast, NOS
SNM3	T-04003	Lower inner quadrant of breast, NOS
SNM3	T-04004	Upper outer quadrant of breast, NOS
SNM3	T-04005	Lower outer quadrant of breast, NOS
SNM3	T-11218	Suprasternal notch
SNM3	T-15200	Fontanel of skull, NOS
SNM3	T-15460	Joint of wrist, NOS
SNM3	T-15460	Wrist joint, NOS
SNM3	T-15750	Ankle joint, NOS
SNM3	T-21000	Nose, NOS
SNM3	T-23000	Nasopharynx, NOS
SNM3	T-24100	Larynx, NOS
SNM3	T-25000	Trachea, NOS
SNM3	T-26000	Bronchus, NOS
SNM3	T-28000	Lung, NOS
SNM3	T-32000	Heart, NOS
SNM3	T-32100	Atrium, NOS
SNM3	T-32400	Ventricle, NOS
SNM3	T-51000	Mouth, NOS
SNM3	T-53000	Tongue, NOS
SNM3	T-55000	Pharynx, NOS
SNM3	T-55300	Hypopharynx, NOS
SNM3	T-56000	Esophagus, NOS
SNM3	T-57000	Stomach, NOS
SNM3	T-58200	Duodenum, NOS
SNM3	T-58400	Jejunum, NOS
SNM3	T-58600	Ileum, NOS
SNM3	T-59300	Colon, NOS
SNM3	T-59600	Rectum, NOS
SNM3	T-60610	Bile duct, NOS
SNM3	T-62000	Liver, NOS
SNM3	T-63000	Gallbladder, NOS
SNM3	T-65000	Pancreas, NOS
SNM3	T-65010	Pancreatic duct, NOS
SNM3	T-71000	Kidney, NOS
SNM3	T-72000	Renal pelvis, NOS

SNM3	T-72100	Calyx, NOS
SNM3	T-73000	Ureter, NOS
SNM3	T-74000	Bladder, NOS
SNM3	T-75000	Urethra, NOS
SNM3	T-81000	Vulva, NOS
SNM3	T-82000	Vagina, NOS
SNM3	T-83000	Uterus, NOS
SNM3	T-87000	Ovary, NOS
SNM3	T-91000	Penis, NOS
SNM3	T-94000	Testis, NOS
SNM3	T-98000	Scrotum, NOS
SNM3	T-A0100	Brain, NOS
SNM3	T-A7010	Spinal cord, NOS
SNM3	T-AA110	Sclera, NOS
SNM3	T-AA200	Cornea, NOS
SNM3	T-AA810	Eyelid, NOS
SNM3	T-AB000	Ear, NOS
SNM3	T-AB200	External auditory canal, NOS
SNM3	T-B3000	Adrenal gland, NOS
SNM3	T-B6000	Thyroid, NOS
SNM3	T-B7000	Parathyroid, NOS
SNM3	T-C3000	Spleen, NOS
SNM3	T-D1100	Head, NOS
SNM3	T-D1160	Scalp, NOS
SNM3	T-D1200	Face, NOS
SNM3	T-D1206	Buccal region of face
SNM3	T-D1206	Cheek, NOS
SNM3	T-D1212	Hypoglossal
SNM3	T-D1600	Neck, NOS
SNM3	T-D1603	Submandibular area
SNM3	T-D1620	Supraclavicular region of neck
SNM3	T-D2100	Back, NOS
SNM3	T-D2220	Shoulder, NOS
SNM3	T-D2310	Flank, NOS
SNM3	T-D2500	Hip, NOS
SNM3	T-D2600	Buttock, NOS
SNM3	T-D2600	Gluteal region
SNM3	T-D2700	Perineum, NOS
SNM3	T-D3000	Thorax, NOS
SNM3	T-D3300	Mediastinum, NOS
SNM3	T-D4000	Abdomen, NOS
SNM3	T-D4110	Right upper quadrant of abdomen

SNM3	T-D4120	Right lower quadrant of abdomen
SNM3	T-D4130	Left upper quadrant of abdomen
SNM3	T-D4140	Left lower quadrant of abdomen
SNM3	T-D4200	Epigastric region
SNM3	T-D4240	Hypogastric region
SNM3	T-D4240	Suprapubic region
SNM3	T-D4450	Omental bursa
SNM3	T-D4450	Lesser peritoneal sac
SNM3	T-D4600	Omentum, NOS
SNM3	T-D4900	Retroperitoneum, NOS
SNM3	T-D6000	Pelvis, NOS
SNM3	T-D6500	Broad ligament, NOS
SNM3	T-D8100	Axilla, NOS
SNM3	T-D8200	Arm, NOS
SNM3	T-D8300	Elbow, NOS
SNM3	T-D8700	Hand, NOS
SNM3	T-D9100	Thigh, NOS
SNM3	T-D9200	Knee, NOS
SNM3	T-D9310	Popliteal fossa
SNM3	T-D9400	Leg, NOS
SNM3	T-D9700	Foot, NOS
SNM3	A-04140	Vascular graft
SNM3	G-A15A	Intra-articular
SNM3	T-21300	Endo-nasal
SNM3	T-23050	Endo-nasopharyngeal
SNM3	T-32000	Endo-cardiac
SNM3	T-32000	Intra-cardiac
SNM3	T-40000	Endo-vascular
SNM3	T-41000	Endo-arterial
SNM3	T-41000	Intra-arterial
SNM3	T-48000	Endo-venous
SNM3	T-56000	Endo-esophageal
SNM3	T-56000	Intra-esophageal
SNM3	T-59600	Endo-rectal
SNM3	T-71000	Endo-renal
SNM3	T-73000	Endo-ureteric
SNM3	T-74250	Endo-vesical
SNM3	T-75000	Endo-urethral
SNM3	T-82000	Endo-vaginal
SNM3	T-D14000	Intracranial
SNM3	T-D3000	Intra-thoracic
SNM3	T-D3136	Parasternal

SNM3	T-D3213	Subxiphoid
SNM3	T-D4010	Intra-abdominal
SNM3	T-D4210	Subcostal
SNM3	T-D6221	Intra-pelvic
SNM3	T-D4212	Right hypochondriac region
SNM3	T-D4211	Left hypochondriac region
SNM3	T-D2300	Lumbar region
SNM3	T-D2342	Right lumbar region
SNM3	T-D2340	Left lumbar region
SNM3	T-D7000	Inguinal region
SNM3	T-D7010	Right inguinal region
SNM3	T-D7020	Left inguinal region
SNM3	T-D4230	Umbilical region

Context ID 5

Transducer Approach

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	G-A100	Right
SNM3	G-A101	Left
SNM3	G-A104	Lateral
SNM3	G-A105	Anterior
SNM3	G-A105	Ventral
SNM3	G-A106	Posterior
SNM3	G-A106	Dorsal
SNM3	G-A108	Caudal
SNM3	G-A109	Medial
SNM3	G-A110	Central
SNM3	G-A111	Peripheral
SNM3	G-A112	External
SNM3	G-A113	Internal
SNM3	G-A115	Inferior
SNM3	G-A115	Lower
SNM3	G-A116	Superior
SNM3	G-A116	Upper
SNM3	G-A117	Transverse
SNM3	G-A118	Proximal
SNM3	G-A119	Distal
SNM3	G-A122	Apical
SNM3	G-A168	Surface

SNM3	G-A599	Ascending
SNM3	G-A600	Descending
SNM3	T-03000	Subcutaneous tissue, NOS
SNM3	T-A1120	Dura mater
SNM3	T-A1280	Pia mater
SNM3	A-2C600	External prosthesis for sonographic procedure [Stand-off]
SNM3	A-2C602	Water bag prosthesis for imaging procedure
SNM3	A-2C604	Saline bag prosthesis for imaging procedure
SNM3	A-2C606	Gel prosthesis for imaging procedure
SNM3	G-A10A	Cranial
SNM3	G-A10A	Midline
SNM3	G-A11A	Mid-longitudinal
SNM3	G-A11B	Parasagittal
SNM3	G-A12A	Intraluminal
SNM3	G-A16A	Capsule
SNM3	G-A16B	Lumen
SNM3	G-A16C	Direct contact
SNM3	G-A16C	Contact
SNM3	G-A16D	Parenchyma

Context ID 6

Transducer Orientation

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	G-A138	Coronal
SNM3	G-A143	Longitudinal
SNM3	G-A145	Sagittal
SNM3	G-A11B	Parasagittal
SNM3	G-A472	Oblique
SNM3	G-A185	Long axis
SNM3	G-A13B	Off axis
SNM3	G-A186	Short axis
SNM3	G-A191	Five chamber
SNM3	G-A19B	Two chamber
SNM3	G-A19C	Four chamber
SNM3	R-11300	Transverse

Context ID 7

Ultrasound Beam Path

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	G-A1A9	Trans-hepatic
SNM3	G-A1B2	Trans-gastric
SNM3	G-A1A5	Trans-pleural
SNM3	G-A1B3	Trans-mural
SNM3	G-A1A8	Trans-orbital
SNM3	G-A1A6	Trans-pancreatic
SNM3	G-A1A4	Trans-renal
SNM3	G-D032	Trans-temporal
SNM3	G-A1A2	Trans-thecal
SNM3	G-A1A1	Trans-vesical
SNM3	G-A1A3	Trans-splenic
SNM3	G-D033	Trans-esophageal
SNM3	G-D001	Trans-abdominal
SNM3	G-D002	Trans-vaginal (endovaginal)

Context ID 8

Angiographic Interventional Devices

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	A-25500	Stent, NOS
SNM3	A-26800	Catheter, NOS
SNM3	A-81080	Laser
SNM3	C-20005	Glue
SNM3	A-25600	Atherectomy device
SNM3	A-25614	Embolization ball
SNM3	A-26912	Percutaneous transluminal angioplasty balloon
SNM3	A-25612	Embolization coil
SNM3	A-25612	Gianturco coil
SNM3	A-27322	Detachable balloon
SNM3	A-26A06	Fixed object
SNM3	A-26A08	Grid
SNM3	A-26802	Guiding catheter
SNM3	A-25616	Embolization particulate
SNM3	A-25610	Rotational atherectomy device

SNM3	A-10141	Measuring ruler

Context ID 9

Image Guided Therapeutic Procedures

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	F-39780	Vasoconstriction, NOS
SNM3	F-39800	Vasodilatation
SNM3	P1-03100	Biopsy, NOS
SNM3	P1-03176	Removal of foreign body, NOS
SNM3	P1-05035	Intra-arterial infusion of thrombolytic agent
SNM3	P1-05052	Irrigation following insertion of catheter
SNM3	P1-05535	Catheterization
SNM3	P1-05535	Insertion of catheter
SNM3	P1-30350	Atherectomy, NOS
SNM3	P1-30350	Removal of atherosclerotic plaque from artery, NOS
SNM3	P1-30351	Atherectomy by rotary cutter
SNM3	P1-30352	Atherectomy by laser
SNM3	P1-30530	Selective embolization of artery
SNM3	P5-31500	Percutaneous transluminal balloon angioplasty, NOS
SNM3	P5-39010	Transcatheter therapy for embolization, NOS
SNM3	P5-39050	Percutaneous retrieval of intravascular foreign body, NOS
SNM3	P1-00018	Failed attempted procedure
SNM3	P1-05550	Stent placement
SNM3	P1-05536	Catheter manipulation
SNM3	P1-05537	Catheter replacement
SNM3	P1-05538	Occlusion of catheter
SNM3	P1-05539	Removal of catheter
SNM3	P5-39015	Transcatheter deployment of detachable balloon
SNM3	P5-39191	Percutaneous insertion of intravascular filter
SNM3	P1-86100	Amniocentesis
SNM3	P5-B8310	Ultrasonic guidance for amniocentesis
SNM3	P1-86520	Amnioinfusion [injection of amnion]
SNM3	P1-86180	Intrauterine cordocentesis
SNM3	P1-28160	Thoracentesis
SNM3	P1-86E70	Breech Version [Obstetrical Version]

SRT1.1	P1-86101	Decompression amniocentesis [decompression of amnion]
SNM3	P2-68060	Intrauterine transfusion
SRT1.1	P1-86C50	Fetocide (selective reduction)
SRT1.1	P1-93506	Prostaglandin injection

Context ID 10

Interventional Drug

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	C-21005	Ethyl alcohol
SNM3	C-21005	Ethanol
SNM3	C-22947	Methylene blue
SNM3	C-51000	Antihistamine, NOS
SNM3	C-67770	Atropine
SNM3	C-72000	Diuretic, NOS
SNM3	C-80110	Antiarrhythmic drug, NOS
SNM3	C-80120	Inotropic agent, NOS
SNM3	C-80123	Cardiotonic drug, NOS
SNM3	C-80125	Cardiac depressant drug, NOS
SNM3	C-80130	Cardiac adrenergic blocking agent, NOS
SNM3	C-80131	Alpha-adrenergic blocking agent, NOS
SNM3	C-80135	beta-Adrenergic blocking agent, NOS
SNM3	C-80330	Digoxin
SNM3	C-80400	Lidocaine
SNM3	C-80401	Lidocaine hydrochloride
SNM3	C-80430	Nifedipine
SNM3	C-80450	Propranolol
SNM3	C-80460	Quinidine
SNM3	C-80490	Verapamil
SNM3	C-81100	Hypotensive agent, NOS
SNM3	C-81100	Antihypertensive agent, NOS
SNM3	C-81100	Antihypertensive drug, NOS
SNM3	C-81120	Centrally acting hypotensive agent, NOS
SNM3	C-81560	Nitroglycerin
SNM3	C-A2010	Glucagon preparation
SNM3	C-A6500	Anticoagulant, NOS
SNM3	C-A6530	Warfarin
SNM3	C-A6540	Heparin
SNM3	C-A6700	Anti-heparin agent, NOS

SNM3	C-A6710	Protamine sulfate
SNM3	C-A6900	Coagulant, NOS
SNM3	C-A6920	Injectable fibrinogen
SNM3	C-A7000	Hemostatic agent, NOS
SNM3	C-A7001	Astringent drug, NOS
SNM3	C-A7021	Antihemophilic factor preparation
SNM3	C-A7040	Thrombin preparation
SNM3	C-A7042	Thromboplastin preparation
SNM3	C-A7220	Dextran
SNM3	C-A7400	Thrombolytic agent, NOS
SNM3	C-A7400	Fibrinolytic agent, NOS
SNM3	C-A7420	Streptokinase preparation
SNM3	C-A7430	Urokinase preparation
SNM3	C-A7440	Injectable fibrinolysin
SNM3	C-A7440	Injectable plasmin
SNM3	C-C2318	Priscoline hydrocholoride ampuls
SNM3	F-B2110	Epinephrine

Context ID 11

Route of Administration

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	G-D101	Intravenous route
SNM3	G-D102	Intra-arterial route
SNM3	G-D103	Intramuscular route
SNM3	G-D104	Subcutaneous route
SNM3	G-D105	Intracutaneous route
SNM3	G-D105	Intradermal route
SNM3	G-D106	Intraperitoneal route
SNM3	G-D107	Intramedullary route
SNM3	G-D108	Intrathecal route
SNM3	G-D109	Intra-articular route
SNM3	G-D111	Intraepithelial route
SNM3	G-D112	Topical route
SNM3	G-D140	Oral route
SNM3	G-D140	Peroral route
SNM3	G-D142	Transluminal route
SNM3	G-D144	Intraluminal route
SNM3	G-D146	Extraluminal route
SNM3	G-D150	By inhalation

SNM3	G-D160	Per rectum
SNM3	G-D164	Per vagina
SNM3	G-D164	Vaginal route

Context ID 12

Radiographic Contrast Agent

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	A-80230	Air, NOS
SNM3	C-10110	Oxygen, NOS
SNM3	C-10120	Water
SNM3	C-10520	Carbon dioxide, NOS
SNM3	C-10520	Carbon dioxide gas
SNM3	C-12217	Barium Sulfate
SNM3	C-17800	Gadolinium, NOS
SNM3	C-B0300	Radiographic contrast agent, NOS
SNM3	C-B0300	Contrast agent, NOS
SNM3	C-B0310	Radiopaque medium, NOS
SNM3	C-B0312	Non radiopaque medium, NOS
SNM3	C-B0315	Bunamiodyl
SNM3	C-B0316	Chloriodized oil
SNM3	C-B0317	Diatrizoate
SNM3	C-B0318	Iodipamide
SNM3	C-B0319	Iodized oil
SNM3	C-B0323	Iodoalphionic acid
SNM3	C-B0324	Meglumine iodipamide
SNM3	C-B0325	Sodium iodipamide
SNM3	C-B0326	Iodamide meglumine
SNM3	C-B0327	Iodopyracet
SNM3	C-B0328	Iopanoic acid
SNM3	C-B0331	Iophendylate
SNM3	C-B0333	Iophenoxic acid
SNM3	C-B0335	Ipodate
SNM3	C-B0337	Propyliodone
SNM3	C-B0338	Sodium acetrizoate
SNM3	C-B0341	Iodophthalein
SNM3	C-B0342	Sodium diprotrizoate
SNM3	C-B0344	Sodium iodomethamate
SNM3	C-B0345	Meglumine diatrizoate
SNM3	C-B0347	Sodium diatrizoate

SNM3	C-B0348	Metrizamide
SNM3	C-B0349	Sodium tyropanate
SNM3	C-B0301	Ionic iodinated contrast agent
SNM3	C-B0302	Non-ionic iodinated contrast agent

Context ID 18

Isotopes in Radiopharmaceuticals

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	C-111A1	^18^Fluorine
SNM3	C-114A4	^123^Iodine
SNM3	C-114A6	^125^Iodine
SNM3	C-114B1	^131^Iodine
SNM3	C-122A5	^133^Barium
SNM3	C-131A2	^67^Gallium
SNM3	C-138A9	^201^Thallium
SNM3	C-144A3	^57^Cobalt
SNM3	C-145A4	^111^Indium
SNM3	C-163A8	^99m^Technetium
SNM3	C-172A8	^133^Xenon
SNM3	C-173A7	^85^Krypton
SNM3	C-178A8	^153^Gadolinium

Context ID 19

Patient Orientation

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	F-10440	erect
SNM3	F-10450	recumbent
SNM3	F-10460	semi-erect

Context ID 20

Patient Orientation Modifier

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	F-10310	prone

SNM3	F-10316	semi-prone
SNM3	F-10318	lateral decubitus
SNM3	F-10320	standing
SNM3	F-10326	anatomical
SNM3	F-10330	kneeling
SNM3	F-10336	knee-chest
SNM3	F-10340	supine
SNM3	F-10346	lithotomy
SNM3	F-10348	Trendelenburg
SNM3	F-10349	inverse Trendelenburg
SNM3	F-10380	frog
SNM3	F-10390	stooped-over
SNM3	F-103A0	sitting
SNM3	F-10410	curled-up
SNM3	F-10317	right lateral decubitus
SNM3	F-10319	left lateral decubitus

Context ID 21

Patient Gantry Relationship

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	R-10516	oblique
SNM3	F-10470	headfirst
99SDM	G-5190	headfirst
SNM3	F-10480	feet-first
99SDM	G-5191	feet-first
SNM3	R-10515	transverse

Note: The NM IOD uses the G-5190 and G-5191 codes which are retired (and are not actually in SNOMED).

