

DICOM Correction Proposal

STATUS	Final Text
Date of Last Update	2020/01/16
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Submission Date	2015/03/12

Correction Number	CP-1479
Log Summary: Update PS3.4 for expanded Code Sequence	
Name of Standard PS3.4 2019e	
Rationale for Correction: Use of the Code Sequence in PS3.4 definitions need to be extended to support the introduction of Long Code and URN values by CP1031 as well as the Equivalent Code Sequence. The extension to support Long Code Values and other attributes uses Macros and the following guidelines: <ul style="list-style-type: none">- All attributes of the Code Macro of PS 3.3, Table 8.8-1. Code Sequence Macro Attributes like Coding Scheme Version (0008,0103) and others are included.- Consistency of types and requirements amongst the various services and with PS3.3, Chapter 8 "Encoding of Coded Entry Data" is pursued.- Code Value (0008,0100), Long Code Value (0008,0119), URN Code Value (0008,0120) are conditionally required with the same conditions as in PS 3.3, Table 8.8-1. Code Sequence Macro Attributes. These requirements ensure, that exactly one of these three attributes if present.- Coding Scheme Designator (0008,0102) and Coding Scheme Version (0008,0103) are conditionally required as in PS 3.3, Table 8.8-1. Code Sequence Macro Attributes. In some case these attributes have been optional before.- Code Meaning (0008,0104) as Return Key is conditionally required with respect to the presence of Code Value (0008,0100) or Long Code Value (0008,0119). In some case this attribute has been optional before. Note that the requirements for Code Meaning (0008,0104) as a return key and the additional conditional requirements on Coding Scheme Designator (0008,0102) for matching and return keys are potentially breaking changes. The same may apply to N-CREATE or N-SET operations.	

Correction Wording:

<i>Make the following changes to PS3.4:</i>

8 Coded Entry Usage in Service Specifications

The Macros in this Section specify the usage of the Attributes that correspond to Coded Entries as defined by PS3.3 Table 8.8-1 Code Sequence Macro Attributes.

Not all invocations make use of all the columns. For example, in some invocations, only the "Requirement Type SCU/SCP" is relevant; in others, only the Matching Key Type and Return Key Type columns are used.

Table 8-1a. Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning

Attribute Name	Tag	Requirement Type SCU/SCP	Matching Key Type	Return Key Type
<i><u>Include Table 8-1b. "Basic SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning"</u></i>				
<u>Equivalent Code Sequence</u>	(0008,0121)	3/3	O	3
<i><u>>Include Table 8-1b. "Basic SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning"</u></i>				

Table 8-1b. Basic SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning

Attribute Name	Tag	Requirement Type SCU/SCP	Matching Key Type	Return Key Type
<u>Code Value</u>	(0008,0100)	1C/1C Shall be present if the code value length is 16 characters or less, and the code value is not a URN or URL.	RC Required if the code value length is 16 characters or less, and the code value is not a URN or URL.	1C Shall be present if the code value length is 16 characters or less, and the code value is not a URN or URL.
<u>Coding Scheme Designator</u>	(0008,0102)	1C/1C Shall be present if Code Value (0008,0100) or Long Code Value (0008,0119) is present. May be present otherwise.	RC Required if Code Value (0008,0100) or Long Code Value (0008,0119) is present. May be present otherwise.	1C Shall be present if Code Value (0008,0100) or Long Code Value (0008,0119) is present. May be present otherwise.

<u>Attribute Name</u>	<u>Tag</u>	<u>Requirement Type SCU/SCP</u>	<u>Matching Key Type</u>	<u>Return Key Type</u>
<u>Coding Scheme Version</u>	(0008,0103)	1C/1C Required if the value of <u>Coding Scheme Designator (0008,0102)</u> is present and is not sufficient to identify the <u>Code Value (0008,0100)</u> or <u>Long Code Value (0008,0119)</u> or <u>URN Code Value (0008,0120)</u> unambiguously. Shall not be present if <u>Coding Scheme Designator (0008,0102)</u> is absent. May be present otherwise.	RC Required if the value of <u>Coding Scheme Designator (0008,0102)</u> is present and is not sufficient to identify the <u>Code Value (0008,0100)</u> or <u>Long Code Value (0008,0119)</u> or <u>URN Code Value (0008,0120)</u> unambiguously. Shall not be present if <u>Coding Scheme Designator (0008,0102)</u> is absent. May be present otherwise.	1C Required if the value of <u>Coding Scheme Designator (0008,0102)</u> is present and is not sufficient to identify the <u>Code Value (0008,0100)</u> or <u>Long Code Value (0008,0119)</u> or <u>URN Code Value (0008,0120)</u> unambiguously. Shall not be present if <u>Coding Scheme Designator (0008,0102)</u> is absent. May be present otherwise.
<u>Code Meaning</u>	(0008,0104)	1/1	-	1
<u>Long Code Value</u>	(0008,0119)	1C/1C Shall be present if <u>Code Value (0008,0100)</u> is not present, and the code value is not a <u>URN or URL</u> .	RC Required if <u>Code Value (0008,0100)</u> is not present, and the code value is not a <u>URN or URL</u> .	1C Required if <u>Code Value (0008,0100)</u> is not present, and the code value is not a <u>URN or URL</u> .
<u>URN Code Value</u>	(0008,0120)	1C/1C Shall be present if <u>Code Value (0008,0100)</u> is not present, and the code value is a <u>URN or URL</u> .	RC Required if <u>Code Value (0008,0100)</u> is not present, and the code value is a <u>URN or URL</u> .	1C Require if <u>Code Value (0008,0100)</u> is not present, and the code value is a <u>URN or URL</u> .
<u>Mapping Resource</u>	(0008,0105)	3/3	-	3
<u>Mapping Resource UID</u>	(0008,0118)	3/3	-	3
<u>Context Group Version</u>	(0008,0118)	3/3	-	3
<u>Context Group Extension Flag</u>	(0008,010B)	3/3	-	3
<u>Context Group Local Version</u>	(0008,0107)	3/3	-	3
<u>Context Group Extension Creator UID</u>	(0008,010D)	3/3	-	3

Table 8-2a. Enhanced Coded Entry Macro with Optional Matching Key Support and Optional Meaning

<u>Attribute Name</u>	<u>Tag</u>	<u>Matching Key Type</u>	<u>Return Key Type</u>
<i>Include Table 8-2b. "Basic Coded Entry Macro with Optional Matching Key Support and Optional Meaning"</i>			

<u>Attribute Name</u>	<u>Tag</u>	<u>Matching Key Type</u>	<u>Return Key Type</u>
<u>Equivalent Code Sequence</u>	(0008,0121)	<u>O</u>	<u>3</u>
<i>>Include Table 8-2b. "Basic Coded Entry Macro with Optional Matching Key Support and Optional Meaning"</i>			

Table 8-2b. Basic Coded Entry Macro with Optional Matching Key Support and Optional Meaning

<u>Attribute Name</u>	<u>Tag</u>	<u>Matching Key Type</u>	<u>Return Key Type</u>
<u>Code Value</u>	(0008,0100)	<u>O</u>	<u>1C</u> Shall be present if the code value length is 16 characters or less, and the code value is not a URN or URL.
<u>Coding Scheme Designator</u>	(0008,0102)	<u>O</u>	<u>1C</u> Shall be present if Code Value (0008,0100) or Long Code Value (0008,0119) is present.
<u>Coding Scheme Version</u>	(0008,0103)	<u>OC</u> May be present only if the value of Coding Scheme Designator (0008,0102) is present and is not sufficient to identify the Code Value (0008,0100) or Long Code Value (0008,0119) or URN Code Value (0008,0120) unambiguously.	<u>3</u> Applicable only if the value of Coding Scheme Designator (0008,0102) is present and is not sufficient to identify the Code Value (0008,0100) or Long Code Value (0008,0119) or URN Code Value (0008,0120) unambiguously.
<u>Code Meaning</u>	(0008,0104)	<u>O</u>	<u>3</u>
<u>Long Code Value</u>	(0008,0119)	<u>O</u>	<u>1C</u> Shall be present if Code Value (0008,0100) is not present, and the code value is not a URN or URL.

