Digital Imaging and Communications in Medicine (DICOM)

Supplement 233

Patient Model Gender Enhancements

*Prepared by:*

**DICOM Standards Committee, Working Group 6**

1300 N. 17th Street, Suite 900

Rosslyn, Virginia 22209 USA

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# Document History

|  |  |  |  |
| --- | --- | --- | --- |
| 2019/02/21 | Version 3 | DAC | Updated to reflect conventions in DocBook publishing |
| 2022/12/19 | Version 4 |  | Updated open and closed issues |
| 2023/01/16 | Version 5 |  | Update prior to WG-06 meeting |

# Open Issues

|  |  |
| --- | --- |
| 3 | Should we add a gender CID into TID 1007 Subject Context, Patient? It has subject sex; does it also need a subject gender? We need to fix a conflict between description and CID.  The gender harmony model includes a partial list of gender identities proposed in various jurisdictions. It is unlikely that there will be a unified single list with internationally agreed definitions. It is likely that for some jurisdictions there will be recommended lists of gender identities.  Note: a gender CID has been created for the Patient’s Gender (0010,xxxx). The TID can reference that. The issue with many local extensions should be a note on the CID to warn implementers to expect local extensions.  ***Add a gender to TID 1007, move to closed*** |
| 5 | Can gender be required capability on Part 18 search? Should the resulting non-conforming past implementations be accepted? New actor created? Make it optional and deal with it by conformance claim?  **Look into search response payload.**  Note: It must remain optional for MWL and UPS to avoid unacceptable backwards compatibility issues. The conformance claim may be updated to inform users about the gender related capabilities. |
| 7 | How should HL7 FHIR codes be handled?  The proposal is   1. Use the minimum interoperable list from HL7 Implementation Guide as the basis for creating CIDs to the extent possible. 2. Where this is not possible, invent something specific for DICOM.   Some of attributes, such as Patient’s Gender (0010,xxxx) will have significant local extensions based on national and local policies.  See also issue 30 about how to encode HL7 codes  ***Write a separate CP*** |
| 8 | How should the comments on sex and gender attributes relate to the existing DICOM comments?  Comments on the Scheduled Procedure Step (0040,0400) is explicitly indicated as something to be displayed to the operator. It only applies to Scheduled Procedure Step and Unified Procedure Step.  Requested Procedure Comments (0040,1400) also applies.  Proposal: Update the description of Patient Comments (0010,4000) to explicitly indicate potential use for sex-linked information. Patient Comments (0040,1400) is present in both the normalized and composite objects at patient, study, and procedure levels. See issue 28. |
| 13 | ***Note, this may change as a result of HL7 Implementation Guide ballot resolution. Wait for that resolution to complete.***  Does DICOM have a need for an “recorded sex/gender” attribute? This is the sex/gender that is present on an ID such as a Passport, National ID, or Driving License. At present HL7 describes this as “Recorded Sex or Gender”. These are needed in some legal and administrative workflows that matter to HL7, such as during patient admission.  No? – DICOM workflows do not need Identity document information. We are not aware of operational workflows where patient identity documents are checked as part of the process. E.g., confirmed identity from modality worklist against National ID.  Yes? – Many existing procedures depend upon some form of birth sex as part of the workflow and machine settings for the examination. How would that need be met? (One suggestion in HL7 context is to use an SFCU with the effective date being the patient date of birth. SFCU is allowed to change over time with effective dates being specified for each value.)  ***Take key attributes and put into identity confirmation, maybe*** |
| 16 | All Supplements that are in progress need to be updated somehow. **This is not a comment issue. It’s a TODO.** |
| 18 | Should we update Part 16 TID 1007, CID 7455 (which is mostly diagnostic codes and non-extensible) and/or CID 7457 (which is M, F, and extensible) to include gender codes? These are mostly diagnostic codes. This is a complex area that deserves separate review and development with significant clinical contribution and review. HL7 is treating this as out of scope for the Implementation Guide. |
| 22 | **TODO** Update PS3.2 Conformance as necessary  **ISSUE** Australia privacy regulations require a statement with justification for maintaining sex information in records. Will this be part of a conformance statement from DICOM, or put somewhere else by the vendor?  Should this be covered by having a section in the DCS for other regulations that are also complied with, e.g., GDPR, DIN, and UL? Should this be part of Supplement 209? These privacy regulation responses could go in such a section.  **Conformance will not provide justification: NO, will conformance describe capability: MAYBE/YES** |
| 25 | What should be done about Sex at Birth? See also issue 13. |
| 27 | Can we duplicate Patient Comments into Patient Study Module?  There are other examples of the same attribute being present at the top level in multiple modules. In those cases the disambiguation of intent is either not needed or obvious. Can with do that with these comments? Can or should we do that for other attributes? |
| 28 | Are there problems with the same attribute in the Patient Module having different values in different studies? (Like Patient Weight, Patient Gender is subject to change.) This can be resolved by putting all the gender attributes in the Patient Study Module. Is that a problem?  Example Patient Name |
| 29 | What should we do about Patient Sex (0010,0008)? HL7 is leaving it very ambiguously defined and noting that the definition is basically up to the local policy of the system creating the value. The better defined value sets are used in the new attributes. |
| 30 | How will DICOM refer to codes defined in FHIR? This is a question for both WG-06 and WG-20 to decide whether this is a suitable encoding and will function appropriately.  FHIR defines codes as the pair (Value Set URI, code) rather than just (code).  Proposal 1, define a “FHIR-code” that is the concatentation of the value set URI and code. This will make use of the extended length code values. The alternative of defining new coding systems for each FHIR value set is very unattractive. The alternative of using the value set URI as the code system is not available because the length of the URI exceeds the size limit for the name of a code system.  Proposal 2: use the Coding Scheme UID (0008,010C) for each specific value set used, and add them to the list in PS3.16 Table 8-2. |
| 31 | Check the language on sex/gender based analytic results etc. E.g., BSA. Confirm that there is a way to indicate sex used, etc. on observations. |