Context ID 23

Cranio-caudad Angulation

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	G-A107	Cephalic
SNM3	G-A107	Cephalad
SNM3	G-A107	Rostral

SNM3	G-A107	Caudal-craniad
SNM3	G-A107	Caudal-cranial
SNM3	G-A107	Caudo-craniad
SNM3	G-A107	Caudo-cranial
SNM3	G-A108	Caudal
SNM3	G-A108	Caudad
SNM3	G-A108	Cranial-caudad
SNM3	G-A108	Cranial-caudal
SNM3	G-A108	Cranio-caudad
SNM3	G-A108	Cranio-caudal
SNM3	G-A107	Craniad

Context ID 25

Radiopharmaceuticals

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	C-B1302	Carbon^14^ D-xylose
SNM3	C-B1300	Carbon^14^ triolein
SNM3	C-B1304	Cholyl-carbon^14^ glycine
SNM3	C-B1140	Chromic phosphate P^32^
SNM3	C-B1012	Chromium^51^ albumin
SNM3	C-B1013	Chromium^51^ chloride
SNM3	C-B1051	Colloidal gold Au^198^
SNM3	C-B1063	Colloidal Indium^111^
SNM3	C-B1017	Copper^64^ acetate
SNM3	C-B1016	Copper^64^ versenate
SNM3	C-B1018	Copper^67^ ceruloplasmin
SNM3	C-B1021	Cyanocobalamin Co^57^
SNM3	C-B1022	Cyanocobalamin Co^58^
SNM3	C-B1023	Cyanocobalamin Co^60^
SNM3	C-B1000	Diagnostic radioisotope, NOS
SNM3	C-B1092	Diiodofluorecein I^131^
SNM3	C-B1062	Disodium indium^111^
SNM3	C-B1122	Ferrous chloride Fe^59^
SNM3	C-B1121	Ferrous citrate Fe^59^
SNM3	C-B1123	Ferrous sulfate Fe^59^
SNM3	C-B1082	Fibrinogen I^123^
SNM3	C-B1031	Fluorodeoxyglucose F^18^
SNM3	C-B1041	Gallium^67^ citrate
SNM3	C-B1061	Indium^111^ pentetate

SNM3	C-B1066	Indium^111^ red cell label
SNM3	C-B1067	Indium^111^ transferrin
SNM3	C-B1065	Indium^111^-Fe(OH)>3<
SNM3	C-B1068	Indium^113^ bleomycin
SNM3	C-B1069	Indium^113^ chloride
SNM3	C-B1072	Indium^113^ oxoquinoline platelet label
SNM3	C-B1073	Indium^113^ oxoquinoline RBC label
SNM3	C-B1071	Indium^113^ oxoquinoline WBC label
SNM3	C-B1070	Indium^113^ pentetate
SNM3	C-B1084	Iodinated I^125^ albumin
SNM3	C-B1100	Iodinated I^125^ human serum albumin
SNM3	C-B1094	Iodinated I^125^ levothyroxine
SNM3	C-B1093	Iodinated I^125^ oleic acid and triolein
SNM3	C-B1096	Iodinated I^125^ povidone
SNM3	C-B1097	Iodinated I^125^ Rose Bengal
SNM3	C-B1098	Iodinated I^125^ sealed source
SNM3	C-B1099	Iodinated I^125^ sodium iodine
SNM3	C-B1090	Iodinated I^131^ aggregated albumin
SNM3	C-B1089	Iodinated I^131^ albumin
SNM3	C-B1111	Iodinated I^131^ gamma globulin
SNM3	C-B1091	Iodine^131^ hippuran
SNM3	C-B1109	Iodine^131^ polyvinylpyrrolidone
SNM3	C-B1109	Iodine^131^ PVP
SNM3	C-B1087	Iodocholesterol I^131^
SNM3	C-B1095	Iodohippurate I^123^ sodium
SNM3	C-B1105	Iodohippurate I^125^ sodium
SNM3	C-B1091	Iodohippurate I^131^ sodium
SNM3	C-B1108	Iofetamine I^123^ hydrochloride
SNM3	C-B1088	Iothalamate sodium I^125^
SNM3	C-B1124	Iron Fe^59^ labeled dextran
SNM3	C-B1083	Oleic acid I^125^
SNM3	C-B1251	Pentetate calcium trisodium Yb^169^
SNM3	C-B1151	Potassium carbonate K^42^
SNM3	C-B1152	Potassium chloride K^42^
SNM3	C-B1150	Potassium chloride K^43^
SNM3	C-B1085	Rose Bengal sodium I^131^
SNM3	C-B1172	Selenium^75^ HCAT
SNM3	C-B1171	Selenomethionione Se^75^
SNM3	C-B1176	Sodium chloride Na^22^
SNM3	C-B1175	Sodium chloride Na^24^
SNM3	C-B1011	Sodium chromate Cr^51^

SNM3	C-B1032	Sodium fluoride F^18^
SNM3	C-B1081	Sodium iodide I^123^
SNM3	C-B1086	Sodium iodide I^131^
SNM3	C-B1206	Sodium pertechnetate Tc^99m^
SNM3	C-B1142	Sodium phosphate P^32^
SNM3	C-B1180	Strontium chloride Sr^85^
SNM3	C-B1181	Strontium chloride Sr^87^
SNM3	C-B1182	Strontium nitrate Sr^85^
SNM3	C-B1183	Strontium nitrate Sr^87^
SNM3	C-B1225	Tc^99^ labeled HIDA
SNM3	C-B1225	Technetium Tc^99^ N-substituted iminodiacetate
SNM3	C-B1224	Technetium Tc^99^ tagged red cells
SNM3	C-B1205	Technetium Tc^99c^ albumin microspheres
SNM3	C-B1207	Technetium Tc^99c^ disofenin
SNM3	C-B1223	Technetium Tc^99c^ exametazine
SNM3	C-B1210	Technetium Tc^99c^ iron ascorbate
SNM3	C-B1209	Technetium Tc^99c^ lidofenin
SNM3	C-B1208	Technetium Tc^99c^ mebrofenin
SNM3	C-B1212	Technetium Tc^99c^ medronate
SNM3	C-B1213	Technetium Tc^99c^ oxidronate
SNM3	C-B1214	Technetium Tc^99c^ pentetate
SNM3	C-B1215	Technetium Tc^99c^ pyro and polyphosphates
SNM3	C-B1216	Technetium Tc^99c^ serum albumin
SNM3	C-B1220	Technetium Tc^99c^ sodium glucoheptonate
SNM3	C-B1211	Technetium Tc^99c^ stannous etidronate
SNM3	C-B1221	Technetium Tc^99c^ succimer
SNM3	C-B1222	Technetium Tc^99c^ sulfur colloid
SNM3	C-B1200	Technetium Tc^99m^ aggregated albumin
SNM3	C-B1204	Technetium Tc^99m^ albumin colloid
SNM3	C-B1203	Technetium Tc^99m^ microaggregated albumin
SNM3	C-B1231	Thallous chloride Tl^201^
SNM3	C-B1010	Therapeutic radioisotope, NOS
SNM3	C-B1251	Yb^169^-DTPA - pentetate

Context ID 26

Nuclear Medicine Projections

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	G-A138	Coronal
SNM3	G-A138	Frontal
SNM3	G-A145	Sagittal
SNM3	G-A147	Axial
SNM3	G-5200	Antero-posterior
SNM3	G-5200	AP
SNM3	G-5201	Postero-anterior
SNM3	G-5201	PA
SNM3	G-5203	Frontal oblique
SNM3	G-5204	Antero-posterior oblique
SNM3	G-5205	Postero-anterior oblique
SNM3	G-5206	Right anterior oblique
SNM3	G-5207	Left anterior oblique
SNM3	G-5208	Right posterior oblique
SNM3	G-5209	Left posterior oblique
SNM3	G-5210	Oblique axial
SNM3	G-5210	Oblique caudo-cranial
SNM3	G-5210	Oblique cranio-caudal
SNM3	G-5210	Oblique transaxial
SNM3	G-5210	Off-axial
SNM3	G-5210	Off-axial projection
SNM3	G-5211	Frontal-oblique axial
SNM3	G-5212	Sagittal-oblique axial
SNM3	G-5213	Submento-vertex
SNM3	G-5214	Oblique submento-vertex
SNM3	G-5220	Medial-lateral
SNM3	G-5220	Medio-lateral
SNM3	G-5221	Lateral-medial
SNM3	G-5221	Latero-medial
SNM3	G-5222	Right lateral projection
SNM3	G-5222	Left to right beam projection
SNM3	G-5223	Left lateral projection
SNM3	G-5223	Right to left beam projection
SNM3	G-5224	Medio-lateral oblique
SNM3	G-5225	Latero-medial oblique
SNM3	G-5226	Right to left oblique

SNM3	G-5227	Left to right oblique
SNM3	G-A117	Transaxial
SNM3	G-A145	Lateral Projection
SNM3	R-11300	Transverse
SNM3	G-A104	Lateral

Context ID 82 – Units of Measurement

Not defined as a table of codes per se, but rather constructed from UCUM. See section 7.2.2.

Context ID 3001
ECG leads

(Most Restrictive Use: Defined)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
SCPECG	1.3	5.6.3-9-73	Defibrillator lead: anterior-lateral
SCPECG	1.3	5.6.3-9-74	External pacing lead: anterior-posterior
SCPECG	1.3	5.6.3-9-27	Lead A
SCPECG	1.3	5.6.3-9-71	Lead A (Nehb – Anterior)
SCPECG	1.3	5.6.3-9-75	Lead A1 (Auxiliary unipolar lead 1)
SCPECG	1.3	5.6.3-9-76	Lead A2 (Auxiliary unipolar lead 2)
SCPECG	1.3	5.6.3-9-77	Lead A3 (Auxiliary unipolar lead 3)
SCPECG	1.3	5.6.3-9-78	Lead A4 (Auxiliary unipolar lead 4)
SCPECG	1.3	5.6.3-9-57	Lead A-cal
SCPECG	1.3	5.6.3-9-84	Lead A-cal (cal for Nehb – Anterior)
SCPECG	1.3	5.6.3-9-64	Lead aVF
SCPECG	1.3	5.6.3-9-63	Lead aVL
SCPECG	1.3	5.6.3-9-62	Lead aVR
SCPECG	1.3	5.6.3-9-65	Lead -aVR
SCPECG	1.3	5.6.3-9-26	Lead C
SCPECG	1.3	5.6.3-9-19	Lead CC5
SCPECG	1.3	5.6.3-9-49	Lead CC5-cal
SCPECG	1.3	5.6.3-9-56	Lead C-cal
SCPECG	1.3	5.6.3-9-20	Lead CM5
SCPECG	1.3	5.6.3-9-50	Lead CM5-cal
SCPECG	1.3	5.6.3-9-70	Lead D (Nehb – Dorsal)
SCPECG	1.3	5.6.3-9-83	Lead D-cal (cal for Nehb – Dorsal)
SCPECG	1.3	5.6.3-9-25	Lead E
SCPECG	1.3	5.6.3-9-55	Lead E-cal

SCPECG	1.3	5.6.3-9-29	Lead F
SCPECG	1.3	5.6.3-9-59	Lead F-cal
SCPECG	1.3	5.6.3-9-30	Lead H
SCPECG	1.3	5.6.3-9-60	Lead H-cal
SCPECG	1.3	5.6.3-9-1	Lead I (Einthoven)
SCPECG	1.3	5.6.3-9-24	Lead I (Frank)
SCPECG	1.3	5.6.3-9-31	Lead I-cal (Einthoven)
SCPECG	1.3	5.6.3-9-54	Lead I-cal (Frank)
SCPECG	1.3	5.6.3-9-2	Lead II
SCPECG	1.3	5.6.3-9-32	Lead II-cal
SCPECG	1.3	5.6.3-9-61	Lead III
SCPECG	1.3	5.6.3-9-72	Lead J (Nehb – Inferior)
SCPECG	1.3	5.6.3-9-85	Lead J-cal (cal for Nehb – Inferior)
SCPECG	1.3	5.6.3-9-21	Lead Left Arm
SCPECG	1.3	5.6.3-9-51	Lead Left Arm-cal
SCPECG	1.3	5.6.3-9-23	Lead Left Leg
SCPECG	1.3	5.6.3-9-53	Lead Left Leg-cal
SCPECG	1.3	5.6.3-9-28	Lead M
SCPECG	1.3	5.6.3-9-58	Lead M-cal
SCPECG	1.3	5.6.3-9-22	Lead Right Arm
SCPECG	1.3	5.6.3-9-52	Lead Right Arm-cal
SCPECG	1.3	5.6.3-9-3	Lead V1
SCPECG	1.3	5.6.3-9-33	Lead V1-cal
SCPECG	1.3	5.6.3-9-4	Lead V2
SCPECG	1.3	5.6.3-9-34	Lead V2-cal
SCPECG	1.3	5.6.3-9-10	Lead V2R
SCPECG	1.3	5.6.3-9-40	Lead V2R-cal
SCPECG	1.3	5.6.3-9-5	Lead V3
SCPECG	1.3	5.6.3-9-35	Lead V3-cal
SCPECG	1.3	5.6.3-9-11	Lead V3R
SCPECG	1.3	5.6.3-9-41	Lead V3R-cal
SCPECG	1.3	5.6.3-9-6	Lead V4
SCPECG	1.3	5.6.3-9-36	Lead V4-cal
SCPECG	1.3	5.6.3-9-12	Lead V4R
SCPECG	1.3	5.6.3-9-42	Lead V4R-cal
SCPECG	1.3	5.6.3-9-7	Lead V5
SCPECG	1.3	5.6.3-9-37	Lead V5-cal
SCPECG	1.3	5.6.3-9-13	Lead V5R
SCPECG	1.3	5.6.3-9-43	Lead V5R-cal
SCPECG	1.3	5.6.3-9-8	Lead V6

SCPECG	1.3	5.6.3-9-38	Lead V6-cal
SCPECG	1.3	5.6.3-9-14	Lead V6R
SCPECG	1.3	5.6.3-9-44	Lead V6R-cal
SCPECG	1.3	5.6.3-9-9	Lead V7
SCPECG	1.3	5.6.3-9-39	Lead V7-cal
SCPECG	1.3	5.6.3-9-15	Lead V7R
SCPECG	1.3	5.6.3-9-45	Lead V7R-cal
SCPECG	1.3	5.6.3-9-66	Lead V8
SCPECG	1.3	5.6.3-9-79	Lead V8-cal
SCPECG	1.3	5.6.3-9-68	Lead V8R
SCPECG	1.3	5.6.3-9-81	Lead V8R-cal
SCPECG	1.3	5.6.3-9-67	Lead V9
SCPECG	1.3	5.6.3-9-80	Lead V9-cal
SCPECG	1.3	5.6.3-9-69	Lead V9R
SCPECG	1.3	5.6.3-9-82	Lead V9R-cal
SCPECG	1.3	5.6.3-9-16	Lead X
SCPECG	1.3	5.6.3-9-46	Lead X-cal
SCPECG	1.3	5.6.3-9-17	Lead Y
SCPECG	1.3	5.6.3-9-47	Lead Y-cal
SCPECG	1.3	5.6.3-9-18	Lead Z
SCPECG	1.3	5.6.3-9-48	Lead Z-cal
SCPECG	1.3	5.6.3-9-0	Unspecified lead