<u>Attribute Name</u>	<u>Tag</u>	<u>Matching Key Type</u>	<u>Return Key Type</u>
<u>URN Code Value</u>	<u>(0008,0120)</u>	<u>0</u>	<u>1C</u> Shall be present only if Code Value (0008,0100) is not present, and the code value is a URN or URL.
<u>Mapping Resource</u>	<u>(0008,0105)</u>	<u>0</u>	<u>3</u>
<u>Mapping Resource UID</u>	<u>(0008,0118)</u>	<u>0</u>	<u>3</u>
<u>Context Group Version</u>	<u>(0008,0118)</u>	<u>0</u>	<u>3</u>
<u>Context Group Extension Flag</u>	<u>(0008,010B)</u> <u>)</u>	<u>0</u>	<u>3</u>
<u>Context Group Local Version</u>	<u>(0008,0107)</u>	<u>0</u>	<u>3</u>
<u>Context Group Extension Creator UID</u>	<u>(0008,010D)</u> <u>)</u>	<u>0</u>	<u>3</u>

Table 8-3a. Enhanced SCU/SCP Coded Entry Macro with no SCU Support and no Matching Key Support

<u>Attribute Name</u>	<u>Tag</u>	<u>Requirement Type SCU/SCP</u>	<u>Matching Key Type</u>	<u>Return Key Type</u>
<i>Include Table 8-3b. "Basic SCU/SCP Code Entry Macro with no SCU Support and no Matching Key Support"</i>				
<u>Equivalent Code Sequence</u>	<u>(0008,0121)</u>	<u>-/3</u>	<u>:</u>	
<i>>Include Table 8-3b. "Basic SCU/SCP Code Entry Macro with no SCU Support and no Matching Key Support"</i>				

Table 8-3b. Basic SCU/SCP Coded Entry Macro with no SCU Support and no Matching Key Support

<u>Attribute Name</u>	<u>Tag</u>	<u>Requirement Type SCU/SCP</u>	<u>Matching Key Type</u>	<u>Return Key Type</u>
<u>Code Value</u>	<u>(0008,0100)</u>	<u>-/1C</u> Shall be present if the code value length is 16 characters or less, and the code value is not a URN or URL.	<u>:</u>	<u>1C</u> Shall be present if the code value length is 16 characters or less, and the code value is not a URN or URL.
<u>Coding Scheme Designator</u>	<u>(0008,0102)</u>	<u>-/1C</u> Shall be present if Code Value (0008,0100) or Long Code Value (0008,0119) is present. May be present otherwise.	<u>:</u>	<u>1C</u> Shall be present if Code Value (0008,0100) or Long Code Value (0008,0119) is present. May be present otherwise.

<u>Attribute Name</u>	<u>Tag</u>	<u>Requirement Type SCU/SCP</u>	<u>Matching Key Type</u>	<u>Return Key Type</u>
<u>Coding Scheme Version</u>	<u>(0008,0103)</u>	<u>-1C</u> <u>Required if the value of Coding Scheme Designator (0008,0102) is present and is not sufficient to identify the Code Value (0008,0100) or Long Code Value (0008,0119) or URN Code Value (0008,0120) unambiguously. Shall not be present if Coding Scheme Designator (0008,0102) is absent. May be present otherwise.</u>	<u>:</u>	<u>1C</u> <u>Shall be present if the value of Coding Scheme Designator (0008,0102) is present and is not sufficient to identify the Code Value (0008,0100) or Long Code Value (0008,0119) or URN Code Value (0008,0120) unambiguously. Shall not be present if Coding Scheme Designator (0008,0102) is absent. May be present otherwise.</u>
<u>Code Meaning</u>	<u>(0008,0104)</u>	<u>-1</u>	<u>:</u>	<u>1</u>
<u>Long Code Value</u>	<u>(0008,0119)</u>	<u>-1C</u> <u>Shall be present if Code Value (0008,0100) is not present, and the code value is not a URN or URL.</u>	<u>:</u>	<u>1C</u> <u>Shall be present if Code Value (0008,0100) is not present, and the code value is not a URN or URL.</u>
<u>URN Code Value</u>	<u>(0008,0120)</u>	<u>-1C</u> <u>Shall be present if Code Value (0008,0100) is not present, and the code value is a URN or URL.</u>	<u>:</u>	<u>1C</u> <u>Shall be present if Code Value (0008,0100) is not present, and the code value is a URN or URL.</u>
<u>Mapping Resource</u>	<u>(0008,0105)</u>	<u>-3</u>	<u>:</u>	<u>3</u>
<u>Mapping Resource UID</u>	<u>(0008,0118)</u>	<u>-3</u>	<u>:</u>	<u>3</u>
<u>Context Group Version</u>	<u>(0008,0118)</u>	<u>-3</u>	<u>:</u>	<u>3</u>
<u>Context Group Extension Flag</u>	<u>(0008,010B)</u>	<u>-3</u>	<u>:</u>	<u>3</u>
<u>Context Group Local Version</u>	<u>(0008,0107)</u>	<u>-3</u>	<u>:</u>	<u>3</u>
<u>Context Group Extension Creator UID</u>	<u>(0008,010D)</u>	<u>-3</u>	<u>:</u>	<u>3</u>

Table 8-4a. Enhanced Coded Entry Macro with Optional Matching Key Support and Mandatory Meaning

Attribute Name	Tag	Matching Key Type	Return Key Type
<i>Include Table 8-4b. "Basic Coded Entry Macro with Optional Matching Key Support and Mandatory Meaning"</i>			
Equivalent Code Sequence	(0008,0121)	O	3
<i>>Include Table 8-4b. "Basic Coded Entry Macro with Optional Matching Key Support and Mandatory Meaning"</i>			

Table 8-4b. Basic Coded Entry Macro with Optional Matching Key Support and Mandatory Meaning

Attribute Name	Tag	Matching Key Type	Return Key Type
Code Value	(0008,0100)	O	1C Shall be present if the code value length is 16 characters or less, and the code value is not a URN or URL.
Coding Scheme Designator	(0008,0102)	O	1C Shall be present if Code Value (0008,0100) or Long Code Value (0008,0119) is present. May be present otherwise.
Coding Scheme Version	(0008,0103)	RC Required if the value of Coding Scheme Designator (0008,0102) is present and is not sufficient to identify the Code Value (0008,0100) or Long Code Value (0008,0119) or URN Code Value (0008,0120) unambiguously. Shall not be present if Coding Scheme Designator (0008,0102) is absent. May be present otherwise.	1C Shall be present if the value of Coding Scheme Designator (0008,0102) is present and is not sufficient to identify the Code Value (0008,0100) or Long Code Value (0008,0119) or URN Code Value (0008,0120) unambiguously. Shall not be present if Coding Scheme Designator (0008,0102) is absent. May be present otherwise.
Code Meaning	(0008,0104)	O	1

<u>Attribute Name</u>	<u>Tag</u>	<u>Matching Key Type</u>	<u>Return Key Type</u>
<u>Long Code Value</u>	<u>(0008,0119)</u>	<u>O</u>	<u>1C</u> <u>Shall be present if</u> <u>Code Value</u> <u>(0008,0100) is not</u> <u>present, and the</u> <u>code value is not a</u> <u>URN or URL.</u>
<u>URN Code Value</u>	<u>(0008,0120)</u>	<u>O</u>	<u>1C</u> <u>Shall be present if</u> <u>Code Value</u> <u>(0008,0100) is not</u> <u>present, and the</u> <u>code value is a URN</u> <u>or URL.</u>
<u>Mapping Resource</u>	<u>(0008,0105)</u>	<u>O</u>	<u>3</u>
<u>Mapping Resource UID</u>	<u>(0008,0118)</u>	<u>O</u>	<u>3</u>
<u>Context Group Version</u>	<u>(0008,0118)</u>	<u>O</u>	<u>3</u>
<u>Context Group Extension Flag</u>	<u>(0008,010B)</u>	<u>O</u>	<u>3</u>
<u>Context Group Local Version</u>	<u>(0008,0107)</u>	<u>O</u>	<u>3</u>
<u>Context Group Extension</u> <u>Creator UID</u>	<u>(0008,010D)</u>	<u>O</u>	<u>3</u>

Table 8-5a. Enhanced SCU/SCP Coded Entry Macro with no SCU Support and Optional Meaning for SCP

<u>Attribute Name</u>	<u>Tag</u>	<u>Requirement Type</u> <u>SCU/SCP</u>
<i><u>Include Table 8-5b. "Basic SCU/SCP Code Entry Macro with no SCU Support and Optional Meaning for SCP"</u></i>		
<u>Equivalent Code Sequence</u>	<u>(0008,0121)</u>	<u>-/3</u>
<i><u>>Include Table 8-5b. "Basic SCU/SCP Code Entry Macro with no SCU Support and Optional Meaning for SCP"</u></i>		

Table 8-5b. Basic SCU/SCP Coded Entry Macro with no SCU Support and Optional Meaning for SCP

<u>Attribute Name</u>	<u>Tag</u>	<u>Requirement Type</u> <u>SCU/SCP</u>
<u>Code Value</u>	<u>(0008,0100)</u>	<u>-/1C</u> <u>Shall be present if</u> <u>the code value</u> <u>length is 16</u> <u>characters or less,</u> <u>and the code value</u> <u>is not a URN or URL.</u>

<u>Attribute Name</u>	<u>Tag</u>	<u>Requirement Type</u> <u>SCU/SCP</u>
<u>Coding Scheme Designator</u>	<u>(0008,0102)</u>	<u>-/1C</u> <u>Shall be present if</u> <u>Code Value</u> <u>(0008,0100) or Long</u> <u>Code Value</u> <u>(0008,0119) is</u> <u>present. May be</u> <u>present otherwise.</u>
<u>Coding Scheme Version</u>	<u>(0008,0103)</u>	<u>-/1C</u> <u>May be present if</u> <u>the value of Coding</u> <u>Scheme Designator</u> <u>(0008,0102) is</u> <u>present and is not</u> <u>sufficient to identify</u> <u>the Code Value</u> <u>(0008,0100) or Long</u> <u>Code Value</u> <u>(0008,0119) or URN</u> <u>Code Value</u> <u>(0008,0120)</u> <u>unambiguously.</u> <u>Shall not be present</u> <u>if Coding Scheme</u> <u>Designator</u> <u>(0008,0102) is</u> <u>absent. May be</u> <u>present otherwise.</u>
<u>Code Meaning</u>	<u>(0008,0104)</u>	<u>-/3</u>
<u>Long Code Value</u>	<u>(0008,0119)</u>	<u>-/1C</u> <u>Shall be present if</u> <u>Code Value</u> <u>(0008,0100) is not</u> <u>present, and the</u> <u>code value is not a</u> <u>URN or URL.</u>
<u>URN Code Value</u>	<u>(0008,0120)</u>	<u>1C/1C</u> <u>Shall be present if</u> <u>Code Value</u> <u>(0008,0100) is not</u> <u>present, and the</u> <u>code value is a URN</u> <u>or URL.</u>
<u>Mapping Resource</u>	<u>(0008,0105)</u>	<u>-/3</u>
<u>Mapping Resource UID</u>	<u>(0008,0118)</u>	<u>-/3</u>
<u>Context Group Version</u>	<u>(0008,0118)</u>	<u>-/3</u>
<u>Context Group Extension Flag</u>	<u>(0008,010B</u> <u>)</u>	<u>-/3</u>
<u>Context Group Local Version</u>	<u>(0008,0107)</u>	<u>-/3</u>
<u>Context Group Extension</u> <u>Creator UID</u>	<u>(0008,010D</u> <u>)</u>	<u>-/3</u>

C. Query/Retrieve Service Class (Normative)

...