# Closed Issues

|  |  |
| --- | --- |
| 1 | Should the conformance statement describe how sex/gender attributes are managed?  Yes, in terms of any applicable configuration support, but not in terms of imposing any particular policy choices. |
| 2 | **Duplicate of 26** |
| 4 | What should be done about CID 7457?  **NO changes.**  This is for small animals and groups of small animals where gender is not an issue. |
| 6 | Are there any SOP classes that deserve creating a new SOP class where the new attributes are type 2?  **NO**. The new attributes are type 3 for all existing SOP classes. |
| 9 | Should Patient Comments (0010,4000) be moved from C.7.1.1.1 Patient Module to C.7.2.2 Patient Study Module?  **NO**, never move existing attributes. But new attributes can be created in other modules. These may vary from study to study because they may reflect temporary, transient, or changed characteristics of the patient. That would make it more appropriate for comments on patient sex and gender that reflect changes.  YES. Can we duplicate Patient Comments into Patient Study Module. |
| 10 | What new attributes should be created to capture more specific sub-sets of genotypic and phenotypic parameters? Is this captured in an updated TID 1007? Should this be part of a later CP?  **No new attributes.** Proper diagnosis is much more than just a diagnostic code, and does not belong in DICOM. The comments and references can provide specific extra information needed by the operator and staff. If links to other medical records are appropriate they can be included there. |
| 11 | How should the present models in open literature, implementations, etc. be reflected into DICOM Standard?  Copy bibliography in from HL7? Copy or reference various background information on HL7 Gender project site? (This stuff gets re-organized occasionally because it is a working group area, not a part of the standard that is subject to change control. Can we use DOI or something like it for more permanent references? Ask HL7 project team.)  Response:  **Put bibliography into Part 17 Annex**. |
| 12 | Do we provide instructions on what algorithm to pick for selecting sex or gender when the other is missing? What about other sex related instructions?  **NO**. It’s not DICOM’s responsibility or core competence. |
| 14 | Is this a supplement or a CP? <wg-06 question, November 2019 meeting> <revised August 2022>  **Supplement 233** |
| 19 | Include both sex and gender, in both image IODs and workflow IODs?  **YES.** The Harmonized model is incorporated in Patient Modules and any IOD that incorporates these is affected. The question of Query is separate. |
| 21 | The new attributes are proposed as type 3 so that they do not trigger creation of new SOP classes. They are a better fit to type 2 so that the concept “attempted but failed to get a value” can be encoded. Is there a way to finesse this issue? Is it a problem if that concept cannot be encoded? Should a code value for this be added to the definition?  **Leave them type 3.** |
| 23. | Gender for animals is not prohibited and not specifically addressed. Should this be addressed?  **No.** As coded values the veterinary users can extend locally, or add coded values to SNOMED, or as DICOM codes. This is a separate issue and can be dealt with by CP if necessary. |
| 24 | How should pronoun usage be addressed in this Supplement?  **Only English pronoun usage is addressed in this Supplement**. Pronoun usage issues are reasonably well understood for English, but not for other languages that use pronouns. Some languages, e.g., Mandarin and Cantonese, do not traditionally use pronouns, so it is a non-issue for them. Other languages have complex conjugation, declination, and similar grammatical rules that apply to pronouns. (Note: The Europeans forced the use of pronouns onto some cultures, including Chinese. Some of them are removing the use of pronouns while others are revising the use of pronouns.)  This could be addressed in a separate CP.  The example use case is as part of instructions, comments, etc. The acquired images and structured reports are much less likely to include pronouns. |
| 26 | What VR should be used for Patient’s Gender (0010,xxx1)?  **The Patient’s Gender Identity (0010,xxx1) is encoded as a coded value**. There are only a minimal set of coded values defined by SNOMED and HL7.  There are many locally defined terms that are appropriate for gender identities. These may be official designations, local designations, or personal designations. These will be handled the same way other value set extensions are handled. |
|  |  |

# Scope and Field

Further explanatory information can be found in the article “*Gender harmony: improved standards to support affirmative care of gender-marginalized people through inclusive gender and sex representation*” in Journal of the American Medical Informatics Association (JAMIA) (<https://doi.org/10.1093/jamia/ocab196>).

# HL7 Gender Harmony Project Notes

1. Question regarding proper mapping between FHIR terminology and value sets and DICOM Attributes with Enumerated Values. How should this be documented in FHIR? Does this affect anything in the text of the DICOM Standard? Should DICOM define a CID that contains codes that correspond precisely to Enumerated Values in specific attributes? With equivalent DICOM codes? (wg-06 and WG-20 question)
2. Question regarding proper reference to FHIR value sets (and terminology?) from DICOM. How should this kind of reference be made? How (if at all) are value sets and terminologies coordinated when changes are made?
3. Gender related information (e.g., Patient Sex (0010,0040) is provided by HL7 to systems that populate DICOM Modality Worklists. HL7 will be providing this information in three standard forms:
   1. FHIR Orders, as a FHIR resource extension, or as extensions on referenced or included FHIR elements and resources. For example, the FHIR Order will usually refer to a Patient Resource and the gender information may be present as a resource extension to the patient resource rather than as an extension to the order resource.
   2. HL7 v2.9 segments. New segments are being defined to convey the gender information related to this message. An order sent using v2.9 can include gender segments.
   3. HL7 v2.5.1 backwards compatible segments. The segments defined for v2.9 can be added to v2.5.1 messages in accordance with a specified standard process for extensions.
   4. The old PID-8.
   5. Should this supplement or a CP be written to describe use of this information for systems that generate MWL? Is this something that will be managed by IHE? Is this something to be described as part of an informative annex section explaining the relationship between attributes of DICOM and HL7 protocols?
4. How will changes by FHIR or HL7 be tracked to generate appropriate CPs or commentary by DICOM?
5. Steve’s question about how do we illustrate (FHIR, v2)<->DICOM mapping properly in our informative annex in Part 17.