Context ID 3003
Hemodynamic waveform sources

(Most Restrictive Use: Defined)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
SRT	V1	G-DB22	Aortic pressure waveform
SRT	V1	G-DB31	Aortic valve pullback pressure waveform
SRT	V1	G-DB24	Arterial pressure waveform
SRT	V1	G-DB23	Central venous pressure waveform
SRT	V1	G-DB33	Dye dilution cardiac output waveform
SRT	V1	G-DB20	Femoral artery pressure waveform
SRT	V1	G-DB12	Hemodynamic flow waveform
SRT	V1	G-DB34	Hemodynamic impedance waveform
SRT	V1	G-DB13	Hemodynamic oxygen saturation waveform
SRT	V1	G-DB11	Hemodynamic pressure waveform
SRT	V1	G-DB10	Hemodynamic waveform, NOS
SRT	V1	G-DB19	Left atrium pressure waveform
SRT	V1	G-DB16	Left ventricle pressure waveform

SRT	V1	G-DB28	Mitral valve pullback pressure waveform
SRT	V1	G-DB25	Pulmonary artery oxygen saturation waveform
SRT	V1	G-DB21	Pulmonary artery pressure waveform
SRT	V1	G-DB27	Pulmonary artery wedge pressure waveform
SRT	V1	G-DB26	Pulmonary capillary wedge pressure waveform
SRT	V1	G-DB30	Pulmonary valve pullback pressure waveform
SRT	V1	G-DB14	Respiration impedance waveform
SRT	V1	G-DB18	Right atrium pressure waveform
SRT	V1	G-DB17	Right ventricle pressure waveform
SRT	V1	G-DB15	Temperature waveform
SRT	V1	G-DB32	Thermal cardiac output waveform
SRT	V1	G-DB29	Tricuspid valve pullback pressure waveform

Context ID 3010
Cardiovascular Anatomic Locations
(Most Restrictive Use: Defined)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
SNM3	3.4	T-42500	Abdominal aorta
SRT	V1	T-48503	Anomalous pulmonary vein
SRT	V1	T-49215	Antecubital vein
SNM3	3.5	T-48440	Anterior cardiac vein
SNM3	3.5	T-45530	Anterior communicating artery
SNM3	3.5	T-45730	Anterior spinal artery
SNM3	3.5	T-47700	Anterior tibial artery
SNM3	3.4	T-42000	Aorta
SNM3	3.5	T-42300	Aortic arch
SRT	V1	D3-81922	Aortic fistula
SRT	V1	T-32602	Apex of left ventricle
SRT	V1	T-32502	Apex of right ventricle
SNM3	3.5	T-41000	Artery
SNM3	3.5	T-42100	Ascending aorta
SNM3	3.4	T-47100	Axillary Artery
SNM3	3.5	T-49110	Axillary vein
SNM3	3.4	T-48340	Azygos vein
SRT	V1	A-00203	Baffle
SNM3	3.5	T-45800	Basilar artery
SNM3	3.5	T-D00AB	Body conduit
SRT	V1	T-49424	Boyd’s perforating vein
SNM3	3.5	T-47160	Brachial artery
SNM3	3.4	T-49350	Brachial vein

SNM3	3.5	T-46010	Brachiocephalic artery
SNM3	3.5	T-46010	Brachiocephalic trunk
SNM3	3.5	T-48620	Brachiocephalic vein
SNM3	3.4	T-45010	Carotid Artery
SNM3	3.5	T-49240	Cephalic vein
SNM3	3.5	T-45510	Cerebral artery
SNM3	3.5	D4-31320	Common atrium
SNM3	3.5	T-45100	Common carotid artery
SNM3	3.5	T-46710	Common iliac artery
SNM3	3.5	T-48920	Common iliac vein
SNM3	3.5	D4-31120	Common ventricle
SRT	V1	D4-32504	Congenital coronary artery fistula to left atrium
SRT	V1	D4-32506	Congenital coronary artery fistula to left ventricle
SNm	3.5	D3-40208	Congenital coronary artery fistula to pulmonary artery
SRT	V1	D4-32509	Congenital coronary artery fistula to right atrium
SRT	V1	D4-32510	Congenital coronary artery fistula to right ventricle
SNM3	3.5	D3-40208	Congenital pulmonary arteriovenous fistula
SRT	V1	D4-33142	Congenital pulmonary artery conduit
SRT	V1	D4-33512	Congenital pulmonary vein confluence
SRT	V1	D4-33514	Congenital pulmonary venous atrium
SRT	V1	D4-33516	Congenital systemic venous atrium
SNM3	3.5	T-43000	Coronary artery
SNM3	3.5	T-48410	Coronary sinus
SNM3	3.4	T-42400	Descending aorta
SRT	V1	T-49429	Dodd’s perforating vein
SNM3	3.5	T-45200	External carotid artery
SNM3	3.5	T-46910	External iliac artery
SNM3	3.5	T-48930	External iliac vein
SNM3	3.5	T-45240	Facial artery
SNM3	3.5	T-47400	Femoral artery
SNM3	3.4	T-49410	Femoral vein
SNM3	3.5	T-48820	Gastric vein
SRT	V1	T-47490	Genicular artery
SNM3	3.5	T-48420	Great cardiac vein
SNM3	3.5	T-46420	Hepatic artery
SNM3	3.5	T-48720	Hepatic vein
SRT	V1	T-4942A	Hunterian perforating vein
SNM3	3.5	T-46700	Iliac artery
SNM3	3.5	T-48470	Inferior cardiac vein
SNM3	3.4	T-48540	Inferior left pulmonary vein
SNM3	3.5	T-46520	Inferior mesenteric artery

SNM3	3.5	T-48520	Inferior right pulmonary vein
SNM3	3.5	T-48710	Inferior vena cava
SNM3	3.5	T-46010	Innominate artery
SNM3	3.4	T-48620	Innominate vein
SNM3	3.5	T-45300	Internal carotid artery
SNM3	3.5	T-48170	Internal jugular vein
SNM3	3.5	T-46740	Internal iliac artey
SNM3	3.5	T-46200	Internal mammary artery
SRT	V1	D4-31052	Juxtaposed atrial appendage
SNM3	3.5	T-45410	Lacrimal artery
SRT	V1	T-45416	Lacrimal artery of right eye
SNM3	3.5	T-32300	Left atrium
SNM3	3.5	T-32310	Left auricular appendage
SNM3	3.5	T-47420	Left femoral artery
SNM3	3.4	T-44400	Left pulmonary artery
SNM3	3.5	T-32600	Left ventricle
SNM3	3.5	T-32640	Left ventricle inflow
SRT	V1	D4-31022	Left ventricle outflow chamber
SNM3	3.5	T-32650	Left ventricle outflow tract
SNM3	3.5	T-45230	Lingual artery
SNM3	3.5	T-46960	Lumbar artery
SNM3	3.5	T-46500	Mesenteric artery
SRT	V1	T-4884A	Mesenteric vein
SNM3	3.5	T-45250	Occipital artery
SNM3	3.5	T-48214	Occipital vein
SNM3	3.5	T-45400	Ophthalmic artery
SNM3	3.5	D4-32012	Patent ductus arteriosus
SNM3	3.5	T-47630	Peroneal artery
SNM3	3.5	T-47500	Popliteal artery
SNM3	3.5	T-48810	Portal vein
SNM3	3.5	T-45320	Posterior communication artery
SRT	V1	T-49535	Posterior medial tributary
SNM3	3.5	T-47600	Posterior tibial artery
SNM3	3.5	T-F7001	Primitive aorta
SNM3	3.5	T-F7040	Primitive pulmonary artery
SNM3	3.5	T-44000	Pulmonary artery
SRT	V1	D4-33142	Pulmonary artery conduit
SRT	V1	T-32190	Pulmonary chamber of cor triatriatum
SNM3	3.5	T-48500	Pulmonary vein
SRT	V1	D4-33512	Pulmonary vein confluence

SRT	V1	D4-33514	Pulmonary venous atrium
SNM3	3.5	T-47300	Radial artery
SNM3	3.5	T-46600	Renal artery
SNM3	3.5	T-48740	Renal vein
SNM3	3.5	T-32200	Right atrium
SNM3	3.5	T-32210	Right auricular appendage
SNM3	3.5	T-47410	Right femoral artery
SNM3	3.5	T-44200	Right pulmonary artery
SNM3	3.5	T-32500	Right ventricle
SNM3	3.5	T-32540	Right ventricle inflow
SRT	V1	D4-31022	Right ventricle outflow chamber
SNM3	3.5	T-32550	Right ventricle outflow tract
SRT	V1	T-D930A	Saphenofemoral junction
SNM3	3.5	T-49530	Saphenous vein
SNM3	3.5	T-46460	Splenic artery
SNM3	3.5	T-48890	Splenic vein
SNM3	3.5	T-46100	Subclavian artery
SNM3	3.5	T-48330	Subclavian vein
SNM3	3.5	T-45270	Superficial temporal artery
SNM3	3.5	T-48530	Superior left pulmonary vein
SNM3	3.5	T-46510	Superior mesenteric artery
SNM3	3.5	T-48510	Superior right pulmonary vein
SNM3	3.5	T-45210	Superior thyroid artery
SNM3	3.5	T-48610	Superior vena cava
SRT	V1	T-44007	Systemic collateral artery to lung
SRT	V1	D4-33516	Systemic venous atrium
SNM3	3.5	T-42070	Thoracic aorta
SNM3	3.5	D4-31400	Truncus arteriosus communis
SNM3	3.5	T-46400	Truncus coeliacus
SNM3	3.5	T-47200	Ulnar artery
SNM3	3.5	T-F1810	Umbilical artery
SNM3	3.5	T-48817	Umbilical vein
SNM3	3.5	T-48000	Vein
SNM3	3.4	T-48170	Vena jugularis interna
SNM3	3.5	T-48810	Vena portae
SNM3	3.5	T-48003	Venous network
SNM3	3.5	T-45700	Vertebral artery

Context ID 3011
Electrophysiology Anatomic Locations

(Most Restrictive Use: Defined)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
SNM3	3.5	T-32850	Accessory atrioventricular bundle
SRT	V1	T-32602	Apex of left ventricle
SRT	V1	T-32502	Apex of right ventricle
SNM3	3.5	T-32830	Atrioventricular bundle
SNM3	3.5	T-32820	Atrioventricular node
SNM3	3.5	T-32400	Common ventricle
SNM3	3.5	T-48410	Coronary sinus
SNM3	3.5	T-39010	Epicardium
SNM3	3.5	T-48420	Great cardiac vein
SRT	V1	G-DE02	High right atrium
SNM3	3.5	T-48540	Inferior left pulmonary vein
SNM3	3.5	T-48520	Inferior right pulmonary vein
SRT	V1	G-DE04	Lateral high right atrium
SNM3	3.5	T-32833	Left anterior division of left branch of left atrioventricular bundle
SNM3	3.5	T-32300	Left Atrium
SNM3	3.5	T-32310	Left auricular appendage
SNM3	3.5	T-32832	Left branch of atrioventricular bundle
SNM3	3.5	T-32834	Left posterior division of left branch of left atrioventricular bundle
SNM3	3.5	T-32600	Left ventricle
SNM3	3.5	T-32640	Left ventricle inflow
SNM3	3.5	T-32650	Left ventricle outflow tract
SRT	V1	G-DE08	Low right atrium
SRT	V1	G-DE06	Mid right atrium
SNM3	3.5	T-48430	Middle cardiac vein
SNM3	3.5	T-35310	Mitral ring
SNM3	3.5	T-48411	Ostium of coronary sinus
SNM3	3.5	T-48500	Pulmonary vein
SNM3	3.5	T-35210	Pulmonic ring
SNM3	3.5	T-32840	Purkinje fibers
SNM3	3.5	T-35120	Right atrioventricular ostium
SNM3	3.5	T-32200	Right Atrium
SNM3	3.5	T-32210	Right auricular appendage
SNM3	3.5	T-32831	Right branch of Atrioventricular bundle
SNM3	3.5	T-32500	Right ventricle
SNM3	3.5	T-32540	Right ventricle inflow

SNM3	3.5	T-32550	Right ventricle outflow tract
SNM3	3.5	T-32810	Sino-atrial node
SNM3	3.5	T-48530	Superior left pulmonary vein
SNM3	3.5	T-48510	Superior right pulmonary vein
SRT	V1	T-32202	Tendon of Todaro
SNM3	3.5	T-35110	Tricuspid ring

Context ID 3014
Coronary artery segments
(Most Restrictive Use: Defined)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
BARI	1992	15	1st Diagonal Coronary Artery
BARI	1992	24	1st Left Posterolateral Coronary Artery
BARI	1992	20	1st Marginal Coronary Artery
BARI	1992	6	1st Right posterolateral
BARI	1992	17	1st Septal Coronary Artery
BARI	1992	16	2nd Diagonal Coronary Artery
BARI	1992	25	2nd Left Posterolateral Coronary Artery
BARI	1992	21	2nd Marginal Coronary Artery
BARI	1992	7	2nd Right posterolateral
BARI	1992	29	3rd diagonal
BARI	1992	26	3rd Left Posterolateral Coronary Artery
BARI	1992	22	3rd Marginal Coronary Artery
BARI	1992	8	3rd Right posterolateral
BARI	1992	10	Acute Marginal
BARI	1992	23	AV groove continuation of Circumflex Artery
BARI	1992	19A	Distal Circumflex Coronary Artery
BARI	1992	14	Distal Left Anterior Descending Coronary Artery
BARI	1992	3	Distal Right Coronary Artery
BARI	1992	15A	Lateral 1st Diagonal Coronary Artery
BARI	1992	20A	Lateral 1st Marginal Coronary Artery
BARI	1992	16A	Lateral 2nd Diagonal Coronary Artery
BARI	1992	21A	Lateral 2nd Marginal Coronary Artery
BARI	1992	29A	Lateral 3rd Diagonal
BARI	1992	22A	Lateral 3rd Marginal Coronary Artery
BARI	1992	28A	Lateral Ramus
BARI	1992	11	Left Main Coronary Artery
BARI	1992	11A	Left Main Coronary Artery Ostium
BARI	1992	27	Left Posterior Descending Artery
BARI	1992	19	Mid Circumflex Coronary Artery

BARI	1992	13	Mid Left Anterior Descending Coronary Artery
BARI	1992	2	Mid Right Coronary Artery
BARI	1992	4	Posterior Descending Right Coronary Artery
BARI	1992	9	Posterior descending septal perforators
BARI	1992	18	Proximal Circumflex Coronary Artery
BARI	1992	12	Proximal Left Anterior Descending Coronary Artery
BARI	1992	1	Proximal Right Coronary Artery
BARI	1992	28	Ramus
BARI	1992	1A	Right Coronary Artery Ostium
BARI	1992	5	Right posterior AV

Context ID 3019
Cardiovascular Anatomic Location Modifiers

(Most Restrictive Use: Defined)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
SNM3	3.5	G-A105	Anterior
SRT	V1	G-D873	Arterial graft to cited segment
SNM3	3.5	GA110	Central
SNM3	3.5	G-A119	Distal
SRT	V1	G-D870	Graft to cited segment, body
SRT	V1	G-D872	Graft to cited segment, distal anastomosis
SRT	V1	G-D871	Graft to cited segment, proximal anastomosis
SNM3	3.5	G-A115	Inferior
SRT	V1	G-A104	Lateral
SNM3	3.5	G-A101	Left
SRT	V1	T-3215A	Ostium
SNM3	3.5	G-A106	Posterior
SNM3	3.5	G-A118	Proximal
SNM3	3.5	G-A100	Right
SNM3	3.5	G-A116	Superior
SRT	V1	G-D874	Venous graft to cited segment

Context ID 3082
Cardiology Units of Measurement

(Most Restrictive Use: Defined)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
UCUM	1.4	dB(A)	A scale of loudness
UCUM	1.4	[arb'U]	arbitrary unit
UCUM	1.4	cm	centimeter

UCUM	1.4	cm/s	centimeter/second
UCUM	1.4	d	day
UCUM	1.4	dB	decibel
UCUM	1.4	Cel	degrees Celsius
UCUM	1.4	{H.B.}/min	Heart beat per minute
UCUM	1.4	Hz	Herz
UCUM	1.4	h	hour
UCUM	1.4	J	Joule
UCUM	1.4	KHz	kiloHerz
UCUM	1.4	kOhm	kiloOhm
UCUM	1.4	km/h	kilometer per hour
UCUM	1.4	kPa	kiloPascal
UCUM	1.4	l/min	liter per minute
UCUM	1.4	MHz	megaHerz
UCUM	1.5	[MET]	Metabolic equivalent
UCUM	1.4	uV	microvolt
UCUM	1.4	[mi_i]/h	mile per hour
UCUM	1.4	mm	millimeter
UCUM	1.4	ml/min	milliliter per minute
UCUM	1.4	ml/s	milliliter per second
UCUM	1.4	mm[Hg]	millimeter of mercury
UCUM	1.4	mV	millivolt
UCUM	1.4	min	minute
UCUM	1.4	mm/s	mm/s
UCUM	1.4	%	percent
UCUM	1.4	s	second
UCUM	1.4	mm2	square millimeter
UCUM	1.4	1	unary, no units
UCUM	1.4	V	volt
UCUM	1.4	W	Watt

Context ID 3090
Time Synchronization Channel Types

(Most Restrictive Use: Defined)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
DCM	01	109001	Digital timecode (NOS)
DCM	01	109002	ECG-based gating signal, processed
DCM	01	109003	IRIG-B timecode
DCM	01	109004	X-ray Fluoroscopy On Signal
DCM	01	109005	X-ray On Trigger