C.6.1.1.3 Study Level

Table C.6-2a. Enhanced Code Value Keys Macro with Optional Keys

Attribute Name	Tag	Requirement Type
<i>Include Table C.6-2b "Basic Code Value Keys Macro with Optional Keys"</i>		
<u>Equivalent Code Sequence</u>	(0008,0121)	O
<i>>Include Table C.6-2b "Basic Code Value Keys Macro with Optional Keys"</i>		

Table C.6-2b. Basic Code Value Keys Macro with Optional Keys

Attribute Name	Tag	Requirement Type
<u>Code Value</u>	(0008,0100)	OC – May be present only if the code value length is 16 characters or less, and the code value is not a URN or URL.
<u>Coding Scheme Designator</u>	(0008,0102)	O
<u>Coding Scheme Version</u>	(0008,0103)	O
<u>Code Meaning</u>	(0008,0104)	O
<u>Long Code Value</u>	(0008,0119)	OC – May be present only if Code Value (0008,0100) is not present, and the code value is not a URN or URL.
<u>URN Code Value</u>	(0008,0120)	OC – May be present only if Code Value (0008,0100) is not present, and the code value is a URN or URL.
<u>Context Identifier</u>	(0008,010e)	O
<u>Context UID</u>	(0008,0117)	O
<u>Mapping Resource</u>	(0008,0105)	O
<u>Mapping Resource UID</u>	(0008,0118)	O
<u>Context Group Version</u>	(0008,0118)	O
<u>Context Group Extension Flag</u>	(0008,010B)	O

<u>Context Group Local Version</u>	<u>(0008,0107)</u>	<u>Q</u>
<u>Context Group Extension Creator UID</u>	<u>(0008,010D)</u>	<u>Q</u>

Table C.6-2. Study Level Keys for the Patient Root Query/Retrieve Information Model

Attribute Name	Tag	Type
...		
Procedure Code Sequence	(0008,1032)	O
>Code Value	(0008,0100)	Q
>Coding Scheme Designator	(0008,0102)	Q
>Coding Scheme Version	(0008,0103)	Q
>Code Meaning	(0008,0104)	Q
<i>>Include Table C.6-2a "Enhanced Code Value Keys Macro with Optional Keys"</i>		
...		

C.6.1.1.5 Composite Object Instance Level

Table C.6-4. Composite Object Instance Level Keys for the Patient Root Query/Retrieve Information Model

Attribute Name	Tag	Requirement Type
...		
Alternate Representation Sequence	(0008,3001)	O
>Series Instance UID	(0020,000E)	O
>SOP Class UID	(0008,1150)	O
>SOP Instance UID	(0008,1155)	O
>Purpose of Reference Code Sequence	(0040,A170)	O
>>Code Value	(0008,0100)	Q
>>Coding Scheme Designator	(0008,0102)	Q
>>Coding Scheme Version	(0008,0103)	Q
>>Code Meaning	(0008,0104)	Q
<i>>>Include Table C.6-2a "Enhanced Code Value Keys Macro with Optional Keys"</i>		
Related General SOP Class UID	(0008,001A)	O
Concept Name Code Sequence	(0040,A043)	O
>Code Value	(0008,0100)	Q
>Coding Scheme Designator	(0008,0102)	Q
>Coding Scheme Version	(0008,0103)	Q
>Code Meaning	(0008,0104)	Q
<i>>Include Table C.6-2a "Enhanced Code Value Keys Macro with Optional Keys"</i>		
...		

C.6.2.1.2 Study Level

Table C.6-5. Study Level Keys for the Study Root Query/Retrieve Information Model

Attribute Name	Tag	Requirement Type
...		
Procedure Code Sequence	(0008,1032)	O
>Code Value	(0008,0100)	O
>Coding Scheme Designator	(0008,0102)	O
>Coding Scheme Version	(0008,0103)	O
>Code Meaning	(0008,0104)	O
<i>>Include Table C.6-2a "Enhanced Code Value Keys Macro with Optional Keys"</i>		
Name of Physician(s) Reading Study	(0008,1060)	O

F Procedure Step SOP Class

F.7.2.1.1 Modality Performed Procedure Step Subset Specification

Table F.7.2-1a. Modality Performed Procedure Step Enhanced Code Value Macro with no N-SET

Attribute Name	Tag	Req. Type N-CREATE (SCU/SCP)	Req. Type N-SET (SCU/SCP)	Requirement Type Final State (see Note 1)
<i>Include Table F.7.2-1b "Modality Performed Procedure Step Simple Code Value Macro with no N-SET"</i>				
<u>Equivalent Code Sequence</u>	<u>(0008,0121)</u>	<u>3/3</u>	<u>Not allowed</u>	
<i>>Include Table F.7.2-1b "Modality Performed Procedure Step Simple Code Value Macro with no N-SET"</i>				

Table F.7.2-1b. Modality Performed Procedure Step Simple Code Value Macro with no N-SET

Attribute Name	Tag	Req. Type N-CREATE (SCU/SCP)	Req. Type N-SET (SCU/SCP)	Requirement Type Final State (see Note 1)
<u>Code Value</u>	<u>(0008,0100)</u>	<u>1C/1C</u> <u>Shall be present if the code value length is 16 characters or less, and the code value is not a URN or URL.</u>	<u>Not allowed</u>	
<u>Coding Scheme Designator</u>	<u>(0008,0102)</u>	<u>1C/1C</u> <u>Shall be present if Code Value</u>	<u>Not allowed</u>	

Attribute Name	Tag	Req. Type N-CREATE (SCU/SCP)	Req. Type N-SET (SCU/SCP)	Requirement Type Final State (see Note 1)
		<u>(0008,0100) or Long Code Value (0008,0119) is present. May be present otherwise.</u>		
<u>Coding Scheme Version</u>	<u>(0008,0103)</u>	<u>1C/1C</u> <u>Shall be present if the value of Coding Scheme Designator (0008,0102) is present and is not sufficient to identify the Code Value (0008,0100) or Long Code Value (0008,0119) or URN Code Value (0008,0120) unambiguously. Shall not be present if Coding Scheme Designator (0008,0102) is absent. May be present otherwise.</u>	<u>Not allowed</u>	
<u>Code Meaning</u>	<u>(0008,0104)</u>	<u>1/1</u>	<u>Not allowed</u>	
<u>Long Code Value</u>	<u>(0008,0119)</u>	<u>1C/1C</u> <u>Shall be present if Code Value (0008,0100) is not present, and the code value is not a URN or URL.</u>	<u>Not allowed</u>	
<u>URN Code Value</u>	<u>(0008,0120)</u>	<u>1C/1C</u> <u>Shall be present if Code Value (0008,0100) is not present, and the code value is a URN or URL.</u>	<u>Not allowed</u>	
<u>Mapping Resource</u>	<u>(0008,0105)</u>	<u>3/3</u>	<u>Not allowed</u>	
<u>Mapping Resource UID</u>	<u>(0008,0118)</u>	<u>3/3</u>	<u>Not allowed</u>	
<u>Context Group Version</u>	<u>(0008,0118)</u>	<u>3/3</u>	<u>Not allowed</u>	
<u>Context Group Extension Flag</u>	<u>(0008,010B)</u>	<u>3/3</u>	<u>Not allowed</u>	
<u>Context Group Local Version</u>	<u>(0008,0107)</u>	<u>3/3</u>	<u>Not allowed</u>	
<u>Context Group Extension Creator UID</u>	<u>(0008,010D)</u>	<u>3/3</u>	<u>Not allowed</u>	

**Table F.7.2-1c. Modality Performed Procedure Step Enhanced Code Value Macro with N-SET,
Mandatory Meaning**

Attribute Name	Tag	Req. Type N- CREATE (SCU/SCP)	Req. Type N-SET (SCU/SCP)	Requirement Type Final State (see Note 1)
<i>>Include Table F.7.2-1d “Modality Performed Procedure Step Simple Code Value Macro with N-SET, Mandatory Meaning”</i>				
<u>Equivalent Code Sequence</u>	<u>(0008,0121)</u>	<u>3/3</u>	<u>3/3</u>	
<i>>Include Table F.7.2-1d “Modality Performed Procedure Step Simple Code Value Macro with N-SET, Mandatory Meaning”</i>				