# Part 3 PP

### 

Update Part 3, Table C.2-3. Patient Demographic Module Attributes

### C.2.3 Patient Demographic Module

Table C.2-3 defines the Attributes relevant to generally describing a Patient at a specific point in time, e.g., at the time of admission.

Table C.2-3. Patient Demographic Module Attributes

|  |  |  |
| --- | --- | --- |
| Attribute Name | Tag | Attribute Description |
| Patient's Sex | (0010,0040) | Sex of the named Patient.  Enumerated Values:  **M** male  **F** female  **O** other  **See section C.7.2.2.1.x2** |
| **Gender Identity Sequence** | **(0010,xxxx)** | **Patient Gender Identities that apply to this patient.**  **One or more items are permitted in this Sequence.** |
| **>Gender Code Sequence** | **(0010,xxx4)** | **A specific gender code.**  **See also section C.7.2.2.1.x**  **Only a single item shall be included in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | **DCID CIDxxx1 Person Gender** |
| **>Start DateTime** | **(0010,xxx6)** | **Valid after this time.**  **If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **Valid before this time.**  **If missing, it is valid for all times after the Start DateTime (0010,xxx6)** |
| **>Gender Comment** | **(0010,xxx8)** | **Description of gender identity** |
| **Sex for Clinical Use Sequence** | **(0010,xxx2)** | **Sex for Clinical Use that apply to this patient.**  **See also section C.7.2.2.1.x2**  **One or more items are permitted in this Sequence.** |
| **>SFCU Code Sequence** | **(0010,xxx9)** | **A specific sex for clinical use**  **Only a single item shall be included in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | **DCID CIDxxx2 Sex for Clinical Use** |
| **>Start DateTime** | **(0010,xxx6)** | **Valid after this time.**  **If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **Valid before this time.**  **If missing, it is valid for all times after the Start DateTime (0010,xxx6)** |
| **>SFCU Comment** | **(0010,xxx1)** | **Further description of clinical implications and reasons for the selected code.** |
| **>SFCU Reference** | **(0010,xx10)** | **URI reference that explains, extends, or justifies the SFCU** |
| **Person Names to Use Sequence** | **(0010,xxx3)** | **Names to be used or that have been used when talking with or discussing this person.**  **One or more items are permitted in this Sequence.** |
| **>Name to use** | **(0010,xx12)** | **A name to be used when talking with or discussing this person.**  **This need not be an official name nor comply with any particular name structure.** |
| **>Start DateTime** | **(0010,xxx6)** | **Valid after this time.**  **If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **Valid before this time.**  **If missing, it is valid for all times after the Start DateTime (0010,xxx6)** |
| **>Name to Use Comment** | **(0010,xx13)** | **Further explanation of proper name usage** |
| **Sex at Birth Code Sequence** | **(0010,xx25)** | **Sex determined at birth or during infancy.**  **Only a single item is permitted in this Sequence.** |
| **>*Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | **DCID CIDxxx2 Sex for Clinical Use** |
| **Recorded Sex or Gender Sequence** | **(0010,xx14)** | **Sex or Gender records that apply to this patient.**  **One or more items are permitted in this Sequence.** |
| **>Recorded Value** | **(0010,xx15)** | **A recorded value for this patient.** |
| **>International Equivalent Code Sequence** | **(0010,xx24)** | **The international equivalent code for this value.**  **Only a single item is permitted in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | **DCID CIDxxx3 International Equivalent Sexes** |
| **>RSG Type Code Sequence** | **(0010,xx16)** | **The kind of sex or gender for this value. E.g., “sex assigned at birth.”**  **Only a single item is permitted in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | **DCID (match HL7 value set for Identity type value)** |
| **>Acquisition Datetime** | **(0010,xx17)** | **The datetime when this record was acquired.** |
| **>Start DateTime** | **(0010,xxx6)** | **Valid after this time.**  **If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **Valid before this time.**  **If missing, it is valid for all times after the Start DateTime (0010,xxx6)** |
| **>Jurisdiction** | **(0010,xx18)** | **The jurisdiction or organization that issued this record.** |
| **>Source Field Name** | **(0010,xx19)** | **The name of the field on the document record.** |
| **>Source Field Definition** | **(0010,xx20)** | **The jurisdiction or issuing organization’s definition of this field.** |
| **>Source Document Reference** | **(0010,xx26)** | **A reference to the specific document or record.** |
| **Third person pronoun Sequence** | **(0010,xx21)** | **Pronoun(s) to be used for this person**  **One or more items are permitted in this sequence.** |
| **>Pronoun Code sequence** | **(0010,xx22)** | **Pronoun**  **Only a single item shall be included in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | **DCID CIDxxx4 Third Person Pronouns.** |
| **>Start DateTime** | **(0010,xxx6)** | **Valid after this time.**  **If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **Valid before this time.**  **If missing, it is valid for all times after the Start DateTime (0010,xxx6)** |
| **>Pronoun Comment** | **(0010,xx23)** | **Further explanation of pronoun usage** |

Update Part 3, Table C.4-13. Performed Procedure Step Relationship Module Attributes

### C.4.13 Performed Procedure Step Relationship

Table C.4-13 specifies the Attributes used to reference other SOP Classes and other Information Entities of the DICOM real-world model as defined in Section 7.3.1.6.