Context ID 3240
Electrophysiology Measurement Functions and Techniques

(Most Restrictive Use: Defined)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
DCM	01	109006	Differential signal
DCM	01	109007	His bundle electrogram
DCM	01	109008	Monopole signal
DCM	01	109009	Pacing (electrical) stimulus, voltage
DCM	01	109010	Radio frequency ablation, power
DCM	01	109011	Voltage measurement by basket catheter
DCM	01	109012	Voltage measurement by mapping catheter
DCM	01	109013	Voltage measurement, NOS

Context ID 3241
Hemodynamic Measurement Techniques

(Most Restrictive Use: Defined)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
SRT	V1	PA-50038	Averaged hemodynamic measurement method
SRT	V1	PA-50035	Composite hemodynamic measurement method
SRT	V1	PA-50034	Computed hemodynamic measurement method
SRT	V1.1	PA-5003B	Conductance catheter method
SRT	V1.1	PA-5003C	Doppler catheter method
SRT	V1	PA-50031	Dual catheter method
SRT	V1	PA-50039	Fluid filled catheter method
SRT	V1.1	PA-5003D	Fiberoptic catheter method
SRT	V1.1	PA-5003E	Hall catheter method
SRT	V1	PA-50033	Pullback method
SRT	V1	PA-50032	Pulmonary capillary wedge method
SRT	V1	PA-50036	Static catheter method
SRT	V1.1	PA-5003F	Thermistor catheter method
SRT	V1	PA-5003A	Tip manometer method
SRT	V1	PA-50037	Wedge method

Context ID 3250
Catheterization Procedure Phase

(Most Restrictive Use: Baseline)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
SRT	V1	G-7299	Cardiac catheterization bailout phase

SRT	V1	G-7293	Cardiac catheterization baseline phase
SRT	V1	G-7294	Cardiac catheterization image acquisition phase
SRT	V1	G-7295	Cardiac catheterization intervention phase
SRT	V1	G-729B	Cardiac catheterization post contrast phase
SRT	V1	G-7298	Cardiac catheterization post-intervention phase
SRT	V1	G-7296	Cardiac catheterization pre-intervention phase
SRT	V1.1	G-929D	Cardiac catheterization test/challenging phase
SRT	V1	G-7297	Cardiac catheterization therapy phase
SRT	V1	P1-3160A	Catheterization of both left and right heart with graft
SRT	V1	P1-3160B	Catheterization of both left and right heart without graft
SNM3	3.5	P1-31604	Catheterization of left heart
SNM3	3.5	P1-31602	Catheterization of right heart
SNM3	3.5	P1-31612	Transseptal catheterization

Context ID 3254
Electrophysiology Procedure Phase

(Most Restrictive Use: Baseline)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
SRT	V1	G-729D	Atrial Effective Refractory Period, evaluation of
SRT	V1	G-7304	Carotid Sinus Massage procedure phase
SRT	V1	G-7306	Electrophysiology Mapping phase
SRT	V1	G-729A	Electrophysiology procedure baseline phase
SRT	V1	G-7408	Post-ablation phase
SRT	V1	G-7305	Post-defibrillation procedure phase
SRT	V1	G-729F	Radiofrequency Ablation procedure phase
SRT	V1	G-729C	Sinus Node Recovery Time, evaluation of
SRT	V1	G-729E	Ventricular Effective Refractory Period, evaluation of

Context ID 3261
Stress Protocols

(Most Restrictive Use: Baseline)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
SRT	V1	P2-7131C	Balke protocol
SRT	V1	P2-7131A	Bruce protocol
SRT	V1	P2-7131D	Ellestad protocol
SRT	V1	P2-7131B	Modified Bruce protocol
SRT	V1	P2-713A1	Modified Naughton protocol
SRT	V1	P2-713A0	Naughton protocol

SRT	V1	P2-7131F	Pepper protocol
SRT	V1	P2-7131E	Ramp protocol

Context ID 3262
ECG Patient State Values

(Most Restrictive Use: Baseline)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
SRT	V1	F-01602	Baseline state
SRT	V1	F-01606	Exercise state
SRT	V1	F-01608	Post-exercise state
SRT	V1	F-01604	Resting state
SNM3	3.5	F-10340	Supine body position

Context ID 3263
Electrode Placement Values

(Most Restrictive Use: Baseline)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
SCPECG	1.3	5.4.5-33-1-5	12-lead ECG derived from Frank XYZ leads
SCPECG	1.3	5.4.5-33-1-6	12-lead ECG derived from non-standard leads
SCPECG	1.3	5.4.5-33-1-2	Mason-Likar positions: limb leads placed on the torso
SCPECG	1.3	5.4.5-33-1-3	Mason-Likar with V pad: chest leads as a single pad
SCPECG	1.3	5.4.5-33-1-4	Single electrode pad: all electrodes in a single electrode pad
SCPECG	1.3	5.4.5-33-1-1	Standard 12-lead positions: limb leads placed at extremities
SCPECG	1.3	5.4.5-33-1-0	Unspecified

Context ID 3264
XYZ Electrode Placement Values

(Most Restrictive Use: Baseline)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
SCPECG	1.3	5.4.5-33-2-4	Bipolar uncorrected XYZ lead system
SCPECG	1.3	5.4.5-33-2-3	Cube lead system (Grishman et al, Amer Heart J 1951; 41:483).
SCPECG	1.3	5.4.5-33-2-1	Frank lead system (Frank, 1956; 13:737)
SCPECG	1.3	5.4.5-33-2-2	McFee-Parungao lead system
SCPECG	1.3	5.4.5-33-2-5	Pseudo-orthogonal XYZ lead system (as used in Holter

			recording)
SCPECG	1.3	5.4.5-33-2-0	Unspecified
SCPECG	1.3	5.4.5-33-2-6	XYZ leads derived from standard 12-lead ECG

Context ID 3271
Hemodynamic Physiological Challenges

(Most Restrictive Use: Baseline)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
SRT	V1.1	P2-71317	Drug infusion
SRT	V1	P2-71310	Exercise challenge
SRT	V1	P2-71306	Handgrip
SRT	V1	P2-71302	Head up
SRT	V1	P2-71314	Held inspiration
SRT	V1	P2-71316	Held ventilation
SRT	V1	P2-71304	Leg up
SRT	V1	P2-71308	Negative lower body pressure
SNM3	3.5	P2-35000	Pacing
SRT	V1	P2-71318	Post volume challenge
SRT	V1	P2-71312	Vagal stimulation
SNM3	3.5	F-F7102	Valsalva maneuver

Context ID 3335
ECG Annotations

(Most Restrictive Use: Defined)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
SCPECG	1.3	5.7.1-3	Fiducial point
SCPECG	1.3	D.4.1-J	J point
SCPECG	1.3	D.4.1-ST20	J point + 20 msec
SCPECG	1.3	D.4.1-ST60	J point + 60 msec
SCPECG	1.3	D.4.1-ST80	J point +80 msec
SCPECG	1.3	5.10.3-2	P wave end
SCPECG	1.3	5.10.3-1	P wave onset
SCPECG	1.3	D.4.1-P	P wave peak
SCPECG	1.3	5.10.1.2	Pacemaker spike, suppressed
SCPECG	1.3	D.4.1-PR	PR segment (isoelectric point)
SCPECG	1.3	D.4.1-Q	Q wave
SCPECG	1.3	5.10.3-4	QRS end
SCPECG	1.3	5.10.3-3	QRS onset

SCPECG	1.3	D.4.1-R	R wave peak
SCPECG	1.3	D.4.1-R2	R' peak
SCPECG	1.3	D.4.1-S	S wave
SCPECG	1.3	D.4.1-S2	S' wave
SCPECG	1.3	5.10.3-5	T wave end
SCPECG	1.3	D.4.1-STE	T wave onset
SCPECG	1.3	D.4.1-T	T wave peak
SCPECG	1.3	D.4.1-U	U wave peak

Context ID 3337
Hemodynamic Annotations
(Most Restrictive Use: Defined)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
DCM	01	109014	35% of thermal/dye dilution CO
DCM	01	109015	70% of thermal/dye dilution CO
DCM	01	109016	A wave
DCM	01	109017	A wave average
DCM	01	109018	Beat detected (accepted)
DCM	01	109019	Beat detected (rejected)
DCM	01	109020	Diastolic average
DCM	01	109021	Diastolic nadir
DCM	01	109022	End diastole
DCM	01	109023	End of expiration
DCM	01	109024	End of inspiration
DCM	01	109070	End of systole
DCM	01	109071	Indicator mean transit time
DCM	01	109025	Max dp/dt
DCM	01	109026	Max neg dp/dt
DCM	01	109027	Mean pressure
DCM	01	109028	Peak of thermal/dye dilution CO
DCM	01	109029	Start of expiration
DCM	01	109030	Start of inspiration
DCM	01	109031	Start of thermal CO
DCM	01	109032	Systolic average
DCM	01	109033	Systolic peak
DCM	01	109072	Tau
DCM	01	109073	V max
DCM	01	109034	V wave
DCM	01	109035	V wave average
DCM	01	109036	Valve close

DCM	01	109037	Valve open

Context ID 3339
Electrophysiology Annotations
(Most Restrictive Use: Defined)

Coding Scheme	Coding Scheme Version	Code Value	Code Meaning
DCM	01	109038	Ablation off
DCM	01	109039	Ablation on
DCM	01	109040	HIS bundle wave
DCM	01	109041	P wave
DCM	01	109042	Q wave
DCM	01	109043	R wave
DCM	01	109044	S wave
DCM	01	109045	Start of atrial contraction
DCM	01	109046	Start of atrial contraction (subsequent)
DCM	01	109047	Stimulation at rate 1 interval
DCM	01	109048	Stimulation at rate 2 interval
DCM	01	109049	Stimulation at rate 3 interval
DCM	01	109050	Stimulation at rate 4 interval
DCM	01	109051	T wave
DCM	01	109052	V wave
DCM	01	109053	V wave of next beat

Context ID 4009
DX Anatomy Imaged
(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	T-D3000	Chest
SNM3	T-280A0	Apex of Lung
SNM3	T-25000	Trachea
SNM3	T-26000	Bronchus
SNM3	T-24100	Larynx
SNM3	T-D3300	Mediastinum
SNM3	T-32000	Heart
SNM3	T-D1600	Neck
SNM3	T-11210	Sternum
SNM3	T-15610	Sternoclavicular joint
SNM3	T-11300	Rib

SNM3	T-11500	Spine
SNM3	T-11501	Cervical spine
SNM3	T-11502	Thoracic spine
SNM3	T-11503	Lumbar spine
SNM3	T-11AD0	Sacrum
SNM3	T-11BF0	Coccyx
SNM3	T-D4000	Abdomen
SNM3	T-D0300	Extremity
SNM3	T-D8200	Arm
SNM3	T-D8810	Thumb
SNM3	T-D8800	Finger
SNM3	T-D8700	Hand
SNM3	T-D8600	Wrist
SNM3	T-12402	Forearm bone
SNM3	T-D8300	Elbow
SNM3	T-12410	Humerus
SNM3	T-D2220	Shoulder
SNM3	T-12310	Clavicle
SNM3	T-12280	Scapula
SNM3	T-15420	Acromioclavicular joint
SNM3	T-D9800	Toe
SNM3	T-12980	Sesamoid bones of foot
SNM3	T-D9700	Foot
SNM3	T-12770	Calcaneus
SNM3	T-15770	Tarsal joint
SNM3	T-15750	Ankle joint
SNM3	T-D9400	Leg
SNM3	T-D9200	Knee
SNM3	T-12730	Patella
SNM3	T-12710	Femur
SNM3	T-15710	Hip joint
SNM3	T-D6000	Pelvis
SNM3	T-15680	Sacroiliac joint
SNM3	T-D1100	Head
SNM3	T-11100	Skull
SNM3	T-11196	Facial bones
SNM3	T-11167	Zygomatic arch
SNM3	T-11149	Nasal bone
SNM3	T-D1480	Orbit
SNM3	T-11102	Optic canal

SNM3	T-11180	Mandible
SNM3	T-11170	Maxilla
SNM3	T-D1217	Maxilla and mandible
SNM3	T-15290	Temporomandibular joint
SNM3	T-22000	Paranasal sinus
SNM3	T-11133	Mastoid bone
SNM3	T-D1460	Sella turcica
SNM3	T-04000	Breast
SNM3	T-61100	Parotid gland
SNM3	T-61300	Submandibular gland
SNM3	T-63000	Gall bladder
SNM3	T-60610	Bile duct
SNM3	T-56000	Esophagus
SNM3	T-57000	Stomach
SNM3	T-58200	Duodenum
SNM3	T-58000	Small intestine
SNM3	T-59000	Large intestine
SNM3	T-59600	Rectum
SNM3	T-70010	Upper urinary tract
SNM3	T-74000	Bladder
SNM3	T-75000	Urethra
SNM3	T-D6151	Uterus and fallopian tubes

Context ID 4010

DX View

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	R-10202	frontal
SNM3	R-10204	frontal oblique
SNM3	R-10206	antero-posterior
SNM3	R-10208	antero-posterior oblique
SNM3	R-10210	right posterior oblique
SNM3	R-10212	left posterior oblique
SNM3	R-10214	postero-anterior
SNM3	R-10216	postero-anterior oblique
SNM3	R-10218	right anterior oblique
SNM3	R-10220	left anterior oblique
SNM3	R-10222	sagittal
SNM3	R-10224	medial-lateral

SNM3	R-10226	lateral oblique
SNM3	R-10228	lateral-medial
SNM3	R-10230	medial oblique
SNM3	R-10232	right lateral
SNM3	R-10234	right oblique
SNM3	R-10236	left lateral
SNM3	R-10238	left oblique
SNM3	R-10241	axial
SNM3	R-10242	cranio-caudal
SNM3	R-10244	caudo-cranial
SNM3	R-10246	oblique axial
SNM3	R-10248	oblique cranio-caudal
SNM3	R-10250	oblique caudo-cranial
SNM3	R-10252	frontal-oblique axial
SNM3	R-10254	sagittal-oblique axial
SNM3	R-102C1	oblique
SNM3	R-102CD	lateral
SNM3	R-102C2	tangential
SNM3	R-10256	submentovertical
SNM3	R-10257	verticosubmental
SNM3	R-102C3	plantodorsal
SNM3	R-102C4	dorsoplantar
SNM3	R-102C5	parietoacanthal
SNM3	R-102C6	acanthoparietal
SNM3	R-102C7	orbitoparietal
SNM3	R-102C8	parieto-orbital

Context ID 4011

DX View Modifier

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	R-10244	cephalad
SNM3	R-10242	caudad
SNM3	R-102C9	transthoracic
SNM3	R-102CA	lordotic
SNM3	R-102CB	transforamenal
SNM3	R-102CC	transoral
SNM3	R-102CE	transorbital

Context ID 4012

Projection Eponymous Name

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	R-10261	Albers-Schonberg
SNM3	R-10262	Alexander
SNM3	R-10263	Arcelin
SNM3	R-10264	Beclere
SNM3	R-10265	Bertel
SNM3	R-10266	Blackett-Healy
SNM3	R-10267	Broden
SNM3	R-10268	Cahoon
SNM3	R-10269	Caldwell
SNM3	R-1026A	Camp-Coventry
SNM3	R-1026B	Causton
SNM3	R-1026C	Chamberlain
SNM3	R-1026D	Chassard-Lapine
SNM3	R-1026E	Chausse
SNM3	R-1026F	Cleaves
SNM3	R-10270	Clements
SNM3	R-10271	Clements-Nakayama
SNM3	R-10272	Dunlap
SNM3	R-10273	Ferguson
SNM3	R-10274	Fleischner
SNM3	R-10275	Friedman
SNM3	R-10276	Fuchs
SNM3	R-10277	Gaynor-Hart
SNM3	R-10278	Grandy
SNM3	R-10279	Grashey
SNM3	R-1027A	Haas
SNM3	R-1027B	Henschen
SNM3	R-1027C	Hickey
SNM3	R-1027D	Holly
SNM3	R-1027E	Holmblad
SNM3	R-1027F	Hough
SNM3	R-10280	Hsieh
SNM3	R-10281	Hughston
SNM3	R-10282	Isherwood
SNM3	R-10283	Judd
SNM3	R-10284	Kandel

SNM3	R-10285	Kasabach
SNM3	R-10286	Kemp Harper
SNM3	R-10287	Kovacs
SNM3	R-10288	Kuchendorf
SNM3	R-10289	Kurzbauer
SNM3	R-1028A	Laquerriere-Pierquin
SNM3	R-1028B	Lauenstein
SNM3	R-1028C	Law
SNM3	R-1028D	Lawrence
SNM3	R-1028E	Leonard-George
SNM3	R-1028F	Lewis
SNM3	R-10290	Lilienfeld
SNM3	R-10291	Lindblom
SNM3	R-10292	Lorenz
SNM3	R-10293	Low-Beer
SNM3	R-10294	Lysholm
SNM3	R-10295	May
SNM3	R-10296	Mayer
SNM3	R-10297	Merchant
SNM3	R-10298	Miller
SNM3	R-10299	Nolke
SNM3	R-1029A	Norgaard
SNM3	R-1029B	Ottonello
SNM3	R-1029C	Pawlow
SNM3	R-1029D	Pearson
SNM3	R-1029E	Penner
SNM3	R-1029F	Pirie
SNM3	R-102A0	Rhese
SNM3	R-102A1	Schuller
SNM3	R-102A2	Settegast
SNM3	R-102A3	Staunig
SNM3	R-102A4	Stecher
SNM3	R-102A5	Stenvers
SNM3	R-102A6	Swanson
SNM3	R-102A7	Tarrant
SNM3	R-102A8	Taylor
SNM3	R-102A9	Teufel
SNM3	R-102AA	Titterington
SNM3	R-102AB	Towne
SNM3	R-102AC	Twining