**Table F.7.2-1d. Modality Performed Procedure Step Simple Code Value Macro with N-SET,
Mandatory Meaning**

Attribute Name	Tag	Req. Type N- CREATE (SCU/SCP)	Req. Type N-SET (SCU/SCP)	Requirement Type Final State (see Note 1)
<u>Code Value</u>	<u>(0008,0100)</u>	<u>1C/1C</u> <u>Shall be present if</u> <u>the code value length</u> <u>is 16 characters or</u> <u>less, and the code</u> <u>value is not a URN or</u> <u>URL.</u>	<u>3/1C</u> <u>Shall be present if</u> <u>the code value length</u> <u>is 16 characters or</u> <u>less, and the code</u> <u>value is not a URN or</u> <u>URL.</u>	
<u>Coding Scheme Designator</u>	<u>(0008,0102)</u>	<u>1C/1C</u> <u>Shall be present if</u> <u>Code Value</u> <u>(0008,0100) or Long</u> <u>Code Value</u> <u>(0008,0119) is</u> <u>present. May be</u> <u>present otherwise.</u>	<u>1C/1C</u> <u>Shall be present if</u> <u>Code Value</u> <u>(0008,0100) or Long</u> <u>Code Value</u> <u>(0008,0119) is</u> <u>present. May be</u> <u>present otherwise.</u>	
<u>Coding Scheme Version</u>	<u>(0008,0103)</u>	<u>1C/1C</u> <u>Shall be present if</u> <u>the value of Coding</u> <u>Scheme Designator</u> <u>(0008,0102) is</u> <u>present and is not</u> <u>sufficient to identify</u> <u>the Code Value</u> <u>(0008,0100) or Long</u> <u>Code Value</u> <u>(0008,0119) or URN</u> <u>Code Value</u> <u>(0008,0120)</u> <u>unambiguously. Shall</u> <u>not be present if</u> <u>Coding Scheme</u> <u>Designator</u> <u>(0008,0102) is absent.</u> <u>May be present</u> <u>otherwise.</u>	<u>1C/1C</u> <u>Shall be present if</u> <u>the value of Coding</u> <u>Scheme Designator</u> <u>(0008,0102) is</u> <u>present and is not</u> <u>sufficient to identify</u> <u>the Code Value</u> <u>(0008,0100) or Long</u> <u>Code Value</u> <u>(0008,0119) or URN</u> <u>Code Value</u> <u>(0008,0120)</u> <u>unambiguously. Shall</u> <u>not be present if</u> <u>Coding Scheme</u> <u>Designator</u> <u>(0008,0102) is absent.</u> <u>May be present</u> <u>otherwise.</u>	
<u>Code Meaning</u>	<u>(0008,0104)</u>	<u>1/1</u>	<u>1/1</u>	

Attribute Name	Tag	Req. Type N-CREATE (SCU/SCP)	Req. Type N-SET (SCU/SCP)	Requirement Type Final State (see Note 1)
<u>Long Code Value</u>	(0008,0119)	<u>1C/1C</u> Shall be present if <u>Code Value (0008,0100) is not present, and the code value is not a URN or URL.</u>	<u>3/1C</u> Shall be present if <u>Code Value (0008,0100) is not present, and the code value is not a URN or URL.</u>	
<u>URN Code Value</u>	(0008,0120)	<u>1C/1C</u> Shall be present if <u>Code Value (0008,0100) is not present, and the code value is a URN or URL.</u>	<u>3/1C</u> Shall be present if <u>Code Value (0008,0100) is not present, and the code value is a URN or URL.</u>	
<u>Mapping Resource</u>	(0008,0105)	<u>3/3</u>	<u>3/3</u>	
<u>Mapping Resource UID</u>	(0008,0118)	<u>3/3</u>	<u>3/3</u>	
<u>Context Group Version</u>	(0008,0118)	<u>3/3</u>	<u>3/3</u>	
<u>Context Group Extension Flag</u>	(0008,010B)	<u>3/3</u>	<u>3/3</u>	
<u>Context Group Local Version</u>	(0008,0107)	<u>3/3</u>	<u>3/3</u>	
<u>Context Group Extension Creator UID</u>	(0008,010D)	<u>3/3</u>	<u>3/3</u>	

Table F.7.2-1e. Modality Performed Procedure Step Enhanced Code Value Macro with N-SET, Optional Meaning

Attribute Name	Tag	Req. Type N-CREATE (SCU/SCP)	Req. Type N-SET (SCU/SCP)	Requirement Type Final State (see Note 1)
<i>>Include Table F.7.2-1f "Modality Performed Procedure Step Simple Code Value Macro with N-SET, Optional Meaning"</i>				
<u>Equivalent Code Sequence</u>	(0008,0121)	<u>3/3</u>	<u>3/3</u>	
<i>>Include Table F.7.2-1f "Modality Performed Procedure Step Simple Code Value Macro with N-SET, Optional Meaning"</i>				

Table F.7.2-1f. Modality Performed Procedure Step Simple Code Value Macro with N-SET, Optional Meaning

Attribute Name	Tag	Req. Type N-CREATE (SCU/SCP)	Req. Type N-SET (SCU/SCP)	Requirement Type Final State (see Note 1)
<u>Code Value</u>	(0008,0100)	<u>1C/1C</u> Shall be present if <u>the code value length is 16 characters or less, and the code value is not a URN or URL.</u>	<u>3/1C</u> Shall be present if <u>the code value length is 16 characters or less, and the code value is not a URN or URL.</u>	

Attribute Name	Tag	Req. Type N-CREATE (SCU/SCP)	Req. Type N-SET (SCU/SCP)	Requirement Type Final State (see Note 1)
<u>Coding Scheme Designator</u>	(0008,0102)	1C/1C Shall be present if Code Value (0008,0100) or Long Code Value (0008,0119) is present. May be present otherwise.	1C/1C Shall be present if Code Value (0008,0100) or Long Code Value (0008,0119) is present. May be present otherwise.	
<u>Coding Scheme Version</u>	(0008,0103)	1C/1C Shall be present if the value of Coding Scheme Designator (0008,0102) is present and is not sufficient to identify the Code Value (0008,0100) or Long Code Value (0008,0119) or URN Code Value (0008,0120) unambiguously. Shall not be present if Coding Scheme Designator (0008,0102) is absent. May be present otherwise.	1C/1C Shall be present if the value of Coding Scheme Designator (0008,0102) is present and is not sufficient to identify the Code Value (0008,0100) or Long Code Value (0008,0119) or URN Code Value (0008,0120) unambiguously. Shall not be present if Coding Scheme Designator (0008,0102) is absent. May be present otherwise.	
<u>Code Meaning</u>	(0008,0104)	3/3	3/3	
<u>Long Code Value</u>	(0008,0119)	1C/1C Shall be present if Code Value (0008,0100) is not present, and the code value is not a URN or URL.	3/1C Shall be present if Code Value (0008,0100) is not present, and the code value is not a URN or URL.	
<u>URN Code Value</u>	(0008,0120)	1C/1C Shall be present if Code Value (0008,0100) is not present, and the code value is a URN or URL.	3/1C Shall be present if Code Value (0008,0100) is not present, and the code value is a URN or URL.	
<u>Mapping Resource</u>	(0008,0105)	3/3	3/3	
<u>Mapping Resource UID</u>	(0008,0118)	3/3	3/3	
<u>Context Group Version</u>	(0008,0118)	3/3	3/3	
<u>Context Group Extension Flag</u>	(0008,010B)	3/3	3/3	
<u>Context Group Local Version</u>	(0008,0107)	3/3	3/3	

Attribute Name	Tag	Req. Type N-CREATE (SCU/SCP)	Req. Type N-SET (SCU/SCP)	Requirement Type Final State (see Note 1)
Context Group Extension Creator UID	(0008,010D)	<u>3/3</u>	<u>3/3</u>	

Table F.7.2-1. Modality Performed Procedure Step SOP Class N-CREATE, N-SET and Final State Attributes

Attribute Name	Tag	Req. Type N-CREATE (SCU/SCP)	Req. Type N-SET (SCU/SCP)	Requirement Type Final State (see Note 1)
...				
Performed Procedure Step Relationship				
Scheduled Step Attribute Sequence	(0040,0270)	1/1	Not allowed	
...				
>Requested Procedure Code Sequence	(0032,1064)	3/3	Not allowed	
>>Code Value	<u>(0008,0100)</u>	<u>1/1</u>	<u>Not allowed</u>	
>>Coding Scheme Designator	<u>(0008,0102)</u>	<u>1/1</u>	<u>Not allowed</u>	
>>Coding Scheme Version	<u>(0008,0103)</u>	<u>3/3</u>	<u>Not allowed</u>	
>>Code Meaning	<u>(0008,0104)</u>	<u>1/1</u>	<u>Not allowed</u>	
>>Include Table F.7.2-1a “Modality Performed Procedure Step Enhanced Code Value Macro with no N-SET”				
>Requested Procedure Description	(0032,1060)	2/2	Not allowed	
>Scheduled Procedure Step ID	(0040,0009)	2/2	Not allowed	
>Scheduled Procedure Step Description	(0040,0007)	2/2	Not allowed	
>Scheduled Protocol Code Sequence	(0040,0008)	2/2	Not allowed	
>>Code Value	<u>(0008,0100)</u>	<u>1/1</u>	<u>Not allowed</u>	
>>Coding Scheme Designator	<u>(0008,0102)</u>	<u>1/1</u>	<u>Not allowed</u>	
>>Coding Scheme Version	<u>(0008,0103)</u>	<u>3/3</u>	<u>Not allowed</u>	
>>Code Meaning	<u>(0008,0104)</u>	<u>1/1</u>	<u>Not allowed</u>	