Table C.4-13. Performed Procedure Step Relationship Module Attributes

|  |  |  |
| --- | --- | --- |
| **Attribute Name** | **Tag** | **Attribute Description** |
| Patient's Sex | (0010,0040) | Sex of the named Patient.  Enumerated Values:  **M** male  **F** female  **O** other  **See section C.7.2.2.1.x2** |
| **Gender Identity Sequence** | **(0010,xxxx)** | **Patient Gender Identities that apply to this patient.**  **One or more items are permitted in this Sequence.** |
| **>Gender Code Sequence** | **(0010,xxx4)** | **A specific gender code.**  **See also section C.7.2.2.1.x**  **Only a single item shall be included in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | **DCID CIDxxx1 Person Gender** |
| **>Start DateTime** | **(0010,xxx6)** | **Valid after this time.**  **If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **Valid before this time.**  **If missing, it is valid for all times after the Start DateTime (0010,xxx6)** |
| **>Gender Comment** | **(0010,xxx8)** | **Description of gender identity** |
| **Sex for Clinical Use Sequence** | **(0010,xxx2)** | **Sex for Clinical Use that apply to this patient.**  **See also section C.7.2.2.1.x2**  **One or more items are permitted in this Sequence.** |
| **>SFCU Code Sequence** | **(0010,xxx9)** | **A specific sex for clinical use**  **Only a single item shall be included in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | **DCID CIDxxx2 Sex for Clinical Use** |
| **>Start DateTime** | **(0010,xxx6)** | **Valid after this time. If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **Valid before this time. If missing, it is valid for all times after the Stop DateTime (0010,xxx6)** |
| **>SFCU Comment** | **(0010,xxx1)** | **Further description of clinical implications and reasons for the selected code.** |
| **>SFCU Reference** | **(0010,xx10)** | **URI reference that explains, extends, or justifies the SFCU** |
| **Person Names to Use Sequence** | **(0010,xxx3)** | **Names to be used or that have been used when talking with or discussing this person.**  **One or more items are permitted in this Sequence.** |
| **>Name to use** | **(0010,xx12)** | **A name to be used when talking with or discussing this person.**  **This need not be an official name nor comply with any particular name structure.** |
| **>Start DateTime** | **(0010,xxx6)** | **Valid after this time.**  **If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **Valid before this time.**  **If missing, it is valid for all times after the Start DateTime (0010,xxx6)** |
| **>Name to Use Comment** | **(0010,xx13)** | **Further explanation of proper name usage** |
| **Sex at Birth Code Sequence** | **(0010,xx25)** | **Code sequence for Sex determined at birth or during infancy.**  **Only a single item is permitted in this Sequence.** |
| **>*Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | **DCID CIDxxx2 Sex for Clinical Use** |
| **Recorded Sex or Gender Sequence** | **(0010,xx14)** | **Sex or Gender records that apply to this patient.**  **One or more items are permitted in this Sequence.** |
| **>Recorded Value** | **(0010,xx15)** | **A recorded value for this patient.** |
| **>International Equivalent Code Sequence** | **(0010,xx24)** | **The international equivalent code for this value.**  **Only a single item is permitted in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | **DCID CIDxxx3 International Equivalent Sexes** |
| **>RSG Type Code Sequence** | **(0010,xx16)** | **The kind of sex or gender for this value. E.g., “sex assigned at birth.”**  **Only a single item is permitted in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | **DCID (match HL7 value set for Identity type value)** |
| **>Acquisition Datetime** | **(0010,xx17)** | **The datetime when this record was acquired.** |
| **>Start DateTime** | **(0010,xxx6)** | **Valid after this time.**  **If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **Valid before this time.**  **If missing, it is valid for all times after the Start DateTime (0010,xxx6)** |
| **>Jurisdiction** | **(0010,xx18)** | **The jurisdiction or organization that issued this record.** |
| **>Source Field Name** | **(0010,xx19)** | **The name of the field on the document record.** |
| **>Source Field Definition** | **(0010,xx20)** | **The jurisdiction or issuing organization’s definition of this field.** |
| **>Source Document Reference** | **(0010,xx26)** | **A reference to the specific document or record.** |
| **Third person pronoun Sequence** | **(0010,xx21)** | **Pronoun(s) to be used for this person**  **One or more items are permitted in this sequence.** |
| **>Pronoun Code sequence** | **(0010,xx22)** | **A Pronoun to be used.**  **Only a single item shall be included in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | **DCID CIDxxx4 Third Person Pronouns.** |
| **>Start DateTime** | **(0010,xxx6)** | **Valid after this time.**  **If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **Valid before this time.**  **If missing, it is valid for all times after the Start DateTime (0010,xxx6)** |
| **>Pronoun Comment** | **(0010,xx23)** | **Further explanation of pronoun usage** |

Update Part 3, Table C.7-1 Patient Module Attributes

### C.7.1 Common Patient IE Modules

#### C.7.1.1 Patient Module

Table C.7-1 specifies the Attributes of the Patient that describe and identify the Patient who is the subject of a Study. This Module contains Attributes of the Patient that are needed for interpretation of the Composite Instances and are common for all Studies performed on the Patient. It contains Attributes that are also included in the Patient Modules in Section C.2.

Table C.7-1. Patient Module Attributes

|  |  |  |  |
| --- | --- | --- | --- |
| Attribute Name | Tag | Type | Attribute Description |
| Patient's Sex | (0010,0040) | 2 | Sex of the named Patient.  Enumerated Values:  **M** male  **F** female  **O** other  **See also section C.7.2.2.1.x2** |

Update Part 3, Table C.7-4a Patient Study Module Attributes – add attributes

#### C.7.2.2 Patient Study Module

Table C.7-4a defines Attributes that provide information about the Patient at the time the Study started.