SNM3	R-102AD	Valdini
SNM3	R-102AE	Waters
SNM3	R-102AF	West Point
SNM3	R-102B0	Wigby-Taylor
SNM3	R-102B1	Zanelli

Context ID 4013

Anatomic Region for Mammography

(Most Restrictive Use: Enumerated)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	T-04000	Breast

Context ID 4014

View for Mammography

(Most Restrictive Use: Enumerated)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)	ACR BI-RADS Equivalent
SNM3	R-10224	medio-lateral	ML
SNM3	R-10226	medio-lateral oblique	MLO
SNM3	R-10228	latero-medial	LM
SNM3	R-10230	latero-medial oblique	LMO
SNM3	R-10242	cranio-caudal	CC
SNM3	R-10244	caudo-cranial (from below)	FB
SNM3	R-102D0	superolateral to inferomedial oblique	SIO
SNM3	R-102CF	exaggerated cranio-caudal	XCC
SNM3	Y-X1770	cranio-caudal exaggerated laterally	XCCL
SNM3	Y-X1771	cranio-caudal exaggerated medially	XCCM

Context ID 4015

View Modifier for Mammography

(Most Restrictive Use: Enumerated)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)	Applies only when view is:	ACR BI-RADS Equivalent
SNM3	R-102D2	Cleavage	CC	CV
SNM3	R-102D1	Axillary Tail	MLO	AT
SNM3	R-102D3	Rolled Lateral	any	...RL
SNM3	R-102D4	Rolled Medial	any	...RM
SNM3	R-102D5	Implant Displaced	any	ID
SNM3	R-102D6	Magnification	any	M...
SNM3	R-102D7	Spot Compression	any	S
SNM3	R-102C2	Tangential	any	TAN

Context ID 4016

Anatomic Region for Intra-oral Radiography

(Most Restrictive Use: Enumerated)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	T-D1217	Maxilla and mandible
SNM3	T-11170	Maxilla
SNM3	T-11180	Mandible

Context ID 4017

Anatomic Region Modifier for Intra-oral Radiography

(Most Restrictive Use: Enumerated)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	T-51005	Anterior 1
SNM3	T-51006	Anterior 2
SNM3	T-51007	Anterior 3
SNM3	T-51008	Premolar 1
SNM3	T-51009	Premolar 2
SNM3	T-5100A	Molar 1
SNM3	T-5100B	Molar 2
SNM3	T-5100C	Molar 3
SNM3	T-5100D	Occlusal

Context ID 4018
Primary Anatomic Structure for Intra-oral Radiography
(Permanent Dentition - Designation of Teeth)
(Most Restrictive Use: Enumerated)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)	ISO 3950 Designation of Quadrant	ISO 3950 Designation of Tooth
SNM3	T-54210	Maxillary right third molar tooth	1	8
SNM3	T-54220	Maxillary right second molar tooth	1	7
SNM3	T-54230	Maxillary right first molar tooth	1	6
SNM3	T-54240	Maxillary right second premolar tooth	1	5
SNM3	T-54250	Maxillary right first premolar tooth	1	4
SNM3	T-54260	Maxillary right canine tooth	1	3
SNM3	T-54270	Maxillary right lateral incisor tooth	1	2
SNM3	T-54280	Maxillary right central incisor tooth	1	1
SNM3	T-54290	Maxillary left central incisor tooth	2	1
SNM3	T-54300	Maxillary left lateral incisor tooth	2	2
SNM3	T-54310	Maxillary left canine tooth	2	3
SNM3	T-54320	Maxillary left first premolar tooth	2	4
SNM3	T-54330	Maxillary left second premolar tooth	2	5
SNM3	T-54340	Maxillary left first molar tooth	2	6
SNM3	T-54350	Maxillary left second molar tooth	2	7
SNM3	T-54360	Maxillary left third molar tooth	2	8
SNM3	T-54370	Mandibular left third molar tooth	3	8
SNM3	T-54380	Mandibular left second molar tooth	3	7
SNM3	T-54390	Mandibular left first molar tooth	3	6
SNM3	T-54400	Mandibular left second premolar tooth	3	5
SNM3	T-54410	Mandibular left first premolar tooth	3	4
SNM3	T-54420	Mandibular left canine tooth	3	3
SNM3	T-54430	Mandibular left lateral tooth	3	2
SNM3	T-54440	Mandibular left central incisor tooth	3	1
SNM3	T-54450	Mandibular right central incisor tooth	4	1
SNM3	T-54460	Mandibular right lateral incisor tooth	4	2
SNM3	T-54470	Mandibular right canine tooth	4	3
SNM3	T-54480	Mandibular right first premolar tooth	4	4
SNM3	T-54490	Mandibular right second premolar tooth	4	5
SNM3	T-54500	Mandibular right first molar tooth	4	6
SNM3	T-54510	Mandibular right second molar tooth	4	7
SNM3	T-54520	Mandibular right third molar tooth	4	8

Context ID 4019

Primary Anatomic Structure for Intra-oral Radiography

(Deciduous Dentition - Designation of Teeth)

(Most Restrictive Use: Enumerated)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)	ISO 3950 Designation of Quadrant	ISO 3950 Designation of Tooth
SNM3	T-54610	Deciduous maxillary right central incisor tooth	5	1
SNM3	T-54620	Deciduous maxillary right lateral incisor tooth	5	2
SNM3	T-54630	Deciduous maxillary right canine tooth	5	3
SNM3	T-54640	Deciduous maxillary right first molar tooth	5	4
SNM3	T-54650	Deciduous maxillary right second molar tooth	5	5
SNM3	T-54660	Deciduous maxillary left central incisor tooth	6	1
SNM3	T-54670	Deciduous maxillary left lateral incisor tooth	6	2
SNM3	T-54680	Deciduous maxillary left canine tooth	6	3
SNM3	T-54690	Deciduous maxillary left first molar tooth	6	4
SNM3	T-54700	Deciduous maxillary left second molar tooth	6	5
SNM3	T-54760	Deciduous mandibular left central incisor tooth	7	1
SNM3	T-54770	Deciduous mandibular left lateral incisor tooth	7	2
SNM3	T-54780	Deciduous mandibular left canine tooth	7	3
SNM3	T-54790	Deciduous mandibular left first molar tooth	7	4
SNM3	T-54800	Deciduous mandibular left second molar tooth	7	5
SNM3	T-54710	Deciduous mandibular right central incisor tooth	8	1
SNM3	T-54720	Deciduous mandibular right lateral incisor tooth	8	2
SNM3	T-54730	Deciduous mandibular right canine tooth	8	3
SNM3	T-54740	Deciduous mandibular right first molar tooth	8	4
SNM3	T-54750	Deciduous mandibular right second molar tooth	8	5

Context ID 4020

PET Radionuclide

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	C-111A1	F^18^ [^18^Fluorine]
SNM3	C-159A2	Rb^82^ [^82^Rubidium]
		O^15^ [^15^Oxygen]
SNM3	C-107A1	N^13^ [^13^Nitrogen]
SNM3	C-105A1	C^11^ [^11^Carbon]
SNM3	C-128A2	Ge^68^ [^68^Germanium]
SNM3	C-155A1	Na^22^ [^22^Sodium]

Context ID 4021

PET Radiopharmaceutical

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Coding Scheme Version (0008,0103)	Code Value (0008,0100)	Code Meaning (0008,0104)
SRT	V1.1	C-B1043	Acetate C^11^
SRT	V1.1	C-B103C	Ammonia N^13^
SRT	V1.1	C-B103B	Carbon dioxide O^15^
SRT	V1.1	C-B1045	Carbon monoxide C^11^
SRT	V1.1	C-B103A	Carbon monoxide O^15^
SRT	V1.1	C-B103F	Carfentanil C^11^
SNM3		C-B1031	Fluorodeoxyglucose F^18^
SRT	V1.1	C-B1034	Fluoro-L-dopa F^18^
SRT	V1.1	C-B1046	Germanium Ge^68^
SRT	V1.1	C-B103D	Glutamate N^13^
SRT	V1.1	C-B103E	Methionine C^11^
SRT	V1.1	C-B1038	Oxygen O^15^
SRT	V1.1	C-B1039	Oxygen-water O^15^
SRT	V1.1	C-B1044	Palmitate C^11^
SRT	V1.1	C-B1042	Raclopride C^11^
SRT	V1.1	C-B1037	Rubidium chloride Rb^82^
SNM3		C-B1032	Sodium fluoride F^18^
SRT	V1.1	C-B1047	Sodium Na^22^
SRT	V1.1	C-B1033	Spiperone F^18^
SRT	V1.1	C-B1036	Thymidine (FLT)F^18^

Context ID 5000

Languages

(Most Restrictive Use: Defined)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
ISO639_2	abk	Abkhazian
ISO639_2	ace	Achinese
ISO639_2	ach	Acoli
ISO639_2	ada	Adangme
ISO639_2	aar	Afar
ISO639_2	afh	Afrihili

ISO639_2	afr	Afrikaans
ISO639_2	afa	Afro-Asiatic (Other)
ISO639_2	aka	Akan
ISO639_2	akk	Akkadian
ISO639_2	sqi	Albanian
ISO639_2	ale	Aleut
ISO639_2	alg	Algonquian languages
ISO639_2	tut	Altaic (Other)
ISO639_2	amh	Amharic
IANARFC1766	i-ami	Amis
IANARFC1766	zh-min	Amoy
ISO639_2	apa	Apache languages
ISO639_2	ara	Arabic
ISO639_2	arc	Aramaic
ISO639_2	arp	Arapaho
ISO639_2	arn	Araucanian
ISO639_2	arw	Arawak
ISO639_2	hye	Armenian
ISO639_2	art	Artificial (Other)
ISO639_2	asm	Assamese
ISO639_2	ath	Athapascan languages
ISO639_2	map	Austronesian (Other)
ISO639_2	ava	Avaric
ISO639_2	ave	Avestan
ISO639_2	awa	Awadhi
ISO639_2	aym	Aymara
ISO639_2	aze	Azerbaijani
ISO639_2	nah	Aztec
ISO639_2	ban	Balinese
ISO639_2	bat	Baltic (Other)
ISO639_2	bal	Baluchi
ISO639_2	bam	Bambara
ISO639_2	bai	Bamileke languages
ISO639_2	bad	Banda
ISO639_2	bnt	Bantu (Other)
ISO639_2	bas	Basa
ISO639_2	bak	Bashkir
ISO639_2	eus	Basque
ISO639_2	bej	Beja
ISO639_2	bem	Bemba
ISO639_2	ben	Bengali

ISO639_2	ber	Berber (Other)
ISO639_2	bho	Bhojpuri
ISO639_2	bih	Bihari
ISO639_2	bik	Bikol
ISO639_2	bin	Bini
ISO639_2	bis	Bislama
ISO639_2	bra	Braj
ISO639_2	bre	Breton
ISO639_2	bug	Buginese
ISO639_2	bul	Bulgarian
IANARFC1766	i-bnn	Bunun
ISO639_2	bua	Buriat
ISO639_2	mya	Burmese
ISO639_2	bel	Byelorussian
ISO639_2	cad	Caddo
IANARFC1766	zh-yue	Cantonese
ISO639_2	car	Carib
ISO639_2	cat	Catalan
ISO639_2	cau	Caucasian (Other)
ISO639_2	ceb	Cebuano
ISO639_2	cel	Celtic (Other)
ISO639_2	cai	Central American Indian (Other)
ISO639_2	chg	Chagatai
ISO639_2	cha	Chamorro
ISO639_2	che	Chechen
ISO639_2	chr	Cherokee
ISO639_2	chy	Cheyenne
ISO639_2	chb	Chibcha
ISO639_2	zho	Chinese
ISO639_2	chn	Chinookjargon
ISO639_2	cho	Choctaw
ISO639_2	chu	ChurchSlavic
ISO639_2	chv	Chuvash
ISO639_2	cop	Coptic
ISO639_2	cor	Cornish
ISO639_2	cos	Corsican
ISO639_2	cre	Cree
ISO639_2	mus	Creek
ISO639_2	crp	Creolesand Pidgins (Other)
ISO639_2	cpe	Creolesand Pidgins, English-based (Other)
ISO639_2	cpf	Creolesand Pidgins, French-based (Other)

ISO639_2	cpp	Creolesand Pidgins, Portuguese-based (Other)
ISO639_2	cus	Cushitic (Other)
ISO639_2	ces	Czech
ISO639_2	dak	Dakota
ISO639_2	dan	Danish
ISO639_2	del	Delaware
ISO639_2	din	Dinka
ISO639_2	div	Divehi
ISO639_2	doi	Dogri
ISO639_2	dra	Dravidian (Other)
ISO639_2	dua	Duala
ISO639_2	nla	Dutch
ISO639_2	dum	Dutch, Middle (ca.1050-1350)
ISO639_2	dyu	Dyula
ISO639_2	dzo	Dzongkha
ISO639_2	efi	Efik
ISO639_2	egy	Egyptian (Ancient)
ISO639_2	eka	Ekajuk
ISO639_2	elx	Elamite
ISO639_2	eng	English
ISO639_2	enm	English, Middle (ca.1100-1500)
ISO639_2	ang	English, Old (ca.450-1100)
ISO639_2	esk	Eskimo (Other)
ISO639_2	epo	Esperanto
ISO639_2	est	Estonian
ISO639_2	ewe	Ewe
ISO639_2	ewo	Ewondo
ISO639_2	fan	Fang
ISO639_2	fat	Fanti
ISO639_2	fao	Faroese
ISO639_2	fij	Fijian
ISO639_2	fin	Finnish
ISO639_2	fiu	Finno-Ugrian (Other)
ISO639_2	fon	Fon
ISO639_2	fra	French
ISO639_2	frm	French, Middle (ca.1400-1600)
ISO639_2	fro	French, Old (842-ca.1400)
ISO639_2	fry	Frisian
ISO639_2	ful	Fulah
IANARFC1766	zh-min	Fuzhou
ISO639_2	gaa	Ga

ISO639_2	gdh	Gaelic (Scots)
ISO639_2	glg	Gallegan
IANARFC1766	zh-gan	Gan
ISO639_2	lug	Ganda
ISO639_2	gay	Gayo
ISO639_2	gez	Geez
ISO639_2	kat	Georgian
ISO639_2	deu	German
ISO639_2	gmh	German, Middle High (ca. 1050-1500)
ISO639_2	goh	German, Old High (ca. 750-1050)
ISO639_2	gem	Germanic (Other)
ISO639_2	gil	Gilbertese
ISO639_2	gon	Gondi
ISO639_2	got	Gothic
ISO639_2	grb	Grebo
ISO639_2	grc	Greek, Ancient (to 1453)
ISO639_2	ell	Greek, Modern (1453-)
ISO639_2	kal	Greenlandic
ISO639_2	grn	Guarani
ISO639_2	guj	Gujarati
ISO639_2	hai	Haida
IANARFC1766	i-hak	Hakka
IANARFC1766	zh-hakka	Hakka
ISO639_2	hau	Hausa
ISO639_2	haw	Hawaiian
ISO639_2	heb	Hebrew
ISO639_2	her	Herero
ISO639_2	hil	Hiligaynon
ISO639_2	him	Himachali
ISO639_2	hin	Hindi
ISO639_2	hmo	HiriMotu
IANARFC1766	zh-min	Hokkien
IANARFC1766	zh-xiang	Hunanese
ISO639_2	hun	Hungarian
ISO639_2	hup	Hupa
ISO639_2	iba	Iban
ISO639_2	isl	Icelandic
ISO639_2	ibo	Igbo
ISO639_2	ijo	Ijo
ISO639_2	ilo	Iloko
ISO639_2	inc	Indic (Other)

ISO639_2	ine	Indo-European (Other)
ISO639_2	ind	Indonesian
ISO639_2	ine	Interlingue
ISO639_2	iku	Inuktitut
ISO639_2	ipk	Inupiak
ISO639_2	ira	Iranian (Other)
ISO639_2	gai	Irish
ISO639_2	mga	Irish, Middle (900-1200)
ISO639_2	sga	Irish, Old (to900)
ISO639_2	iro	Iroquoian languages
ISO639_2	ita	Italian
ISO639_2	jpn	Japanese
ISO639_2	jaw	Javanese
ISO639_2	jrb	Judeo-Arabic
ISO639_2	jpr	Judeo-Persian
ISO639_2	kab	Kabyle
ISO639_2	kac	Kachin
ISO639_2	kam	Kamba
IANARFC1766	zh-gan	Kan
ISO639_2	kan	Kannada
ISO639_2	kau	Kanuri
ISO639_2	kaa	Kara-Kalpak
ISO639_2	kar	Karen
ISO639_2	kas	Kashmiri
ISO639_2	kaw	Kawi
ISO639_2	kaz	Kazakh
ISO639_2	kha	Khasi
ISO639_2	khm	Khmer
ISO639_2	khi	Khoisan (Other)
ISO639_2	kho	Khotanese
ISO639_2	kik	Kikuyu
ISO639_2	kin	Kinyarwanda
ISO639_2	kir	Kirghiz
IANARFC1766	i-klingon	Klingon
ISO639_2	kom	Komi
ISO639_2	kon	Kongo
ISO639_2	kok	Konkani
ISO639_2	kor	Korean
ISO639_2	kpe	Kpelle
ISO639_2	kro	Kru
ISO639_2	kua	Kuanyama