Attribute Name	Tag	Req. Type N-CREATE (SCU/SCP)	Req. Type N-SET (SCU/SCP)	Requirement Type Final State (see Note 1)
>>All other Attributes of the Scheduled Protocol Code Sequence		<u>3/3</u>	<u>Not allowed</u>	
>>Include Table F.7.2-1a “Modality Performed Procedure Step Enhanced Code Value Macro with no N-SET”				
...				
Performed Procedure Step Information				
...				
Procedure Code Sequence	(0008,1032)	2/2	3/2	
>Code Value	(0008,0100)	1/1	1/1	
>Coding Scheme Designator	(0008,0102)	1/1	1/1	
>Coding Scheme Version	(0008,0103)	3/3	3/3	
>Code Meaning	(0008,0104)	3/3	3/3	
>Include Table F.7.2-1e “Modality Performed Procedure Step Enhanced Code Value Macro with N-SET, Optional Meaning”				
Reason For Performed Procedure Code Sequence	(0040,1012)	3/3	3/3	
>Code Value	(0008,0100)	1/1	1/1	
>Coding Scheme Designator	(0008,0102)	1/1	1/1	
>Coding Scheme Version	(0008,0103)	3/3	3/3	
>Code Meaning	(0008,0104)	1/1	1/1	
>Include Table F.7.2-1c “Modality Performed Procedure Step Enhanced Code Value Macro with N-SET, Mandatory Meaning”				
Performed Procedure Step End Date	(0040,0250)	2/2	3/1	1
Performed Procedure Step End Time	(0040,0251)	2/2	3/1	1
Comments on the Performed Procedure Step	(0040,0280)	3/3	3/3	
Performed Procedure Step Discontinuation Reason Code Sequence	(0040,0281)	3/3	3/3	
>Code Value	(0008,0100)	1/1	1/1	
>Coding Scheme Designator	(0008,0102)	1/1	1/1	
>Coding Scheme Version	(0008,0103)	3/3	3/3	
>Code Meaning	(0008,0104)	3/3	3/3	

Attribute Name	Tag	Req. Type N-CREATE (SCU/SCP)	Req. Type N-SET (SCU/SCP)	Requirement Type Final State (see Note 1)
>Include Table F.7.2-1c “Modality Performed Procedure Step Enhanced Code Value Macro with N-SET, Optional Meaning”				
Image Acquisition Results				
Modality	(0008,0060)	1/1	Not allowed	
Study ID	(0020,0010)	2/2	Not allowed	
Performed Protocol Code Sequence	(0040,0260)	2/2	3/2	
>Code Value	(0008,0100)	1/1	1/1	
>Coding Scheme Designator	(0008,0102)	1/1	1/1	
>Coding Scheme Version	(0008,0103)	3/3	3/3	
>Code Meaning	(0008,0104)	3/3	3/3	
>All other Attributes of the Performed Protocol Code Sequence		3/3	Not allowed	
>Include Table F.7.2-1e “Modality Performed Procedure Step Enhanced Code Value Macro with N-SET, Optional Meaning”				
...				

Note

1. The requirement for the final state is that which applies at the time that the Performed Procedure Step Status (0040,0252) is N-SET to a value of COMPLETED or DISCONTINUED, as described in Section F.7.2.2.2. It is only described if it is different from the SCP requirement for the N-CREATE.
2. The Performed Series Sequence (0040,0340) may not be empty (zero length) at the time that the Performed Procedure Step Status (0040,0252) is N-SET to a value of COMPLETED or DISCONTINUED. In other words a Series must exist for every Performed Procedure Step, though it may contain no Images or Non-Image Composite objects, if none were created, as described in Section F.7.2.2.2.
3. . Attributes (0040,1006) Placer Order Number/Procedure and (0040,1007) Filler Order Number/Procedure were previously defined in DICOM. They are now retired (see PS3.3-1998).
4. Attributes (0040,2006) and (0040,2007) were previously defined in DICOM. They are now retired (see PS3.3-1998).
5. Only Attributes that are specified in a SOP Instance at N-CREATE may later be updated through the N-SET. If an SCU wishes to use the PPS Discontinuation Reason Code Sequence (0040,0281), it must create that Attribute (zero-length) during MPPS N-CREATE.
6. The Radiation Dose Module was previously defined in DICOM. This is now retired (see PS3.3-2017c).

F.8.2.1.1 Modality Performed Procedure Step Retrieve IOD Subset Specifications

Table F.8.2-1. Modality Performed Procedure Step Retrieve SOP Class N-GET Attributes

Attribute Name	Tag	Requirement Type (SCU/SCP)
...		
Performed Procedure Step Relationship		
Scheduled Step Attributes Sequence	(0040,0270)	3/1
...		
>Requested Procedure Code Sequence	(0032,1064)	-/3
>>Code Value	(0008,0100)	-/1
>>Coding Scheme Designator	(0008,0102)	-/1
>>Code Meaning	(0008,0104)	-/1
<i>>>Include Table 8-3a "Enhanced SCU/SCP Coded Entry Macro with no SCU Support and no Matching Key"</i>		
>Requested Procedure Description	(0032,1060)	-/2
>Requested Procedure ID	(0040,1001)	-/2
>Scheduled Procedure Step ID	(0040,0009)	-/2
>Scheduled Procedure Step Description	(0040,0007)	-/2
>Scheduled Protocol Code Sequence	(0040,0008)	-/2
>>Code Value	(0008,0100)	-/1
>>Coding Scheme Designator	(0008,0102)	-/1
>>Coding Scheme Version	(0008,0103)	-/3
>>Code Meaning	(0008,0104)	-/3
>>All other Attributes of the Scheduled Protocol Code Sequence		-/3
<i>>>Include Table 8-5a "Enhanced SCU/SCP Coded Entry Macro with no SCU Support and Optional Meaning for SCP"</i>		
...		
Performed Procedure Step Information		
...		
Procedure Code Sequence	(0008,1032)	3/2
>Code Value	(0008,0100)	-/1
>Coding Scheme Designator	(0008,0102)	-/1
>Coding Scheme Version	(0008,0103)	-/3
>Code Meaning	(0008,0104)	-/3
<i>>>Include Table 8-5a "Enhanced SCU/SCP Coded Entry Macro with no SCU Support and Optional Meaning for SCP"</i>		
Comments on the Performed Procedure Step	(0040,0280)	3/3
Performed Procedure Step Discontinuation Reason Code Sequence	(0040,0281)	3/2
>Code Value	(0008,0100)	-/1
>Coding Scheme Designator	(0008,0102)	-/1

Attribute Name	Tag	Requirement Type (SCU/SCP)
>Coding Scheme Version	(0008,0103)	-3
>Code Meaning	(0008,0104)	-3
<i>>Include Table 8-5a "Enhanced SCU/SCP Coded Entry Macro with no SCU Support and Optional Meaning for SCP"</i>		
Image Acquisition Results		
...		
Performed Protocol Code Sequence	(0040,0260)	3/2
>Code Value	(0008,0100)	-1
>Coding Scheme Designator	(0008,0102)	-1
>Coding Scheme Version	(0008,0103)	-3
>Code Meaning	(0008,0104)	-3
>All other Attributes of the Performed Protocol Code Sequence		-3
<i>>Include Table 8-5a "Enhanced SCU/SCP Coded Entry Macro with no SCU Support and Optional Meaning for SCP"</i>		
...		

K. Basic Worklist Management Service (Normative)

K.6.1.2.2 Modality Worklist Attributes

Table K.6-1. Attributes for the Modality Worklist Information Model

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
Scheduled Procedure Step				
Scheduled Procedure Step Sequence	(0040,0100)	R	1	The Attributes of the Scheduled Procedure Step shall only be retrieved with Sequence Matching. The Scheduled Procedure Step Sequence shall contain only a single Item.
...				
>Scheduled Protocol Code Sequence	(0040,0008)	O	1C	Either the Scheduled Procedure Step Description (0040,0007) or the Scheduled Protocol Code Sequence (0040,0008) or both shall be supported by the SCP.