Note In the case of imaging a group of small animals simultaneously, the Attributes in this Module can only have values that apply to the entire group

Discuss: Patient’s Sex is at Patient Level despite its variability study to study. Should any of these new attributes use that same approach? This has implications for C-FIND in particular.

Discuss: Do we define the mapping for all of the Logical Model even though some parts are unlikely to be useful except in very special circumstances?

Table C.7-4a. Patient Study Module Attributes

|  |  |  |  |
| --- | --- | --- | --- |
| Attribute Name | Tag | Type | Attribute Description |
| … |  |  |  |
| **Gender Identity Sequence** | **(0010,xxxx)** | **3** | **Patient Gender Identities that apply to this patient.**  **One or more items are permitted in this Sequence.** |
| **>Gender Code Sequence** | **(0010,xxx4)** | **1** | **A specific gender code.**  **See also section C.7.2.2.1.x**  **Only a single item shall be included in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | | **DCID CIDxxx1 Person Gender** |
| **>Start DateTime** | **(0010,xxx6)** | **3** | **Valid after this time.**  **If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **3** | **Valid before this time.**  **If missing, it is valid for all times after the Start DateTime (0010,xxx6)** |
| **>Gender Comment** | **(0010,xxx8)** | **3** | **Description of gender identity** |
| **Sex for Clinical Use Sequence** | **(0010,xxx2)** | **3** | **Observations related to Sex for Clinical Use that apply to this patient.**  **See section C.7.2.2.1.x2**  **One or more items are permitted in this Sequence.** |
| **>SFCU Code Sequence** | **(0010,xxx9)** | **1** | **A specific SFCU observation code for clinical use**  **Only a single item shall be included in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | | **DCID CIDxxx2 Sex for Clinical Use** |
| **>Start DateTime** | **(0010,xxx6)** | **3** | **This observation applies after this date time.**  **If missing valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **3** | **This observation applies before this date time.**  **If missing, it is valid for all times after the Start DateTime (0010,xxx6)** |
| **>SFCU Comment** | **(0010,xxx1)** | **3** | **Further description of clinical implications and reasons for the selected code.** |
| **>SFCU Reference** | **(0010,xx10)** | **3** | **URI reference that explains, extends, or justifies the SFCU observation.** |
| **Person Names to Use Sequence** | **(0010,xxx3)** | **3** | **Names to be used or that have been used when talking with or discussing this person.**  **One or more items are permitted in this Sequence.** |
| **>Name to use** | **(0010,xx12)** | **1** | **A name to be used when talking with or discussing this person.**  **This need not be an official name nor comply with any particular name structure.** |
| **>Start DateTime** | **(0010,xxx6)** | **3** | **Valid after this time. If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **3** | **Valid before this time. If missing, it is valid for all times after the Start DateTime (0010,xxx6)** |
| **>Name to Use Comment** | **(0010,xx13)** | **3** | **Further explanation of appropriate name usage** |
| **Sex at Birth Code Sequence** | **(0010,xx25)** | **3** | **Sex determined at birth or during infancy.**  **Only a single item is permitted in this Sequence.** |
| **>*Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | | **DCID CIDxxx2 Sex for Clinical Use** |
| **Recorded Sex or Gender Sequence** | **(0010,xx14)** | **3** | **Sex or Gender records that apply to this patient.**  **See section C.7.2.2.1.b.**  **One or more items are permitted in this Sequence.** |
| **>Recorded Value** | **(0010,xx15)** | **1** | **A recorded value for this patient.** |
| **>International Equivalent Code Sequence** | **(0010,xx24)** | **3** | **The international equivalent code for this value.**  **Only a single item is permitted in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | | **DCID CIDxxx3 International Equivalent Sexes** |
| **>RSG Type Code Sequence** | **(0010,xx16)** | **3** | **The kind of sex or gender for this value. E.g., “sex assigned at birth.”**  **Only a single item is permitted in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | | **DCID (match HL7 value set for Identity type value)** |
| **>Acquisition Datetime** | **(0010,xx17)** | **3** | **The datetime when this record was acquired.** |
| **>Start DateTime** | **(0010,xxx6)** | **3** | **Valid after this time.**  **If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **3** | **Valid before this time.**  **If missing, it is valid for all times after the Start DateTime (0010,xxx6)** |
| **>Jurisdiction** | **(0010,xx18)** | **3** | **The jurisdiction or organization that issued this record.** |
| **>Source Field Name** | **(0010,xx19)** | **3** | **The name of the field on the document record.** |
| **>Source Field Definition** | **(0010,xx20)** | **3** | **The jurisdiction or issuing organization’s definition of this field.** |
| **>Source Document Reference** | **(0010,xx26)** | **3** | **A reference to the specific document or record.** |
| **Third person pronoun Sequence** | **(0010,xx21)** | **3** | **Pronoun(s) to be used for this person**  **One or more items are permitted in this sequence.** |
| **>Pronoun Code sequence** | **(0010,xx22)** | **1** | **Pronoun**  **Only a single item shall be included in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | | **DCID CIDxxx4 Third Person Pronouns.** |
| **>Start DateTime** | **(0010,xxx6)** | **3** | **Valid after this time.**  **If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **3** | **Valid before this time.**  **If missing, it is valid for all times after the Start DateTime (0010,xxx6)** |
| **>Pronoun Comment** | **(0010,xx23)** | **3** | **Further explanation of pronoun usage** |

Add sections to C.7.2.2 Patient Study Module

###### C.7.2.2.1.x1 Patient's Gender and Sex Attributes

The Gender and Sex Attributes are concrete instantiations of the HL7 Gender Harmony logical model (<http://www.hl7.org/implement/standards/product_brief.cfm?product_id=564>. These are expected to support social interactions between patient, staff, care givers, family, and others.