ISO639_2	kum	Kumyk
ISO639_2	kur	Kurdish
ISO639_2	kru	Kurukh
ISO639_2	kus	Kusaie
ISO639_2	kut	Kutenai
ISO639_2	lad	Ladino
ISO639_2	lah	Lahnda
ISO639_2	lam	Lamba
ISO639_2	oci	Langued'Oc (post 1500)
ISO639_2	lao	Lao
ISO639_2	lat	Latin
ISO639_2	lav	Latvian
ISO639_2	ltz	Letzeburgesch
ISO639_2	lez	Lezghian
ISO639_2	lin	Lingala
ISO639_2	lit	Lithuanian
ISO639_2	loz	Lozi
ISO639_2	lub	Luba-Katanga
ISO639_2	lui	Luiseno
ISO639_2	lun	Lunda
ISO639_2	luo	Luo (Kenyaand Tanzania)
IANARFC1766	i-lux	Luxembourgish
ISO639_2	mac	Macedonian
ISO639_2	mak	Macedonian
ISO639_2	mad	Madurese
ISO639_2	mag	Magahi
ISO639_2	mai	Maithili
ISO639_2	mak	Makasar
ISO639_2	mlg	Malagasy
ISO639_2	may	Malay
ISO639_2	msa	Malay
ISO639_2	mal	Malayalam
ISO639_2	mlt	Maltese
ISO639_2	man	Mandingo
ISO639_2	mni	Manipuri
ISO639_2	mno	Manobo languages
ISO639_2	max	Manx
ISO639_2	mao	Maori
ISO639_2	mri	Maori
ISO639_2	mar	Marathi
ISO639_2	chm	Mari

ISO639_2	mah	Marshall
ISO639_2	mwr	Marwari
ISO639_2	mas	Masai
ISO639_2	myn	Mayan languages
ISO639_2	men	Mende
ISO639_2	mic	Micmac
IANARFC1766	zh-min	Min
ISO639_2	min	Minangkabau
IANARFC1766	i-mingo	Mingo
ISO639_2	mis	Miscellaneous (Other)
ISO639_2	moh	Mohawk
ISO639_2	mol	Moldavian
ISO639_2	lol	Mongo
ISO639_2	mon	Mongolian
ISO639_2	mkh	Mon-Kmer (Other)
ISO639_2	mos	Mossi
ISO639_2	mul	Multiple languages
ISO639_2	mun	Munda languages
ISO639_2	nau	Nauru
IANARFC1766	i-navajo	Navajo
ISO639_2	nav	Navajo
ISO639_2	nde	Ndebele, North
ISO639_2	nbl	Ndebele, South
ISO639_2	ndo	Ndongo
ISO639_2	nep	Nepali
ISO639_2	new	Newari
ISO639_2	nic	Niger-Kordofanian (Other)
ISO639_2	ssa	Nilo-Saharan (Other)
ISO639_2	niu	Niuean
ISO639_2	non	Norse, Old
ISO639_2	nai	North American Indian (Other)
ISO639_2	nor	Norwegian
IANARFC1766	no-bok	Norwegian "Book language"
IANARFC1766	no-nyn	Norwegian "New Norwegian"
ISO639_2	nno	Norwegian (Nynorsk)
ISO639_2	nub	Nubian languages
ISO639_2	nym	Nyamwezi
ISO639_2	nya	Nyanja
ISO639_2	nyn	Nyankole
ISO639_2	nyo	Nyoro
ISO639_2	nzi	Nzima

ISO639_2	oji	Ojibwa
ISO639_2	ori	Oriya
ISO639_2	orm	Oromo
ISO639_2	osa	Osage
ISO639_2	oss	Ossetic
ISO639_2	oto	Otomian languages
ISO639_2	pal	Pahlavi
IANARFC1766	i-pwn	Paiwan
ISO639_2	pau	Palauan
ISO639_2	pli	Pali
ISO639_2	pam	Pampanga
ISO639_2	pag	Pangasinan
ISO639_2	pan	Panjabi
ISO639_2	pap	Papiamento
ISO639_2	paa	Papuan-Australian (Other)
ISO639_2	fas	Persian
ISO639_2	peo	Persian, Old (ca 600-400 B.C.)
ISO639_2	phn	Phoenician
ISO639_2	pol	Polish
ISO639_2	pon	Ponape
ISO639_2	por	Portuguese
ISO639_2	pra	Prakrit languages
ISO639_2	pro	Provencal, Old (to1500)
ISO639_2	pus	Pushto
ISO639_2	que	Quechua
ISO639_2	raj	Rajasthani
ISO639_2	rar	Rarotongan
ISO639_2	roh	Rhaeto-Romance
ISO639_2	roa	Romance (Other)
ISO639_2	ron	Romanian
ISO639_2	rum	Romanian
ISO639_2	rom	Romany
ISO639_2	run	Rundi
ISO639_2	rus	Russian
ISO639_2	sal	Salishan languages
ISO639_2	sam	Samaritan Aramaic
ISO639_2	smi	Sami languages
ISO639_2	smo	Samoan
ISO639_2	sad	Sandawe
ISO639_2	sag	Sango
ISO639_2	san	Sanskrit

ISO639_2	srd	Sardinian
ISO639_2	sco	Scots
ISO639_2	sel	Selkup
ISO639_2	sem	Semitic (Other)
ISO639_2	scr	Serbo-Croatian
ISO639_2	srr	Serer
ISO639_2	shn	Shan
IANARFC1766	zh-wuu	Shanghaiese
ISO639_2	sna	Shona
ISO639_2	sid	Sidamo
ISO639_2	bla	Siksika
ISO639_2	snd	Sindhi
ISO639_2	sin	Singhalese
ISO639_2	sit	Sino-Tibetan (Other)
ISO639_2	sio	Siouan languages
ISO639_2	ssw	Siswant
ISO639_2	sla	Slavic (Other)
ISO639_2	slk	Slovak
ISO639_2	slv	Slovenian
ISO639_2	sog	Sogdian
ISO639_2	som	Somali
ISO639_2	son	Songhai
ISO639_2	wen	Sorbian languages
ISO639_2	nso	Sotho, Northern
ISO639_2	sot	Sotho, Southern
ISO639_2	sai	South American Indian (Other)
ISO639_2	esl	Spanish
IANARFC1766	zh-guoyu	Standard Chinese
ISO639_2	sun	Sudanese
ISO639_2	suk	Sukuma
ISO639_2	sux	Sumerian
ISO639_2	sus	Susu
ISO639_2	swa	Swahili
ISO639_2	ssw	Swazi
ISO639_2	sve	Swedish
ISO639_2	syr	Syriac
ISO639_2	tgl	Tagalog
ISO639_2	tah	Tahitian
IANARFC1766	zh-min	Taiwanese
ISO639_2	tgk	Tajik
ISO639_2	tmh	Tamashek

ISO639_2	tam	Tamil
IANARFC1766	i-tao	Tao
ISO639_2	tat	Tatar
IANARFC1766	i-tay	Tayal
ISO639_2	tel	Telugu
ISO639_2	ter	Tereno
ISO639_2	tha	Thai
ISO639_2	bod	Tibetan
ISO639_2	tig	Tigre
ISO639_2	tir	Tigrinya
ISO639_2	tem	Timne
ISO639_2	tiv	Tivi
ISO639_2	tli	Tlingit
ISO639_2	tog	Tonga (Nyasa)
ISO639_2	ton	Tonga (Tonga Islands)
ISO639_2	tru	Truk
ISO639_2	tsi	Tsimshian
ISO639_2	tso	Tsonga
IANARFC1766	i-tsu	Tsou
ISO639_2	tsn	Tswana
ISO639_2	tum	Tumbuka
ISO639_2	tur	Turkish
ISO639_2	ota	Turkish, Ottoman (1500-1928)
ISO639_2	tuk	Turkmen
ISO639_2	tyv	Tuvinian
ISO639_2	twi	Twi
ISO639_2	uga	Ugaritic
ISO639_2	uig	Uighur
ISO639_2	ukr	Ukrainian
ISO639_2	umb	Umbundu
ISO639_2	und	Undetermined
ISO639_2	urd	Urdu
ISO639_2	uzb	Uzbek
ISO639_2	vai	Vai
ISO639_2	ven	Venda
ISO639_2	vie	Vietnamese
ISO639_2	vol	Volapük
ISO639_2	vot	Votic
ISO639_2	wak	Wakashan languages
ISO639_2	wal	Walamo
ISO639_2	war	Waray

ISO639_2	was	Washo
ISO639_2	cym	Welsh
ISO639_2	wol	Wolof
IANARFC1766	zh-wuu	Wu
ISO639_2	xho	Xhosa
IANARFC1766	zh-xiang	Xiang
ISO639_2	sah	Yakut
ISO639_2	yao	Yao
ISO639_2	yap	Yap
ISO639_2	yid	Yiddish
ISO639_2	yor	Yoruba
ISO639_2	zap	Zapotec
ISO639_2	zen	Zenaga
ISO639_2	zha	Zhuang
ISO639_2	zul	Zulu
ISO639_2	zun	Zuni

Notes: 1. The IANARFC1766 codes are those registered with IANA for use with RFC 1766, and the most recent list can be found at http://www.isi.edu/in-notes/iana/assignments/languages/tags

2. The "two letter" codes from ISO 639-1:1988 are not used.

3. The ISO639_2 codes are a subset of DIS 639-2, and are the proposed "three letter" codes. They are used here since they cover a much greater range of languages than the two letter codes. Only a subset of 639-2 is included, since duplicates that provide alternative strings for the same language (e.g. both "ger" and "deu" for German) have been removed.

4. ISO 639 codes are always lower case letters.

5. Useful resources for the latest lists of ISO 639 codes can be found at "http://www.dsv.su.se/~jpalme/ietf/language-codes.html

Context ID 5001

Countries

(Most Restrictive Use: Defined)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
ISO3166_1	AF	AFGHANISTAN
ISO3166_1	AL	ALBANIA
ISO3166_1	DZ	ALGERIA
ISO3166_1	AS	AMERICAN SAMOA
ISO3166_1	AD	ANDORRA
ISO3166_1	AO	ANGOLA
ISO3166_1	AI	ANGUILLA
ISO3166_1	AQ	ANTARCTICA
ISO3166_1	AG	ANTIGUA AND BARBUDA

ISO3166_1	AR	ARGENTINA
ISO3166_1	AM	ARMENIA
ISO3166_1	AW	ARUBA
ISO3166_1	AU	AUSTRALIA
ISO3166_1	AT	AUSTRIA
ISO3166_1	AZ	AZERBAIJAN
ISO3166_1	BS	BAHAMAS
ISO3166_1	BH	BAHRAIN
ISO3166_1	BD	BANGLADESH
ISO3166_1	BB	BARBADOS
ISO3166_1	BY	BELARUS
ISO3166_1	BE	BELGIUM
ISO3166_1	BZ	BELIZE
ISO3166_1	BJ	BENIN
ISO3166_1	BM	BERMUDA
ISO3166_1	BT	BHUTAN
ISO3166_1	BO	BOLIVIA
ISO3166_1	BA	BOSNIA AND HERZEGOVINA
ISO3166_1	BW	BOTSWANA
ISO3166_1	BV	BOUVET ISLAND
ISO3166_1	BR	BRAZIL
ISO3166_1	IO	BRITISH INDIAN OCEAN TERRITORY
ISO3166_1	BN	BRUNEI DARUSSALAM
ISO3166_1	BG	BULGARIA
ISO3166_1	BF	BURKINA FASO
ISO3166_1	BI	BURUNDI
ISO3166_1	KH	CAMBODIA
ISO3166_1	CM	CAMEROON
ISO3166_1	CA	CANADA
ISO3166_1	CV	CAPE VERDE
ISO3166_1	KY	CAYMAN ISLANDS
ISO3166_1	CF	CENTRAL AFRICAN REPUBLIC
ISO3166_1	TD	CHAD
ISO3166_1	CL	CHILE
ISO3166_1	CN	CHINA
ISO3166_1	CX	CHRISTMAS ISLAND
ISO3166_1	CC	COCOS (KEELING) ISLANDS
ISO3166_1	CO	COLOMBIA
ISO3166_1	KM	COMOROS
ISO3166_1	CG	CONGO

ISO3166_1	CD	CONGO, THE DEMOCRATIC REPUBLIC OF THE
ISO3166_1	CK	COOK ISLANDS
ISO3166_1	CR	COSTA RICA
ISO3166_1	CI	CÔTE D'IVOIRE
ISO3166_1	HR	CROATIA
ISO3166_1	CU	CUBA
ISO3166_1	CY	CYPRUS
ISO3166_1	CZ	CZECH REPUBLIC
ISO3166_1	DK	DENMARK
ISO3166_1	DJ	DJIBOUTI
ISO3166_1	DM	DOMINICA
ISO3166_1	DO	DOMINICAN REPUBLIC
ISO3166_1	TP	EAST TIMOR
ISO3166_1	EC	ECUADOR
ISO3166_1	EG	EGYPT
ISO3166_1	SV	EL SALVADOR
ISO3166_1	GQ	EQUATORIAL GUINEA
ISO3166_1	ER	ERITREA
ISO3166_1	EE	ESTONIA
ISO3166_1	ET	ETHIOPIA
ISO3166_1	FK	FALKLAND ISLANDS
ISO3166_1	FO	FAROE ISLANDS
ISO3166_1	FJ	FIJI
ISO3166_1	FI	FINLAND
ISO3166_1	FR	FRANCE
ISO3166_1	GF	FRENCH GUIANA
ISO3166_1	PF	FRENCH POLYNESIA
ISO3166_1	TF	FRENCH SOUTHERN TERRITORIES
ISO3166_1	GA	GABON
ISO3166_1	GM	GAMBIA
ISO3166_1	GE	GEORGIA
ISO3166_1	DE	GERMANY
ISO3166_1	GH	GHANA
ISO3166_1	GI	GIBRALTAR
ISO3166_1	GR	GREECE
ISO3166_1	GL	GREENLAND
ISO3166_1	GD	GRENADA
ISO3166_1	GP	GUADELOUPE
ISO3166_1	GU	GUAM
ISO3166_1	GT	GUATEMALA
ISO3166_1	GN	GUINEA

ISO3166_1	GW	GUINEA-BISSAU
ISO3166_1	GY	GUYANA
ISO3166_1	HT	HAITI
ISO3166_1	HM	HEARD ISLAND AND MCDONALD ISLANDS
ISO3166_1	VA	HOLY SEE (VATICAN CITY STATE)
ISO3166_1	HN	HONDURAS
ISO3166_1	HK	HONG KONG
ISO3166_1	HU	HUNGARY
ISO3166_1	IS	ICELAND
ISO3166_1	IN	INDIA
ISO3166_1	ID	INDONESIA
ISO3166_1	IR	IRAN, ISLAMIC REPUBLIC OF
ISO3166_1	IQ	IRAQ
ISO3166_1	IE	IRELAND
ISO3166_1	IL	ISRAEL
ISO3166_1	IT	ITALY
ISO3166_1	JM	JAMAICA
ISO3166_1	JP	JAPAN
ISO3166_1	JO	JORDAN
ISO3166_1	KZ	KAZAKSTAN
ISO3166_1	KE	KENYA
ISO3166_1	KI	KIRIBATI
ISO3166_1	KP	KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF
ISO3166_1	KR	KOREA, REPUBLIC OF
ISO3166_1	KW	KUWAIT
ISO3166_1	KG	KYRGYZSTAN
ISO3166_1	LA	LAO PEOPLE'S DEMOCRATIC REPUBLIC
ISO3166_1	LV	LATVIA
ISO3166_1	LB	LEBANON
ISO3166_1	LS	LESOTHO
ISO3166_1	LR	LIBERIA
ISO3166_1	LY	LIBYAN ARAB JAMAHIRIYA
ISO3166_1	LI	LIECHTENSTEIN
ISO3166_1	LT	LITHUANIA
ISO3166_1	LU	LUXEMBOURG
ISO3166_1	MO	MACAU
ISO3166_1	MK	MACEDONIA, THE FORMER YUGOSLAV REPUBLIC OF
ISO3166_1	MG	MADAGASCAR
ISO3166_1	MW	MALAWI
ISO3166_1	MY	MALAYSIA