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
				The Scheduled Protocol Code Sequence contains one or more Items.
>>Code Value	(0008,0100)	Q	1	
>>Coding Scheme Version	(0008,0103)	Q	3	
>>Coding Scheme Designator	(0008,0102)	Q	1	
>>Code Meaning	(0008,0104)	Q	3	
<i>>>Include Table 8-2a "Enhanced Coded Entry Macro with Optional Matching Key Support and Optional Meaning"</i>				
>>>Protocol Context Sequence	(0040,0440)	-	3	The Protocol Context Sequence and its Items shall not be used for matching
>>>Value Type	(0040,A040)	-	1	
>>>Concept Name Code Sequence	(0040,A043)	-	1	
>>>>Code Value	(0008,0100)	=	1	
>>>>Coding Scheme Designator	(0008,0102)	=	1	
>>>>Coding Scheme Version	(0008,0103)	=	3	
>>>>Code Meaning	(0008,0104)	=	1	
<i>>>>>Include Table 8-3a "Enhanced SCU/SCP Coded Entry Macro with no SCU Support and no Matching Key Support"</i>				
>>>>DateTime	(0040,A120)	-	1C	Required if Value Type (0040,A040) is DATETIME.
>>>>Person Name	(0040,A123)	-	1C	Required if Value Type (0040,A040) is PNAME.
>>>>Text Value	(0040,A160)	-	1C	Required if Value Type (0040,A040) is TEXT.
>>>>Concept Code Sequence	(0040,A168)	-	1C	Required if Value Type (0040,A040) is CODE.
>>>>>Code Value	(0008,0100)	=	1	
>>>>>Coding Scheme Designator	(0008,0102)	=	1	
>>>>>Coding Scheme Version	(0008,0103)	=	3	
>>>>>Code Meaning	(0008,0104)	=	1	
<i>>>>>>Include Table 8-3a "Enhanced SCU/SCP Coded Entry Macro with no SCU Support and no Matching Key Support"</i>				
>>>>>Numeric Value	(0040,A30A)	-	1C	Required if Value Type (0040,A040) is NUMERIC.
>>>>>Measurement Units Code Sequence	(0040,08EA)	-	1C	Required if Value Type (0040,A040) is NUMERIC.
>>>>>>Code Value	(0008,0100)	=	1	

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
>>>>Coding Scheme Designator	(0008,0102)	-	1	
>>>>Coding Scheme Version	(0008,0103)	-	3	
>>>>Code Meaning	(0008,0104)	-	1	
>>>>Include Table 8-3a "Enhanced SCU/SCP Coded Entry Macro with no SCU Support and no Matching Key Support"				
...				
Scheduled Specimen Sequence	(0040,0500)	O	3	One or more Items may be returned in this Sequence.
>Container Identifier	(0040,0512)	O	1	
>Container Type Code Sequence	(0040,0518)	-	2	Zero or one Item shall be returned in this Sequence.
>>Code Value	(0008,0100)	-	1	
>>Coding Scheme Designator	(0008,0102)	-	1	
>>Coding Scheme Version	(0008,0103)	-	3	
>>Code Meaning	(0008,0104)	-	1	
>>Include Table 8-3a "Enhanced SCU/SCP Coded Entry Macro with no SCU Support and no Matching Key Support"				
...				
Requested Procedure				
...				
Requested Procedure Code Sequence	(0032,1064)	O	1C	The Requested Procedure Description (0032,1060) or the Requested Procedure Code Sequence (0032,1064) or both shall be supported by the SCP. The Requested Procedure Code Sequence shall contain only a single Item.
>Code Value	(0008,0100)	Q	1	
>Coding Scheme Designator	(0008,0102)	Q	1	
>Coding Scheme Version	(0008,0103)	Q	3	
>Code Meaning	(0008,0104)	Q	3	
>Include Table 8-2a "Enhanced Coded Entry Macro with Optional Matching Key Support and Optional Meaning"				
...				
Patient Demographic				
Patients Birth Date	(0010,0030)	O	2	
Patient's Sex	(0010,0040)	O	2	

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
Patient's Primary Language Code Sequence	(0010,0101)	O	3	The languages that can be used to communicate with the patient. If returned, the Patient's Primary Language Code Sequence shall contain one or more Items. The items are ordered by preference (most preferred language to least preferred language).
>Code Value	(0008,0100)	O	1	
>Coding Scheme Designator	(0008,0102)	O	1	
>Code Meaning	(0008,0104)	-	1	Code Meaning shall not be used as Matching Key.
<i>>Include Table 8-4a "Enhanced Coded Entry Macro with Optional Matching Key Support and Mandatory Meaning"</i>				
>Patient's Primary Language Modifier Code Sequence	(0010,0102)	O	3	A modifier for a Patient's Primary Language. Can be used to specify a national language variant. If returned, the Patient's Primary Language Modifier Code Sequence shall contain only a single Item.
>>Code Value	(0008,0100)	O	1	
>>Coding Scheme Designator	(0008,0102)	O	1	
>>Code Meaning	(0008,0104)	-	1	Code Meaning shall not be used as Matching Key.
<i>>>Include Table 8-4a "Enhanced Coded Entry Macro Coded Entry Macro with Optional Matching Key Support and Mandatory Meaning"</i>				
...				
Patient Medical				
...				
Pertinent Documents Sequence	(0038,0100)	O	3	Pertinent Documents Sequence shall be retrieved with Universal Matching only
>Referenced SOP Class UID	(0008,1150)	-	1	
>Referenced SOP Instance UID	(0008,1155)	-	1	
>Purpose of Reference Code Sequence	(0040,A170)	-	2	
>>Code Value	(0008,0100)	-	1	
>>Coding Scheme Designator	(0008,0102)	-	1	
>>Code Meaning	(0008,0104)	-	1	

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
>>Include Table 8-3a “Enhanced SCU/SCP Coded Entry Macro with no SCU Support and no Matching Key Support”				
...				

P. Application Event Logging Service Class (Normative)

P.3.2.1 Substance Administration Log Action Information

Table P.3-2. Substance Administration Logging N-ACTION Information

Action Type Name	Action Type ID	Attribute Name	Tag	Requirement Type SCU/SCP	
Record Substance Administration Event	1	...			
		Administration Route Code Sequence	(0054,0302)	2/2	
		>Code Value	(0008,0100)	1/1	
		>Coding Scheme Designator	(0008,0102)	1/1	
		>Code Meaning	(0008,0104)	1/1	
		<u>>>Include Table 8-1a “Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning”</u>			
		Substance Administration Parameter Sequence	(0044,0019)	3/3	
		> All Attributes of the Substance Administration Parameter Sequence		3/3	
		Operator Identification Sequence	(0008,1072)	1/1	
		>Person Identification Code Sequence	(0040,1101)	1/1	
		>>Code Value	(0008,0100)	1/1	
		>>Coding Scheme Designator	(0008,0102)	1/1	
		>>Code Meaning	(0008,0104)	1/1	
		<u>>>Include Table 8-1a “Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning”</u>			
		...			

Q. Relevant Patient Information Query Service Class (Normative)

Q.4.3.1.2 Relevant Patient Information Attributes

Table Q.4-1. Attributes for the Relevant Patient Information Model

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
...				
Structured Information (SR Document Content Module)				
Observation DateTime	(0040,A032)	-	1	
Value Type	(0040,A040)	-	1	See Section Q.4.3.1.2.1.
Concept Name Code Sequence	(0040,A043)	-	1	See Section Q.4.3.1.2.1.
>Code Value	(0008,0100)	=	±	
>Coding Scheme Designator	(0008,0102)	=	±	
>Coding Scheme Version	(0008,0103)	=	1C	Required if the value of Coding Scheme Designator (0008,0102) is not sufficient to identify the Code Value (0008,0100) unambiguously.
>Code Meaning	(0008,0104)	=	±	
>Include Table 8-3a "Enhanced SCU/SCP Coded Entry Macro with no SCU Support and no Matching Key Support"				
>All other Attributes of the Concept Name Code Sequence				
...				

R. Instance Availability Notification Service Class (Normative)

R.3.2.1.1 Attributes

Table R.3.2-1. Instance Availability Notification SOP Class N-CREATE Attributes

Attribute Name	Tag	Req. Type N-CREATE (SCU/SCP)
Specific Character Set	(0008,0005)	1C/1C (Required if an extended or replacement character set is used)
All other Attributes of SOP Common Module		3/3

Attribute Name	Tag	Req. Type N-CREATE (SCU/SCP)
Referenced Performed Procedure Step Sequence	(0008,1111)	2/2
>Referenced SOP Class UID	(0008,1150)	1/1
>Referenced SOP Instance UID	(0008,1155)	1/1
>Performed Workitem Code Sequence	(0040,4019)	2/2
>>Code Value	(0008,0100)	1/1
>>Coding Scheme Designator	(0008,0102)	1/1
>>Code Meaning	(0008,0104)	1/1
<i>>>Include Table 8-1a "Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning"</i>		
>>All other Attributes from Performed Workitem Code Sequence		3/3
...		