**TODO, switch to stable references here and section 2 when the ballot is approved by HL7.**

###### C.7.2.2.1.x2 Sex for Clinical Use Sequence

Sex for Clinical Use Sequence (0010,xxx2) provides codes for observations that are related to a clinically relevant biological distinction between male and female. They can be used for purposes such as algorithm selection, normal limits, etc. Multiple codes are possible. It is possible that for some purposes the patient should be treated as part of a male population, in others as part of a female population, and in others with patient specific or unknown characteristics.

Note: Patient's Sex (0010,0040) reflects the sex assignment policies of the local administration. It is related to the Sex for Clinical Use Sequence (0010,xxx2) and might be used as a substitute when the Sex for Clinical Use Sequence (0010,xxx2) is not present

Sex for Clinical Use Sequence (0010,xxx2) is intended for use such as computing dose and diagnostic parameters. For example, the formula for SUVlbm depends upon the patient’s phenotypic sex, see PS3.16, CID 85 notes. Most of these are empirical results such as nomographs, formulae, and phenotypical values from referenced publications.

Each individual sequence item shall have an SFCU code (0010,xxx9).

Each individual sequence item may have a Validity Period Sequence (0010,xxx5) specifying the time interval during which this code applies.

Each individual sequence item may have an SFCU Comment (0010,xxx1) to further explain the use of the SFCU code (0010,xxx9).

Each individual sequence item may have one or more SFCU References (0010,xx10) to other observations or reports that further explain the use of the SFCU Code (0010,xxx9).

###### C.7.2.2.1.y Patient's Gender Identity Sequence

The Gender Identity Sequence (0010,xxxx) describes elements of an individual's personal sense of being a man, woman, or something else. Each item describes one gender identity that applies to this person.

Note: 1. Patient's Sex (0010,0040) reflects the sex assignment policies of the local administration. It is related to the Gender Identity Sequence (0010,xxx1) and might be used as a substitute when the Gender Identity Sequence (0010,xxx1) is not present.

2. If the patient (such as a fetus or infant) is unable to express a personal sense of being a man, woman, boy, girl or any point on the gender spectrum, gender identity might be recorded as unknown or might be missing.

###### C.7.2.2.1.a Name to Use

The Name to Use (0010,xx12) is a name to be used when talking with the patient or others about the patient. This name need not be an official name of any sort, nor does it need to comply with any standard naming structure. The name need not match the person’s name for official records purposes. It is the name chosen for social interactions.

Note: This is encoded as a text string rather than a person name (PN) value to avoid confusion about the proper combination of elements. The person name value representation does not provide a mechanism to indicate whether a person wants to be addressed as “John Doe”, “Mr. Doe”, “Sergeant Doe”, or “John” when all of these elements are part of the PN value.

###### C.7.2.2.1.b Recorded Sex and Gender Sequence

The Recorded Sex or Gender Sequence (0010,xx14) provides a catalog of sex or gender information obtained from various documents or sources about this person. Each item may include an International Equivalent Code Sequence (0010,xx24) and an RSG Type Code Sequence (00x0,xx16) to provide equivalence information for records whose encoding or definition might not be known to the recipient.

Note: The Sex at Birth Code Sequence (0010,xx25) provides an alternative to the Recorded Sex and Gender Sequence (0010,xx14) for situations where the sex at birth is the only information provided or of interest. A history of visas, passports, national IDs, and other IDs is of interest for patient identity confirmation and administration but generally not of interest for clinical purposes.

Update Part 3, Table C.30.4-1. Unified Procedure Step Relationship Module Attributes

### C.30.4 Unified Procedure Step Relationship Module

Table C.30.4-1 specifies the Attributes that describe the relationship of a Unified Procedure Step (UPS).