ISO3166_1	MV	MALDIVES
ISO3166_1	ML	MALI
ISO3166_1	MT	MALTA
ISO3166_1	MH	MARSHALL ISLANDS
ISO3166_1	MQ	MARTINIQUE
ISO3166_1	MR	MAURITANIA
ISO3166_1	MU	MAURITIUS
ISO3166_1	YT	MAYOTTE
ISO3166_1	MX	MEXICO
ISO3166_1	FM	MICRONESIA, FEDERATED STATES OF
ISO3166_1	MD	MOLDOVA, REPUBLIC OF
ISO3166_1	MC	MONACO
ISO3166_1	MN	MONGOLIA
ISO3166_1	MS	MONTSERRAT
ISO3166_1	MA	MOROCCO
ISO3166_1	MZ	MOZAMBIQUE
ISO3166_1	MM	MYANMAR
ISO3166_1	NA	NAMIBIA
ISO3166_1	NR	NAURU
ISO3166_1	NP	NEPAL
ISO3166_1	NL	NETHERLANDS
ISO3166_1	AN	NETHERLANDS ANTILLES
ISO3166_1	NC	NEW CALEDONIA
ISO3166_1	NZ	NEW ZEALAND
ISO3166_1	NI	NICARAGUA
ISO3166_1	NE	NIGER
ISO3166_1	NG	NIGERIA
ISO3166_1	NU	NIUE
ISO3166_1	NF	NORFOLK ISLAND
ISO3166_1	MP	NORTHERN MARIANA ISLANDS
ISO3166_1	NO	NORWAY
ISO3166_1	OM	OMAN
ISO3166_1	PK	PAKISTAN
ISO3166_1	PW	PALAU
ISO3166_1	PS	PALESTINIAN TERRITORY, OCCUPIED
ISO3166_1	PA	PANAMA
ISO3166_1	PG	PAPUA NEW GUINEA
ISO3166_1	PY	PARAGUAY
ISO3166_1	PE	PERU
ISO3166_1	PH	PHILIPPINES
ISO3166_1	PN	PITCAIRN

ISO3166_1	PL	POLAND
ISO3166_1	PT	PORTUGAL
ISO3166_1	PR	PUERTO RICO
ISO3166_1	QA	QATAR
ISO3166_1	RE	RÉUNION
ISO3166_1	RO	ROMANIA
ISO3166_1	RU	RUSSIAN FEDERATION
ISO3166_1	RW	RWANDA
ISO3166_1	SH	SAINT HELENA
ISO3166_1	KN	SAINT KITTS AND NEVIS
ISO3166_1	LC	SAINT LUCIA
ISO3166_1	PM	SAINT PIERRE AND MIQUELON
ISO3166_1	VC	SAINT VINCENT AND THE GRENADINES
ISO3166_1	WS	SAMOA
ISO3166_1	SM	SAN MARINO
ISO3166_1	ST	SAO TOME AND PRINCIPE
ISO3166_1	SA	SAUDI ARABIA
ISO3166_1	SN	SENEGAL
ISO3166_1	SC	SEYCHELLES
ISO3166_1	SL	SIERRA LEONE
ISO3166_1	SG	SINGAPORE
ISO3166_1	SK	SLOVAKIA
ISO3166_1	SI	SLOVENIA
ISO3166_1	SB	SOLOMON ISLANDS
ISO3166_1	SO	SOMALIA
ISO3166_1	ZA	SOUTH AFRICA
ISO3166_1	GS	SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS
ISO3166_1	ES	SPAIN
ISO3166_1	LK	SRI LANKA
ISO3166_1	SD	SUDAN
ISO3166_1	SR	SURINAME
ISO3166_1	SJ	SVALBARD AND JAN MAYEN
ISO3166_1	SZ	SWAZILAND
ISO3166_1	SE	SWEDEN
ISO3166_1	CH	SWITZERLAND
ISO3166_1	SY	SYRIAN ARAB REPUBLIC
ISO3166_1	TW	TAIWAN, PROVINCE OF CHINA
ISO3166_1	TJ	TAJIKISTAN
ISO3166_1	TZ	TANZANIA, UNITED REPUBLIC OF
ISO3166_1	TH	THAILAND

ISO3166_1	TG	TOGO
ISO3166_1	TK	TOKELAU
ISO3166_1	TO	TONGA
ISO3166_1	TT	TRINIDAD AND TOBAGO
ISO3166_1	TN	TUNISIA
ISO3166_1	TR	TURKEY
ISO3166_1	TM	TURKMENISTAN
ISO3166_1	TC	TURKS AND CAICOS ISLANDS
ISO3166_1	TV	TUVALU
ISO3166_1	UG	UGANDA
ISO3166_1	UA	UKRAINE
ISO3166_1	AE	UNITED ARAB EMIRATES
ISO3166_1	GB	UNITED KINGDOM
ISO3166_1	US	UNITED STATES
ISO3166_1	UM	UNITED STATES MINOR OUTLYING ISLANDS
ISO3166_1	UY	URUGUAY
ISO3166_1	UZ	UZBEKISTAN
ISO3166_1	VU	VANUATU
ISO3166_1	VE	VENEZUELA
ISO3166_1	VN	VIETNAM
ISO3166_1	VG	VIRGIN ISLANDS, BRITISH
ISO3166_1	VI	VIRGIN ISLANDS, U.S.
ISO3166_1	WF	WALLIS AND FUTUNA
ISO3166_1	EH	WESTERN SAHARA
ISO3166_1	YE	YEMEN
ISO3166_1	YU	YUGOSLAVIA
ISO3166_1	ZM	ZAMBIA
ISO3166_1	ZW	ZIMBABWE

Notes: 1. The ISO3166_1 codes are from ISO 3166-1, last updated 1999/10/01, as listed at "http://www.din.de/gremien/nas/nabd/iso3166ma/codlstp1.html"

2. ISO 3166 codes are always upper case letters.

Context ID 7000

DIAGNOSTIC IMAGING REPORT DOCUMENT TITLES

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
LN	18745-0	Cardiac Catheteization Report
LN	11540-2	CT Abdomen Report
LN	11538-6	CT Chest Report
LN	11539-4	CT Head Report
LN	18747-6	CT Report
LN	18748-4	Diagnostic Imaging Report
LN	11522-0	Echo Heart Report
LN	18760-9	Echo Report
LN	11541-0	MRI Head Report
LN	18755-9	MRI Report
LN	18756-7	MRI Spine Report
LN	18757-5	Nuclear Medicine Report
LN	11525-3	Obstetric Echo Pelvis+Fetus Report
LN	18758-3	PET Scan Report
LN	11528-7	Radiology Report

Context ID 7001

DIAGNOSTIC IMAGING REPORT HEADINGS

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
DCM	121060	History
DCM	121062	Request
DCM	121064	Current Procedure Descriptions
DCM	121066	Prior Procedure Descriptions
DCM	121068	Previous Findings
DCM	121070	Findings
DCM	121072	Impressions
DCM	121074	Recommendations
DCM	121076	Conclusions
DCM	121078	Addendum

Context ID 7002

DIAGNOSTIC IMAGING REPORT ELEMENTS

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
DCM	121060	History
DCM	121062	Request
DCM	121065	Procedure Description
DCM	121069	Previous Finding
DCM	121071	Finding
DCM	121073	Impression
DCM	121075	Recommendation
DCM	121077	Conclusion

CID 7003

DIAGNOSTIC IMAGING REPORT PURPOSES OF REFERENCE

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
DCM	121079	Baseline
DCM	121080	Best illustration of finding

CID 7452
Organizational Roles

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
DCM	121081	Physician
DCM	121082	Nurse
DCM	121083	Technologist
DCM	121084	Radiographer
DCM	121085	Intern
DCM	121086	Resident
DCM	121087	Registrar
DCM	121088	Fellow
DCM	121089	Attending [Consultant]
DCM	121090	Scrub nurse
DCM	121091	Surgeon
DCM	121092	Sonologist
DCM	121093	Sonographer

CID 7453
Performing Roles

(Most Restrictive Use: Baseline)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
DCM	121094	Performing
DCM	121095	Referring
DCM	121096	Requesting
DCM	121097	Recording
DCM	121098	Verifying
DCM	121099	Assisting
DCM	121100	Circulating
DCM	121101	Standby

CID 7454
Species

(Most Restrictive Use: Defined)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3	L-85B00	homo sapiens

CID 7455
Sex

(Most Restrictive Use: Enumerated)

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
ISO5218_1	M	Male
ISO5218_1	F	Female
ISO5218_1	U	Unknown
ISO5218_1	MP	Male Pseudohermaphrodite
ISO5218_1	FP	Female Pseudohermaphrodite
ISO5218_1	H	Hermaphrodite
ISO5218_1	MC	Male changed to Female
ISO5218_1	FC	Female changed to Male
DCM	121102	Other
DCM	121103	Undetermined (temporarily)

Note: ISO 5218 is the choice of coding scheme for sex in ASTM E1633-00 “Standard Specification for Coded Values Used in the Electronic Health Record.”

CID 7456
Units of Measure for Age

(Most Restrictive Use: Enumerated)

Coding Scheme Designator (0008,0102)	Coding Scheme Version (0008,0103)	Code Value (0008,0100)	Code Meaning (0008,0104)
UCUM	1.4	a	year
UCUM	1.4	mo	month
UCUM	1.4	wk	week
UCUM	1.4	d	day
UCUM	1.4	h	hour
UCUM	1.4	min	minute

CONTEXT GROUP 7460

Units of Linear Measurement

(Most Restrictive Use: Defined)

Coding Scheme Designator (0008,0102)	Coding Scheme Version (0008,0103)	Code Value (0008,0100)	Code Meaning (0008,0104)
UCUM	1.4	cm	centimeter
UCUM	1.4	mm	millimeter
UCUM	1.4	um	micrometer

CONTEXT GROUP 7461

Units of Area Measurement

(Most Restrictive Use: Defined)

Coding Scheme Designator (0008,0102)	Coding Scheme Version (0008,0103)	Code Value (0008,0100)	Code Meaning (0008,0104)
UCUM	1.4	cm2	Square centimeter
UCUM	1.4	mm2	Square millimeter
UCUM	1.4	um2	Square micrometer

CONTEXT GROUP 7462

Units of Volume Measurement

(Most Restrictive Use: Defined)

Coding Scheme Designator (0008,0102)	Coding Scheme Version (0008,0103)	Code Value (0008,0100)	Code Meaning (0008,0104)
UCUM	1.4	dm3	Cubic decimeter
UCUM	1.4	cm3	Cubic centimeter
UCUM	1.4	mm3	Cubic millimeter
UCUM	1.4	um3	Cubic micrometer

Note: A "cubic decimeter" is a "liter", just as a "cubic centimeter" is a "milliliter" (of water). Though there are specific units "l" and "ml" in UCUM, only one form is included here, since this context group is intended for use for volume measurements of a physical object derived from one or more images, rather than of fluid volume.

CONTEXT GROUP 7470

Linear Measurements

(Most Restrictive Use: Defined)

Coding Scheme Designator (0008,0102)	Coding Scheme Version (0008,0103)	Code Value (0008,0100)	Code Meaning (0008,0104)
SRT	V1.1	G-A22A	Length
DCM		121211	Path length
DCM		121206	Distance
SNM3		G-A220	Width
SRT	V1.1	G-D785	Depth
SNM3		M-02550	Diameter
SNM3		G-A185	Long Axis
SNM3		G-A186	Short Axis
SRT	V1.1	G-A193	Major Axis
SRT	V1.1	G-A194	Minor Axis
SRT	V1.1	G-A195	Perpendicular Axis
SNM3		G-A196	Radius
SRT	V1.1	G-A197	Perimeter
SNM3		M-02560	Circumference
SRT	V1.1	G-A198	Diameter of circumscribed circle

CONTEXT GROUP 7471

Area Measurements

(Most Restrictive Use: Defined)

Coding Scheme Designator (0008,0102)	Coding Scheme Version (0008,0103)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3		G-A166	Area
SRT	V1.1	G-A167	Area of defined region

CONTEXT GROUP 7472

Volume Measurements

(Most Restrictive Use: Defined)

Coding Scheme Designator (0008,0102)	Coding Scheme Version (0008,0103)	Code Value (0008,0100)	Code Meaning (0008,0104)
SNM3		G-D705	Volume
DCM		121216	Volume estimated from single 2D region

Coding Scheme Designator (0008,0102)	Coding Scheme Version (0008,0103)	Code Value (0008,0100)	Code Meaning (0008,0104)
DCM		121218	Volume estimated from two non-coplanar 2D regions
DCM		121217	Volume estimated from three or more non-coplanar 2D regions
DCM		121222	Volume of sphere
DCM		121221	Volume of ellipsoid
DCM		121220	Volume of circumscribed sphere
DCM		121219	Volume of bounding three dimensional region

Context ID 9231 – General Purpose Workitem Definition

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
DCM	110001	Image Processing
DCM	110002	Quality Control
DCM	110003	Computer Aided Diagnosis
DCM	110004	Computer Aided Detection
DCM	110005	Interpretation
DCM	110006	Transcription
DCM	110007	Report Verification
DCM	110008	Print
DCM	110009	No subsequent Workitems

Context ID 9232 – Non-DICOM Output Types

Coding Scheme Designator (0008,0102)	Code Value (0008,0100)	Code Meaning (0008,0104)
DCM	110010	Film
DCM	110011	Dictation
DCM	110012	Transcription

Annex C Acquisition Context Templates (Normative)

This Annex specifies the content of Templates for Acquisition Context required by DICOM IODs.

TID 3401 ECG ACQUISITION CONTEXT

TID 3401
ECG Acquisition Context

	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1	CODE	(5.4.5-33-1,SCPECG,1.3, "Electrode Placement")	1	U		BCID(3263)
2	CODE	(109054,DCM,"Patient State")	1	U		BCID(3262)
3	NUM	(109055,DCM,"Protocol Stage")	1	U		UNITS=EV("{stage}",UCUM,"stage")
4	CODE	(109056,DCM,"Stress Protocol")	1	U		BCID(3261)
5	CODE	(5.4.5-33-2,SCPECG,1.3, "XYZ Electrode Configuration")	1	U		BCID(3264)

TID 3403 CATHETERIZATION ACQUISITION CONTEXT

TID 3403
Catheterization Acquisition Context

	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1	CODE	(109057,DCM,"Catheterization Procedure Phase")	1	U		BCID(3250)
2	CODE	(109058,DCM,"Contrast Phase")	1	U		BCID(3250)
3	CODE	(109059,DCM,"Physiological challenges")	1	U		BCID(3271)
4	NUM	(109060,DCM,"Procedure Step Number")	1	U		UNITS=EV("{step}",UCUM,"step")

TID 3450 CARDIAC ELECTROPHYSIOLOGY ACQUISITION CONTEXT

TID 3450
Cardiac Electrophysiology Acquisition Context

	VT	Concept Name	VM	Req Type	Condition	Value Set Constraint
1	CODE	(109061,DCM,"EP Procedure Phase")	1	U		BCID(3254)
2	NUM	(109060,DCM,"Procedure Step Number")	1	U		UNITS=EV("{step}",UCUM,"step")
3	TEXT	(109063,DCM,"Pulse train definition")	1	U		

Annex D DICOM Controlled Terminology Definitions (Normative)

This Annex specifies the meanings of codes defined in DICOM, either explicitly or by reference to another part of DICOM or an external reference document or standard.

DICOM Code Definitions (Coding Scheme Designator "DCM" Coding Scheme Version "01")

Code Value	Code Meaning	Definition
109001	Digital timecode (NOS)	A signal transmitted for the purpose of interchange of the current time, not specific to any source or methodology.
109002	ECG-based gating signal, processed	A signal which is generated for each detection of a heart beat
109003	IRIG-B timecode	A signal transmitted by the Inter-Range Instrumentation Group for the purpose of synchronizing time clocks.
109004	X-ray Fluoroscopy On Signal	A signal which indicates that X-ray source has been activated for fluoroscopy use.
109005	X-ray On Trigger	A signal that indicated that the X-ray source has been activated for image recording.
109006	Differential signal	An electrical signal derived from two electrodes
109007	His bundle electrogram	An electrophysiological recording from the HIS nerve bundle
109008	Monopole signal	An electrical signal from one electrode relative to an indifferent potential.
109009	Pacing (electrical) stimulus, voltage	The voltage stimulus during cardiac pacing
109010	Radio frequency ablation, power	The power injected during RF ablation procedure
109011	Voltage measurement by basket catheter	Electrophysiological signals acquired using a multi-splined catheter each equipped with multiple electrodes.
109012	Voltage measurement by mapping catheter	Electrophysiological signals acquired using a steerable catheter
109013	Voltage measurement, NOS	A voltage measurement not otherwise specified
109014	35% of thermal CO	A signal point which is 35% of the peak therma cardiac output signal
109015	70% of thermal CO	A signal point which is 70% of the peak therma cardiac output signal
109016	A wave	The peak pressure of each heart beat monitored in the atrium caused by the atrial contraction
109017	A wave average	The average of several A wave pressure measurements
109018	Beat detected (accepted)	An identified cardiac beat used in the determination of a measurement

109019	Beat detected (rejected)	An identified cardiac beat not used in the determination of a measurement
109020	Diastolic average	The average of several diastolic measurements
109021	Diastolic nadir	The lowest pressure value on a hemodynamic waveform but excluding any undershoot artifact.
109022	End diastole	The moment at the end of the diastolic phase of the cardiac cycle.
109023	End of expiration	The moment at the end of respiratory expiration
109024	End of inspiration	The moment at the end of respiratory inspiration
109025	Max dp/dt	The maximum positive rate of change of pressure.
109026	Max neg dp/dt	The maximum negative rate of change of pressure.
109027	Mean pressure	The average pressure value, generally over 2 or more seconds
109028	Peak of thermal CO	The peak change in blood temperature during a thermal cardiac output measurement.
109029	Start of expiration	The moment respiratory expiration begins
109030	Start of inspiration	The moment of respiratory inspiration begins
109031	Start of thermal CO	The first discernable blood temperature change following the injectate during a thermal cardiac output measurement
109032	Systolic average	The average of several systolic measurements.
109033	Systolic peak	The highest pressure value on a hemodynamic waveform but excluding any overshoot artifact
109034	V wave	The peak pressure of each heart beat monitored in the atrium caused by the filling of the atrium.
109035	V wave average	The average of several V wave pressure measurements
109036	Valve close	The moment at which a heart valve closes
109037	Valve open	The moment at which a heart valve opens
109038	Ablation off	The moment when RF ablation current is turned off.
109039	Ablation on	The moment when RF ablation current is turned on
109040	HIS bundle wave	The moment in the cardiac cycle when the HIS bundle nerves depolarize.
109041	P wave	The surface electrocardiogram of the atrial contraction
109042	Q wave	The first negative deflection of the electrocardiogram cause by ventricular depolarization
109043	R wave	The first positive deflection the electrocardiogram cause by ventricular depolarization
109044	S wave	The first negative deflection after the R wave.
109045	Start of atrial contraction	The beginning of the atrial contraction