U. Hanging Protocol Query/Retrieve Service Class

U.6.1.2 Hanging Protocol Attributes

Table U.6-1. Attributes for the Hanging Protocol Information Model

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
...				
Hanging Protocol Definition				
...				
Hanging Protocol Definition Sequence	(0072,000C)	R	1	This Attribute shall be retrieved with Sequence or Universal matching.
>Modality	(0008,0060)	R	2	This Attribute shall be retrieved with Single Value or Universal matching.
>Anatomic Region Sequence	(0008,2218)	R	2	This Attribute shall be retrieved with Sequence or Universal matching.
>>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
>>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>>Coding Scheme Version	(0008,0103)	-	3	
>>Code Meaning	(0008,0104)	-	1	
<i>>>Include Table 8-1a “Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning”</i>				
>Laterality	(0020,0060)	R	2	This Attribute shall be retrieved with Single Value or Universal matching.
>Procedure Code Sequence	(0008,1032)	R	2	This Attribute shall be retrieved with Sequence or Universal matching.
>>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>>Coding Scheme Version	(0008,0103)	-	3	
>>Code Meaning	(0008,0104)	-	1	
<i>>>Include Table 8-1a “Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning”</i>				
>Reason for Requested Procedure Code Sequence	(0040,100A)	R	2	This Attribute shall be retrieved with Sequence or Universal matching.
>>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>>Coding Scheme Version	(0008,0103)	-	3	
>>Code Meaning	(0008,0104)	-	1	
<i>>>Include Table 8-1a “Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning”</i>				
Number of Priors Referenced	(0072,0014)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
Hanging Protocol User Identification Code Sequence	(0072,000E)	R	2	This Attribute shall be retrieved with Sequence or Universal matching.
>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
>Coding Scheme Version	(0008,0103)	=	3	
>Code Meaning	(0008,0104)	=	1	
<i>>>Include Table 8-1a "Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning"</i>				
...				

V. Substance Administration Query Service Class (Normative)

V.6.1.2.2 Product Characteristics Query Attributes

Table V.6-1. Attributes for the Product Characteristics Query Information Model

Description / Module	Tag	Matching Key Type	Return Key Type	Remark/Matching Type
Product Package Identifier	(0044,0001)	R	1	Shall be retrieved with Single Value Matching only.
Product Type Code Sequence	(0044,0007)	-	1	
>Code Value	(0008,0100)	=	1	
>Coding Scheme Designator	(0008,0102)	=	1	
>Code Meaning	(0008,0104)	=	1	
<i>>>Include Table 8-3a "Enhanced SCU/SCP Coded Entry Macro with no SCU Support and no Matching Key Support"</i>				
Product Name	(0044,0008)	-	1	
Product Expiration DateTime	(0044,000B)	-	2	
Product Parameter Sequence	(0044,0013)	-	2	
>Value Type	(0040,A040)	-	1	
>Concept Name Code Sequence	(0040,A043)	-	1	
>>Code Value	(0008,0100)	=	1	
>>Coding Scheme Designator	(0008,0102)	=	1	
>>Code Meaning	(0008,0104)	=	1	
<i>>>Include Table 8-3a "Enhanced SCU/SCP Coded Entry Macro with no SCU Support and no Matching Key Support"</i>				
...				

V.6.2.2.2 Substance Approval Query Attributes

Table V.6-2. Attributes for the Substance Approval Query Information Model

Description / Module	Tag	Matching Key Type	Return Key Type	Remark/Matching Type
...				
Substance Administration				
Administration Route Code Sequence	(0054,0302)	R	1	Shall be present as a Matching Key in the Query.
>Code Value	(0008,0100)	R	1	
>Coding Scheme Designator	(0008,0102)	R	1	
>Code Meaning	(0008,0104)	-	1	
<i>>Include Table 8-1a "Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning"</i>				
...				

Administration Route Code Sequence (0054,0302) shall be present as a Matching Key in the Query, and a single Item shall be present in that Sequence with Code Value (0008,0100) and Coding Scheme Designator (0008,0102) as Matching Keys.

X. Color Palette Query/Retrieve Service Class

X.6.1.2 Color Palette Attributes

Table X.6-1. Attributes for the Color Palette Information Model

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
Color Palette Definition				
...				
Alternate Content Description Sequence	(0070,0087)	-	3	
>Content Description	(0070,0081)	-	1	
>Language Code Sequence	(0008,0006)	-	1	
>>Code Value	(0008,0100)	-	1	
>>Coding Scheme Designator	(0008,0102)	-	1	
>>Coding Scheme Version	(0008,0103)	-	3	

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
>>Code Meaning	(0008,0104)	-	1	
>>Include Table 8-3a "Enhanced SCU/SCP Coded Entry Macro with no SCU Support and no Matching Key Support"				

BB. Implant Template Query/Retrieve Service Classes

BB.6.1.2.1 Generic Implant Template Attributes

Table BB.6-1. Attributes for the Implant Template Information Model

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
...				
Implant Template				
Implant Target Anatomy Sequence	(0068,6230)	R	2	This Attribute shall be retrieved with Sequence or Universal matching.
>Anatomic Region Sequence	(0008,2218)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>>Code Meaning	(0008,0104)	-	1	
>>Include Table 8-1a "Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning"				
Implant Regulatory Disapproval Code Sequence	(0068,62A0)	R	2	This Attribute shall be retrieved with Sequence or Universal matching.
>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Code Meaning	(0008,0104)	-	1	
>Include Table 8-1a "Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning"				

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
Material Code Sequence	(0068,63A0)	R	1	This Attribute shall be retrieved with Sequence or Universal matching.
>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Code Meaning	(0008,0104)	-	1	
>Include Table 8-1a “Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning”				
Coating Materials Code Sequence	(0068,63A4)	R	1	This Attribute shall be retrieved with Sequence or Universal matching.
>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Code Meaning	(0008,0104)	-	1	
>Include Table 8-1a “Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning”				

BB.6.1.2.2 Implant Assembly Template Attributes

Table BB.6-2. Attributes for the Implant Assembly Template Information Model

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
...				
Implant Assembly Template				
Implant Assembly Template Name		R	1	Shall be retrieved with Single Value, Wild Card, or Universal Matching.
Manufacturer	(0008,0070)	R	1	Shall be retrieved with Single Value, Wild Card, or Universal Matching.
Procedure Type Code Sequence	(0076,0020)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Code Meaning	(0008,0104)	-	1	
>Include Table 8-1a "Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning"				
...				

CC. Unified Procedure Step Service and SOP Classes (Normative)

CC.2.2 Request UPS Cancel (N-ACTION)

This operation allows an SCU that does not control a given Unified Procedure Step (UPS) instance to request to the SCP that the instance be canceled. This operation shall be invoked by the SCU through the DIMSE N-ACTION Service.

CC.2.2.1 Action Information

Table CC.2.2-1. Request UPS Cancel - Action Information

Action Type Name	Action Type ID	Attribute Name	Tag	Requirement Type SCU/SCP	
Request UPS Cancel	2	Reason For Cancellation	(0074,1238)	3/1	
		Procedure Step Discontinuation Reason Code Sequence	(0074,100e)	3/1	
		>Code Value	(0008,0100)	1/1	
		>Coding Scheme Designator	(0008,0102)	1/1	
		>Coding Scheme Version	(0008,0103)	1C/1C Required if the value of Coding Scheme Designator (0008,0102) is not sufficient to identify the Code Value (0008,0100) unambiguously	
		>Code Meaning	(0008,0104)	1/1	
		>Include Table 8-1a "Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning"			
		Contact URI	(0074,100a)	3/1	
Contact Display Name	(0074,100c)	3/1			

CC.2.4 Report a Change in UPS Status (N-EVENT-REPORT)

...

CC.2.4.1 Event Report Information

Table CC.2.4-1. Report a Change in UPS Status - Event Report Information

Event Type Name	Event Type ID	Attribute Name	Tag	Req. Type SCU/SCP		
UPS State Report	1	Procedure Step State	(0074,1000)	-/1		
		Input Readiness State	(0040,4041)	-/1		
		Reason For Cancellation	(0074,1238)	-/3		
		Procedure Step Discontinuation Reason Code Sequence	(0074,100e)	-/3		
		>Code Value	(0008,0100)	-/1		
		>Coding Scheme Designator	(0008,0102)	-/1		
		>Coding Scheme Version	(0008,0103)	-/1C Required if the value of Coding Scheme Designator (0008,0102) is not sufficient to identify the Code Value (0008,0100) unambiguously		
		>Code Meaning	(0008,0104)	-/1		
		>Include Table 8-3a "Enhanced SCU/SCP Coded Entry Macro with no SCU Support and no Matching Key Support"				
		UPS Cancel Requested	2	Requesting AE	(0074,1236)	-/1
Reason For Cancellation	(0074,1238)			-/1C Required if provided in the triggering N-ACTION		
Procedure Step Discontinuation Reason Code Sequence	(0074,100e)			-/1C Required if provided in the triggering N-ACTION		
>Code Value	(0008,0100)			-/1		
>Coding Scheme Designator	(0008,0102)			-/1		
>Coding Scheme Version	(0008,0103)			-/1C Required if the value of Coding Scheme Designator (0008,0102) is not sufficient to identify the Code Value (0008,0100) unambiguously		
>Code Meaning	(0008,0104)			-/1		

Event Type Name	Event Type ID	Attribute Name	Tag	Req. Type SCU/SCP	
		>Include Table 8-3a "Enhanced SCU/SCP Coded Entry Macro with no SCU Support and no Matching Key Support"			
		...			
UPS Assigned	5	Scheduled Station Name Code Sequence	(0040,4025)	-1C Required if populated in the UPS Instance	
		>Code Value	(0008,0100)	-1	
		>Coding Scheme Designator	(0008,0102)	-1	
		>Coding Scheme Version	(0008,0103)	-1C Required if the value of Coding Scheme Designator (0008,0102) is not sufficient to identify the Code Value (0008,0100) unambiguously	
		>Code Meaning	(0008,0104)	-1	
		>Include Table 8-3a "Enhanced SCU/SCP Coded Entry Macro with no SCU Support and no Matching Key Support"			
		Human Performer Code Sequence	(0040,4009)	-1C Required if populated in the UPS Instance	
		>Code Value	(0008,0100)	-1	
		>Coding Scheme Designator	(0008,0102)	-1	
		>Coding Scheme Version	(0008,0103)	-1C Required if the value of Coding Scheme Designator (0008,0102) is not sufficient to identify the Code Value (0008,0100) unambiguously	
		>Code Meaning	(0008,0104)	-1	
		>Include Table 8-3a "Enhanced SCU/SCP Coded Entry Macro with no SCU Support and no Matching Key Support"			
	

CC.2.5 Create a Unified Procedure Step (N-CREATE)

...