Table C.30.4-1. Unified Procedure Step Relationship Module Attributes

|  |  |  |  |
| --- | --- | --- | --- |
| Attribute Name | Tag | Type | Attribute Description |
| Patient's Sex | (0010,0040) | 2 | Sex of the named Patient.  Enumerated Values:  **M** male  **F** female  **O other**  **See also section C.7.2.2.1.x1** |
| **Gender Identity Sequence** | **(0010,xxxx)** | **3** | **Patient Gender Identities that apply to this patient.**  **One or more items are permitted in this Sequence.** |
| **>Gender Code Sequence** | **(0010,xxx4)** | **1** | **A specific gender code.**  **See also section C.7.2.2.1.x**  **Only a single item shall be included in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | | **DCID CIDxxx1 Person Gender** |
| **>Start DateTime** | **(0010,xxx6)** | **3** | **Valid after this time.**  **If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **3** | **Valid before this time.**  **If missing, it is valid for all times after the Start DateTime (0010,xxx6)** |
| **>Gender Comment** | **(0010,xxx8)** | **3** | **Description of gender identity** |
| **Sex for Clinical Use Sequence** | **(0010,xxx2)** | **3** | **Sex for Clinical Use that apply to this patient.**  **See also section C.7.2.2.1.x2**  **One or more items are permitted in this Sequence.** |
| **>SFCU Code Sequence** | **(0010,xxx9)** | **1** | **A specific sex for clinical use**  **Only a single item shall be included in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | | **DCID CIDxxx2 Sex for Clinical Use** |
| **>Start DateTime** | **(0010,xxx6)** | **3** | **Valid after this time.**  **If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **3** | **Valid before this time.**  **If missing, it is valid for all times after the Stop DateTime (0010,xxx6)** |
| **>SFCU Comment** | **(0010,xxx1)** | **3** | **Further description of clinical implications and reasons for the selected code.** |
| **>SFCU Reference** | **(0010,xx10)** | **3** | **URI reference that explains, extends, or justifies the SFCU** |
| **Person Names to Use Sequence** | **(0010,xxx3)** | **3** | **Names to be used or that have been used when talking with or discussing this person.**  **One or more items are permitted in this Sequence.** |
| **>Name to use** | **(0010,xx12)** | **1** | **A name to be used when talking with or discussing this person.**  **This need not be an official name nor comply with any particular name structure.** |
| **>Start DateTime** | **(0010,xxx6)** | **3** | **Valid after this time.**  **If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **3** | **Valid before this time.**  **If missing, it is valid for all times after the Start DateTime (0010,xxx6)** |
| **>Name to Use Comment** | **(0010,xx13)** | **3** | **Further explanation of proper name usage** |
| **Sex at Birth Code Sequence** | **(0010,xx25)** | **3** | **Code sequence for Sex determined at birth or during infancy.**  **Only a single item is permitted in this Sequence.** |
| **>*Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | | **DCID CIDxxx2 Sex for Clinical Use** |
| **Recorded Sex or Gender Sequence** | **(0010,xx14)** | **3** | **Sex or Gender records that apply to this patient.**  **One or more items are permitted in this Sequence.** |
| **>Recorded Value** | **(0010,xx15)** | **1** | **A recorded value for this patient.** |
| **>International Equivalent Code Sequence** | **(0010,xx24)** | **3** | **The international equivalent code for this value.**  **Only a single item is permitted in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | | **DCID CIDxxx3 International Equivalent Sexes** |
| **>RSG Type Code Sequence** | **(0010,xx16)** | **3** | **The kind of sex or gender for this value. E.g., “sex assigned at birth.”**  **Only a single item is permitted in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | | **DCID (match HL7 value set for Identity type value)** |
| **>Acquisition Datetime** | **(0010,xx17)** | **3** | **The datetime when this record was acquired.** |
| **>Start DateTime** | **(0010,xxx6)** | **3** | **Valid after this time.**  **If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **3** | **Valid before this time.**  **If missing, it is valid for all times after the Start DateTime (0010,xxx6)** |
| **>Jurisdiction** | **(0010,xx18)** | **3** | **The jurisdiction or organization that issued this record.** |
| **>Source Field Name** | **(0010,xx19)** | **3** | **The name of the field on the document record.** |
| **>Source Field Definition** | **(0010,xx20)** | **3** | **The jurisdiction or issuing organization’s definition of this field.** |
| **>Source Document Reference** | **(0010,xx26)** | **3** | **A reference to the specific document or record.** |
| **Third person pronoun Sequence** | **(0010,xx21)** | **3** | **Pronoun(s) to be used for this person**  **One or more items are permitted in this sequence.** |
| **>Pronoun Code sequence** | **(0010,xx22)** | **1** | **Pronoun**  **Only a single item shall be included in this Sequence.** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | | **DCID CIDxxx4 Third Person Pronouns.** |
| **>Start DateTime** | **(0010,xxx6)** | **3** | **Valid after this time.**  **If missing, it is valid for all times before the Stop DateTime (0010,xxx7)** |
| **>Stop DateTime** | **(0010,xxx7)** | **3** | **Valid before this time.**  **If missing, it is valid for all times after the Start DateTime (0010,xxx6)** |
| **>Pronoun Comment** | **(0010,xx23)** | **3** | **Further explanation of pronoun usage** |
| … |  |  |  |

# Part 4

Issue: discuss considerations for patient root query with gender being at study level

### C.6.1 Patient Root SOP Class Group

…

Table C.6-1. Patient Level Attributes for the Patient Root Query/Retrieve Information Model

|  |  |  |
| --- | --- | --- |
| Attribute Name | Tag | Type |
| Patient's Sex | (0010,0040) | O |
| Other Patient IDs Sequence | (0010,1002) | O |

Update Part 4, Table C.6-5

### C.6.2 Study Root SOP Class Group

…

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

|  |  |  |
| --- | --- | --- |
| Attribute Name | Tag | Type |
| Patient's Sex | (0010,0040) | O |
| **Gender Identity Sequence** | **(0010,xxxx)** | **O** |
| **>Gender Code Sequence** | **(0010,xxx4)** | **O** |
| ***>>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | |
| **>Start DateTime** | **(0010,xxx6)** | **O** |
| **>Stop DateTime** | **(0010,xxx7)** | **O** |
| **>Gender Comment** | **(0010,xxx8)** | **O** |
| **Sex for Clinical Use Sequence** | **(0010,xxx2)** | **O** |
| **>SFCU Code Sequence** | **(0010,xxx9)** | **O** |
| ***>>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | |
| **>Start DateTime** | **(0010,xxx6)** | **O** |
| **>Stop DateTime** | **(0010,xxx7)** | **O** |
| **>SFCU Comment** | **(0010,xxx1)** | **O** |
| **>SFCU Reference** | **(0010,xx10)** | **O** |
| **Person Names to Use Sequence** | **(0010,xxx3)** | **O** |
| **>Name to use** | **(0010,xx12)** | **O** |
| **>Start DateTime** | **(0010,xxx6)** | **O** |
| **>Stop DateTime** | **(0010,xxx7)** | **O** |
| **>Name to Use Comment** | **(0010,xx13)** | **O** |
| **Sex at Birth Code Sequence** | **(0010,xx25)** | **O** |
| ***>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | |
| **Recorded Sex or Gender Sequence** | **(0010,xx14)** | **O** |
| **>Recorded Value** | **(0010,xx15)** | **O** |
| **>International Equivalent Code Sequence** | **(0010,xx24)** | **O** |
| ***>>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | |
| **>RSG Type Code Sequence** | **(0010,xx16)** | **O** |
| ***>>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | |
| **>Acquisition Datetime** | **(0010,xx17)** | **O** |
| **>Start DateTime** | **(0010,xxx6)** | **O** |
| **>Stop DateTime** | **(0010,xxx7)** | **O** |
| **>Jurisdiction** | **(0010,xx18)** | **O** |
| **>Source Field Name** | **(0010,xx19)** | **O** |
| **>Source Field Definition** | **(0010,xx20)** | **O** |
| **>Source Document Reference** | **(0010,xx26)** | **O** |
| **Pronoun Code Sequence** | **(0010,xx22)** | **O** |
| **>Pronoun Code sequence** | **(0010,xx22)** | **O** |
| ***>>*** ***Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | |
| **>Start DateTime** | **(0010,xxx6)** | **O** |
| **>Stop DateTime** | **(0010,xxx7)** | **O** |
| **>Pronoun Comment** | **(0010,xx23)** | **O** |
| Other Patient IDs Sequence | (0010,1002) | O |