109046	Start of atrial contraction (subsequent)	The beginning of the second atrial contraction of two consecutive beats.
109047	Stimulation at rate 1 interval	The stimulation interval during cardiac stimulation first used in a pacing train
109048	Stimulation at rate 2 interval	The stimulation interval different from the first stimulation interval used in a pacing train
109049	Stimulation at rate 3 interval	A stimulation interval different from and subsequent to the second interval in a pacing train.
109050	Stimulation at rate 4 interval	Describes a stimulation interval different from and subsequent to the third interval in a pacing train
109051	T wave	The electrocardiogram deflection caused by ventricular repolarization.
109052	V wave	The peak pressure of each heart beat monitored in the atrium caused by the filling of the atrium
109053	V wave of next beat	The second V wave measurement of two consecutive beats.
109054	Patient State	A description of the physiological condition of the patient
109055	Protocol Stage	The exercise level during a progressive cardiac stress test.
109056	Stress Protocol	A series of physiological challenges designed to progressively increase the work of the heart.
109057	Catheterization Procedure Phase	A subpart of a cardiac catheterization procedure
109058	Contrast Phase	The subpart of a cardiac catheterization procedure in which a radio-opaque contrast medium is injected into the patient.
109059	Physiological challenges	Physical changes administered to a patient in order to elicit an physiological response
109060	Procedure Step Number	Enumeration of a subpart of a catheterization procedure
109061	EP Procedure Phase	A subpart of en electrophysiological procedure
109063	Pulse train definition	A means of defining a series of cardiac stimulation pulses
109070	End of systole	
109071	Indicator mean transit time	Time for a median particle to travel from point of injection to point of detection
109072	Tau	The time constant of isovolumic pressure fall
109073	V max	Maximum velocity of myocardial contractility
110001	Image Processing	Image processing work item
110002	Quality Control	Quality control work item
110003	Computer Aided Diagnosis	Computer aided diagnosis work item
110004	Computer Aided Detection	Computer aided detection work item
110005	Interpretation	Interpretation work item
110006	Transcription	Transcription work item

110007	Report Verification	Report verification work item
110008	Print	Print work item
110009	No subsequent Workitems	
110010	Film	Film type of output
110011	Dictation	Dictation type of output
110012	Transcription	Transcription type of output
121001	Quotation Mode	
121002	Quoted Source	
121003	Document	
121004	Verbal	
121005	Observer Type	
121006	Person	
121007	Device	
121008	Person Observer Name	
121009	Person Observer's Organization Name	
121010	Person Observer's Role in the Organization	
121011	Person Observer's Role in this Procedure	
121012	Device Observer UID	
121013	Device Observer Name	
121014	Device Observer Manufacturer	
121015	Device Observer Model Name	
121016	Device Observer Serial Number	
121017	Device Observer Physical Location during observation	
121018	Procedure Study Instance UID	
121019	Procedure Study Component UID	
121020	Procedure HL7 Placer Number of Evidence	
121021	Procedure HL7 Filler Number of Evidence	
121022	Procedure Accession Number	
121023	Procedure Code	
121024	Subject Class	
121025	Patient	
121026	Fetus	
121027	Specimen	
121028	Subject UID	
121029	Subject Name	
121030	Subject ID	
121031	Subject Birth Date	

121032	Subject Sex	
121033	Subject Age	
121034	Subject Species	
121036	Mother of fetus	
121037	Fetus number	
121038	Number of Fetuses	
121039	Specimen UID	
121040	Specimen Accession Number	
121041	Specimen Identifier	
121042	Specimen Type	
121043	Slide Identifier	
121044	Slide UID	
121045	Language	
121046	Country of Language	
121047	Language of Value	
121048	Language of Name and Value	
121049	Language of Content Item and Descendants	
121050	Equivalent Meaning of Concept Name	
121051	Equivalent Meaning of Value	
121052	Presence of property	
121053	Present	
121054	Absent	
121055	Path	
121056	Area outline	
121057	Perimeter outline	
121058	Procedure reported	
121059		
121060	History	
121061		
121062	Request	
121063		
121064	Current Procedure Descriptions	
121065	Procedure Description	
121066	Prior Procedure Descriptions	
121068	Previous Findings	
121069	Previous Finding	
121070	Findings	
121071	Finding	
121072	Impressions	

121073	Impression	
121074	Recommendations	
121075	Recommendation	
121076	Conclusions	
121077	Conclusion	
121078	Addendum	
121079	Baseline	
121080	Best illustration of finding	
121081	Physician	
121082	Nurse	
121083	Technologist	
121084	Radiographer	
121085	Intern	
121086	Resident	
121087	Registrar	
121088	Fellow	
121089	Attending [Consultant]	
121090	Scrub nurse	
121091	Surgeon	
121092	Sonologist	
121093	Sonographer	
121094	Performing	
121095	Referring	
121096	Requesting	
121097	Recording	
121098	Verifying	
121099	Assisting	
121100	Circulating	
121101	Standby	
121102	Other	Other sex
121103	Undetermined (temporarily)	Temporarily undetermined sex
121201	Area Outline	
121206	Distance	
121210	Path	
121211	Path length	
121213	Perimeter Outline	
121216	Volume estimated from single 2D region	
121217	Volume estimated from three or more non-coplanar 2D regions	
121218	Volume estimated from two non-coplanar 2D regions	

121219	Volume of bounding three dimensional region	
121220	Volume of circumscribed sphere	
121221	Volume of ellipsoid	
121222	Volume of sphere	

Annex E French Translations of Selected Codes used in the DCMR (Normative)

This Annex defines the French language code meanings for selected codes used in the DCMR.

Coding Scheme Designator	Code Value	Code Meaning English Language	Code Meaning French Language
DCM	121078	Addendum	Addendum
SNM3	G-A127	Afferent	Afférent
SNM3	G-A174	Along edge	Au bord
SNM3	F-10326	anatomical	Anatomique
SNM3	G-A105	Anterior	Antérieur
SNM3	G-A180	Anterolateral	Antéro-latéral
SNM3	G-A122	Apical	Apical
SNM3	G-A166	Area	Surface
SRT	G-A167	Area of defined region	Surface de la région définie
DCM	121201	Area Outline	Tracé de la surface
DCM	121089	Attending (syn. Consultant)	Consultant
SNM3	G-A147	Axial	Axial
SNM3	R-102D1	Axillary Tail	Prolongement axillaire
SNM3	G-A123	Basal	Basal
DCM	121079	Baseline	Référence
DCM	121080	Best illustration of finding	Meilleure illustration des résultats
SNM3	G-A102	Bilateral	Bilatéral
SNM3	T-04000	Breast	Sein
SNM3	T-04000	Breast, NOS	Sein, SAI
SNM3	G-A171	Capsular	Capsulaire
SNM3	G-A108	Caudal	Caudal
SNM3	G-A108	Caudal	Caudal
SNM3	G-A107	Caudal-cranial	Pieds-tête
SNM3	R-10244	caudo-cranial (from below)	Face caudo-craniale
UCUM	cm	centimeter	Centimètre
SNM3	G-A110	Central	Central
SNM3	G-A107	Cephalic	Céphalique
SNM3	G-A107	Cephalic	Céphalique
SNM3	M-02560	Circumference	Circonférence
SNM3	R-102D2	Cleavage	Sillon inter-mammaire
DCM	110004	Computer Aided Detection	
DCM	110003	Computer Aided Diagnosis	
DCM	121077	Conclusion	Conclusion

DCM	121076	Conclusions	Conclusions
SNM3	G-A138	Coronal	Coronal
SNM3	G-A108	Cranial-caudal	Tête-pieds
SNM3	G-A108	Cranio-caudal	Cranio-caudal
SNM3	R-10242	cranio-caudal	Face
SNM3	Y-X1770	cranio-caudal exaggerated laterally	Face exagérée externe
SNM3	Y-X1771	cranio-caudal exaggerated medially	Face exagérée interne
LN	18747-6	CT Report	Compte rendu TDM
UCUM	cm3	Cubic centimeter	Centimètre cube
UCUM	um3	Cubic micrometer	Micromètre cube
UCUM	mm3	Cubic millimeter	Millimètre cube
SNM3	F-10410	curled-up	En chien de fusil
DCM	121064	Current Procedure Descriptions	Description de la procédure en cours
UCUM	d	day	Jour
SNM3	G-A140	Deep	Profond
SRT	G-D785	Depth	Profondeur
SNM3	M-02550	Diameter	Diamètre
SRT	G-A198	Diameter of circumscribed circle	Diamètre du cercle circonscrit
DCM	110011	Dictation	
SNM3	G-A119	Distal	Distal
DCM	121206	Distance	
SNM3	G-A106	Dorsal	Dorsal
SNM3	G-A174	Edge	Bord
SNM3	G-A128	Efferent	Efférent
SNM3	F-10440	erect	Debout
SNM3	R-102CF	exaggerated cranio-caudal	Face exagérée
SNM3	G-A112	External	Externe
SNM3	G-A151	Extra-articular	Extra-articulaire
ISO5218_1	F	female	Femme
DCM	110010	Film	
DCM	121071	Finding	Résultat
DCM	121070	Findings	Résultats
SNM3	F-10380	frog	Position de la grenouille
SNM3	G-A138	Frontal	Frontal
SNM3	G-A169	Gutter	Gouttière
SNM3	G-A170	Hilar	Hilaire
SNM3	G-A170	Hilus	Hile

DCM	121060	History	Antécédents
SNM3	G-A142	Horizontal	Horizontal
UCUM	h	hour	Heure
DCM	110001	Image Processing	
SNM3	R-102D5	Implant Displaced	Prothèse déplacée
DCM	121073	Impression	Impression
DCM	121072	Impressions	Impressions
SNM3	G-A115	Inferior	Inférieur
SNM3	G-A113	Inner	En dedans
SNM3	G-A114	Intermediate	Intermédiaire
DCM	121085	Intern	Interne
SNM3	G-A113	Internal	Interne
DCM	110005	Interpretation	
SNM3	G-A15A	Intra-articular	Intra-articulaire
SNM3	F-10349	inverse Trendelenburg	Trendelenburg inversé
SNM3	F-10336	knee-chest	Genu pectoral
SNM3	F-10330	kneeling	À genou [à genou]
SNM3	G-A104	Lateral	Externe
SNM3	F-10318	lateral decubitus	Décubitus latéral
SNM3	R-10228	latero-medial	Profil externe
SNM3	R-10230	latero-medial oblique	Latéro-médial oblique
SNM3	G-A101	Left	Gauche
SNM3	G-A101	Left lateral	Latéral gauche
SNM3	F-10319	left lateral decubitus	Décubitus latéral gauche
SRT	G-A22A	Length	Longueur
SNM3	F-10346	lithotomy	Lithotomie
SNM3	G-A185	Long Axis	Grand axe
SNM3	G-A143	Longitudinal	Longitudinal
SNM3	T-04003	Lower inner quadrant of breast, NOS	Quadrant inféro-interne du sein, SAI
SNM3	T-04005	Lower outer quadrant of breast, NOS	Quadrant inféro-externe du sein, SAI
SNM3	R-102D6	Magnification	Agrandissement
SRT	G-A193	Major Axis	Axe principal
ISO5218_1	M	male	Homme
SNM3	G-A177	Marginal	Marginal
SNM3	G-A109	Medial	Médial
SNM3	G-A109	Median	Médian
SNM3	R-10224	medio-lateral	Profil interne
SNM3	R-10226	medio-lateral oblique	Médiolatéral oblique
UCUM	um	micrometer	Micromètre
SNM3	G-A109	Middle	Milieu

UCUM	mm	millimeter	Millimètre
SRT	G-A194	Minor Axis	Axe secondaire
UCUM	min	minute	Minute
UCUM	mo	month	Mois
LN	18755-9	MR Report	Compte rendu IRM
DCM	110009	No subsequent Workitems	
DCM	121082	Nurse	Infirmière
SNM3	G-A103	One-sided	Situé d'un seul côté
DCM	121102	other	Autre
SNM3	G-A112	Outer	En dehors
DCM	121210	Path	Tracé
DCM	121211	Path length	Longueur du tracé
DCM	121094	Performing	Réalisateur de l'examen
SRT	G-A197	Perimeter	Périmètre
DCM	121213	Perimeter Outline	Délimitation du périmètre
SNM3	G-A111	Peripheral	Périphérique
SRT	G-A195	Perpendicular Axis	Axe orthogonal
DCM	121081	Physician	Médecin
SNM3	G-A120	Postaxial	Postaxial
SNM3	G-A106	Posterior	Postérieur
SNM3	G-A182	Posterolateral	Postéro-latéral
SNM3	G-A121	Preaxial	Pré-axial
DCM	121069	Previous Finding	Résultat antérieur
DCM	121068	Previous Findings	Résultats antérieurs
DCM	110008	Print	
DCM	121066	Prior Procedure Descriptions	Description de la procédure précédente
DCM	121065	Procedure Description	Description de la procédure
SNM3	G-A140	Profundis	Profondeur
SNM3	F-10310	prone	Procubitus
SNM3	G-A118	Proximal	Proximal
DCM	110002	Quality Control	
DCM	121084	Radiographer	Manipulateur (rice)
LN	11528-7	Radiology Report	Compte rendu radiologique
SNM3	G-A196	Radius	Rayon
DCM	121075	Recommendation	Recommandation
DCM	121074	Recommendations	Recommandations
DCM	121097	Recording	Qui fait le compte rendu
SNM3	F-10450	recumbent	Couché
DCM	121095	Referring	Médecin référent
DCM	121087	Registrar	Secrétaire

DCM	110007	Report Verification	
DCM	121062	Request	Demande
DCM	121096	Requesting	Médecin demandeur
DCM	121086	Resident	Résident
SNM3	G-A100	Right	Droit
SNM3	G-A102	Right and left	Droit et gauche
SNM3	G-A100	Right lateral	Latéral droit
SNM3	F-10317	right lateral decubitus	Décubitus latéral droit
SNM3	R-102D3	Rolled Lateral	Roulé externe
SNM3	R-102D4	Rolled Medial	Roulé interne
SNM3	G-A145	Sagittal	Sagittal
SNM3	F-10460	semi-erect	Semi-couché
SNM3	F-10316	semi-prone	Semi-procubitus
SNM3	G-A186	Short Axis	Petit axe
SNM3	F-103A0	sitting	Assis
SNM3	R-102D7	Spot Compression	Compression localisée
UCUM	cm2	Square centimeter	Centimètre carré
UCUM	um2	Square micrometer	Micromètre carré
UCUM	mm2	Square millimeter	Millimètre carré
SNM3	F-10320	standing	En position verticale
SNM3	F-10390	stooped-over	Penché en avant
SNM3	G-A172	Subcapsular	Sous-capsulaire
SNM3	G-A139	Superficial	Superficiel
SNM3	G-A116	Superior	Supérieur
SNM3	R-102D0	superolateral to inferomedial oblique	Supérolatéral vers inféromédial oblique
SNM3	F-10340	supine	Décubitus
SNM3	T-11218	Suprasternal notch	Creux sus-sternal
SNM3	G-A168	Surface	Surface
SNM3	R-102C2	Tangential	Tangentiel
DCM	121083	Technologist	Technicien
DCM	110006	Transcription (task)	
DCM	110012	Transcription (type of output)	
SNM3	G-A117	Transverse	Transverse
SNM3	F-10348	Trendelenburg	Trendelenburg
LN	18760-9	Ultrasound Report	Compte rendu d’échographie
SNM3	G-A103	Unilateral	Unilatéral
SNM3	G-A116	Upper	En haut
SNM3	T-04002	Upper inner quadrant of breast, NOS	Quadrant supéro-interne du sein, SAI
SNM3	T-04004	Upper outer quadrant of breast, NOS	Quadrant supéro-externe du sein, SAI

SNM3	G-A105	Ventral	Ventral
DCM	121098	Verifying	Qui vérifie
SNM3	G-A144	Vertical	Vertical
SNM3	G-D705	Volume	Volume
DCM	121216	Volume estimated from single 2D region	Volume estimé à partir d'une seule région 2D
DCM	121217	Volume estimated from three or more non-coplanar 2D regions	Volume estimé à partir de trois régions 2D non coplanaires ou plus
DCM	121218	Volume estimated from two non-coplanar 2D regions	Volume estimé à partir de deux régions 2D non coplanaires
DCM	121219	Volume of bounding three dimensional region	Volume d'une région tridimensionnelle de forme quelconque
DCM	121220	Volume of circumscribed sphere	Volume de la sphère circonscrite
DCM	121221	Volume of ellipsoid	Volume d'un éllipsoïde
DCM	121222	Volume of sphere	Volume d'une sphère
UCUM	wk	week	Semaine
SNM3	G-A220	Width	Largeur
UCUM	a	year	Année