CC.2.5.1 Unified Procedure Step Attribute Specification

...

CC.2.5.1.2 UPS Macros

Table CC.2.5-2a. UPS Code Sequence Macro

Attribute Name	Tag	Req. Type N-CREATE (SCU/SCP)	Req. Type N-SET (SCU/SCP)	Final State	Req. Type N-GET (SCU/SCP)	Match Key Type	Return Key Type	Remark/Matching Type
Code Value	(0008,0100)	1C/1C	1C/1C		-/1C	*	1C	Code Value shall be retrieved with Single Value Matching. Required if the code value length is 16 characters or less, and the code value is not a URN or URL.
Coding Scheme Designator	(0008,0102)	1C/1C	1/1		-/1C	*	1C	Coding Scheme Designator shall be retrieved with Single Value Matching. Shall be present if Code Value (0008,0100) or Long Code Value (0008,0119) is present. May be present otherwise.
Coding Scheme Version	(0008,0103)	1C/1C	1C/1C		-/1C	-	1C	Required if the value of Coding Scheme Designator (0008,0102) is not sufficient to identify the Code Value (0008,0100) unambiguously. Shall not be present if Coding Scheme Designator (0008,0102) is absent. May be present otherwise.

Attribute Name	Tag	Req. Type N-CREATE (SCU/SCP)	Req. Type N-SET (SCU/SCP)	Final State	Req. Type N-GET (SCU/SCP)	Match Key Type	Return Key Type	Remark/Matching Type
Code Meaning	(0008,0104)	1/1	1/1		-/1	-	1	Code Meaning shall not be used as Matching Key.
<u>Long Code Value</u>	<u>(0008,0119)</u>	<u>1C/1C</u>	<u>1C/1C</u>		<u>-/1C</u>	<u>*</u> <u>-</u>	<u>1C</u>	<u>Long Code Value shall be retrieved with Single Value Matching. Shall be present if Code Value (0008,0100) is not present, and the code value is not a URN or URL.</u>
<u>URN Code Value</u>	<u>(0008,0120)</u>	<u>1C/1C</u>	<u>1C/1C</u>		<u>-/1C</u>	<u>*</u> <u>-</u>	<u>1C</u>	<u>URN Code Value shall be retrieved with Single Value Matching. Shall be present if Code Value (0008,0100) is not present, and the code value is a URN or URL.</u>
<u>Mapping Resource</u>	<u>(0008,0105)</u>	<u>3/3</u>	<u>3/3</u>		<u>-/3</u>	<u>-</u>	<u>3</u>	
<u>Mapping Resource UID</u>	<u>(0008,0118)</u>	<u>3/3</u>	<u>3/3</u>		<u>-/3</u>	<u>-</u>	<u>3</u>	
<u>Context Group Version</u>	<u>(0008,0118)</u>	<u>3/3</u>	<u>3/3</u>		<u>-/3</u>	<u>-</u>	<u>3</u>	
<u>Context Group Extension Flag</u>	<u>(0008,010B)</u>	<u>3/3</u>	<u>3/3</u>		<u>-/3</u>	<u>-</u>	<u>3</u>	
<u>Context Group Local Version</u>	<u>(0008,0107)</u>	<u>3/3</u>	<u>3/3</u>		<u>-/3</u>	<u>-</u>	<u>3</u>	
<u>Context Group Extension Creator UID</u>	<u>(0008,010D)</u>	<u>3/3</u>	<u>3/3</u>		<u>-/3</u>	<u>-</u>	<u>3</u>	

HH.6.1.2 Defined Procedure Protocol Attributes

Table HH.6-1. Attributes for the Defined Procedure Protocol Information Model

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
...				
>Institution Code Sequence	(0008,0082)	R	2	This Attribute shall be retrieved with Sequence or Universal matching.
>>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>>Code Meaning	(0008,0104)	-	1	
>>Include Table 8-1a “Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning”				<i>Attributes shall be retrieved with Single Value or Universal matching.</i>
Responsible Group Code Sequence	(0008,0220)	R	2	This Attribute shall be retrieved with Sequence or Universal matching.
>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Code Meaning	(0008,0104)	-	1	
>Include Table 8-1a “Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning”				<i>Attributes shall be retrieved with Single Value or Universal matching.</i>

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
Protocol Name	(0018,1030)	R	1	Shall be retrieved with Single Value, Wild Card, or Universal Matching.
Potential Scheduled Protocol Code Sequence	(0018,9906)	R	1	This Attribute shall be retrieved with Sequence or Universal matching.
>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Code Meaning	(0008,0104)	-	1	
<u>>Include Table 8-1a “Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning”</u>				<u>Attributes shall be retrieved with Single Value or Universal matching.</u>
Potential Requested Procedure Code Sequence	(0018,9907)	R	1	This Attribute shall be retrieved with Sequence or Universal matching.
>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Code Meaning	(0008,0104)	-	1	
<u>>Include Table 8-1a “Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning”</u>				<u>Attributes shall be retrieved with Single Value or Universal matching.</u>

Description / Module	Tag	Matchin g Key Type	Retur n Key Type	Remark / Matching Type
				<u>Value or Universal matching.</u>
Potential Reasons for Procedure	(0018,9908)	-	2	
Potential Reasons for Procedure Code Sequence	(0018,9909)	R	2	This Attribute shall be retrieved with Sequence or Universal matching.
>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Code Meaning	(0008,0104)	-	1	
<u>>Include Table 8-1a “Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning”</u>				<u>Attributes shall be retrieved with Single Value or Universal matching.</u>
...				
Patient Positioning				
Anatomic Region Sequence	(0008,2218)	R	2	This Attribute shall be retrieved with Sequence or Universal matching.
>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
>Code Meaning	(0008,0104)	-	1	
<u>>Include Table 8-1a “Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning”</u>				<u>Attributes shall be retrieved with Single Value or Universal matching.</u>
Primary Anatomic Structure Sequence	(0008,2228)	R	2	This Attribute shall be retrieved with Sequence or Universal matching.
>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>Code Meaning	(0008,0104)	-	1	
<u>>Include Table 8-1a “Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning”</u>				<u>Attributes shall be retrieved with Single Value or Universal matching.</u>

II.6.1.2 Protocol Approval Attributes

Table II.6-1. Attributes for the Protocol Approval Information Model

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
...				
Approval Sequence	(0044,0100)	R	1	
>Assertion Code Sequence	(0044,0101)	R	1	

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
>>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>>Code Meaning	(0008,0104)	-	1	
<u>>>Include Table 8-1a “Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning”</u>				<u>Attributes shall be retrieved with Single Value or Universal matching.</u>
...				
>Asserter Identification Sequence	(0044,0103)	R	1	
>>Observer Type	(0040,A084)	-	1	
>>Person Name	(0040,A123)	R	1	
>>Person Identification Code Sequence	(0040,1101)	R	1	
>>>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>>>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>>>Code Meaning	(0008,0104)	-	1	
<u>>>>Include Table 8-1a “Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning”</u>				<u>Attributes shall be retrieved with Single Value or Universal matching.</u>

Description / Module	Tag	Matchin g Key Type	Retur n Key Type	Remark / Matching Type
				<i><u>Value or Universal matching.</u></i>
>>Organizational Role Code Sequence	(0044,010A)	R	2	
>>>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>>>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>>>Code Meaning	(0008,0104)	-	1	
<i><u>>>>Include Table 8-1a "Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning"</u></i>				<i><u>Attributes shall be retrieved with Single Value or Universal matching.</u></i>
...				
>>Institution Code Sequence	(0008,0082)	R	1	
>>>Code Value	(0008,0100)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>>>Coding Scheme Designator	(0008,0102)	R	1	This Attribute shall be retrieved with Single Value or Universal matching.
>>>Code Meaning	(0008,0104)	-	1	
<i><u>>>>Include Table 8-1a "Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning"</u></i>				<i><u>Attributes shall be retrieved with Single Value or Universal matching.</u></i>
>>Institutional Department Name	(0008,1040)	U	2	

Description / Module	Tag	Matching Key Type	Return Key Type	Remark / Matching Type
>>Institutional Department Type Code Sequence	(0008,1041)	U	3	
>>>Code Value	(0008,0100)	R	4	This Attribute shall be retrieved with Single Value or Universal matching.
>>>Coding Scheme Designator	(0008,0102)	R	4	This Attribute shall be retrieved with Single Value or Universal matching.
>>>Code Meaning	(0008,0104)	-	4	
<u>>>>Include Table 8-1a "Enhanced SCU/SCP Coded Entry Macro with SCU Support, Matching Key Support and Mandatory Meaning"</u>				<u>Attributes shall be retrieved with Single Value or Universal matching.</u>
...				