Update Part 4, Table F.7.2-1

### F.7.2 Operations

…

##### F.7.2.1.1 Modality Performed Procedure Step Subset Specification

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)** |
| … |  |  |  |  |
| Patient’s Sex | (0010,0040) | 2/2 | Not Allowed |  |
| **Gender Identity Sequence** | **(0010,xxxx)** | **3/3** | **Not Allowed** |  |
| **>Gender Code Sequence** | **(0010,xxx4)** | **3/3** | **Not Allowed** |  |
| ***>>Include Table F.7.2-1a. Modality Performed Procedure Step Enhanced Code Value Macro with no N-SET*** | | | | |
| **>Start DateTime** | **(0010,xxx6)** | **3/3** | **Not Allowed** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **3/3** | **Not Allowed** |  |
| **>Gender Comment** | **(0010,xxx8)** | **3/3** | **Not Allowed** |  |
| **Sex for Clinical Use Sequence** | **(0010,xxx2)** | **3/3** | **Not Allowed** |  |
| **>SFCU Code Sequence** | **(0010,xxx9)** | **3/3** | **Not Allowed** |  |
| ***>>Include Table F.7.2-1a. Modality Performed Procedure Step Enhanced Code Value Macro with no N-SET*** | | | | |
| **>Start DateTime** | **(0010,xxx6)** | **3/3** | **Not Allowed** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **3/3** | **Not Allowed** |  |
| **>SFCU Comment** | **(0010,xxx1)** | **3/3** | **Not Allowed** |  |
| **>SFCU Reference** | **(0010,xx10)** | **3/3** | **Not Allowed** |  |
| **Person Names to Use Sequence** | **(0010,xxx3)** | **3/3** | **Not Allowed** |  |
| **>Name to use** | **(0010,xx12)** | **3/3** | **Not Allowed** |  |
| **>Start DateTime** | **(0010,xxx6)** | **3/3** | **Not Allowed** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **3/3** | **Not Allowed** |  |
| **>Name to Use Comment** | **(0010,xx13)** | **3/3** | **Not Allowed** |  |
| **Sex at Birth Code Sequence** | **(0010,xx25)** | **3/3** | **Not Allowed** |  |
| ***>>Include Table F.7.2-1a. Modality Performed Procedure Step Enhanced Code Value Macro with no N-SET*** | | | | |
| **Recorded Sex or Gender Sequence** | **(0010,xx14)** | **3/3** | **Not Allowed** |  |
| **>Recorded Value** | **(0010,xx15)** | **3/3** | **Not Allowed** |  |
| **>International Equivalent Code Sequence** | **(0010,xx24)** | **3/3** | **Not Allowed** |  |
| ***>>Include Table F.7.2-1a. Modality Performed Procedure Step Enhanced Code Value Macro with no N-SET Macro with Optional Keys”*** | | | | |
| **>RSG Type Code Sequence** | **(0010,xx16)** | **3/3** | **Not Allowed** |  |
| ***>>Include Table F.7.2-1a. Modality Performed Procedure Step Enhanced Code Value Macro with no N-SET*** | | | | |
| **>Acquisition Datetime** | **(0010,xx17)** | **3/3** | **Not Allowed** |  |
| **>Start DateTime** | **(0010,xxx6)** | **3/3** | **Not Allowed** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **3/3** | **Not Allowed** |  |
| **>Jurisdiction** | **(0010,xx18)** | **3/3** | **Not Allowed** |  |
| **>Source Field Name** | **(0010,xx19)** | **3/3** | **Not Allowed** |  |
| **>Source Field Definition** | **(0010,xx20)** | **3/3** | **Not Allowed** |  |
| **>Source Document Reference** | **(0010,xx26)** | **3/3** | **Not Allowed** |  |
| **Pronoun Code Sequence** | **(0010,xx22)** | **3/3** | **Not Allowed** |  |
| **>Pronoun Code sequence** | **(0010,xx22)** | **3/3** | **Not Allowed** |  |
| ***>>*** ***Include Table F.7.2-1a. Modality Performed Procedure Step Enhanced Code Value Macro with no N-SET*** | | | | |
| **>Start DateTime** | **(0010,xxx6)** | **3/3** | **Not Allowed** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **3/3** | **Not Allowed** |  |
| **>Pronoun Comment** | **(0010,xx23)** | **3/3** | **Not Allowed** |  |
| Referenced Patient Sequence | (0008,1120) | 2/2 | Not Allowed |  |

Update Part 4, Table F.8.2-1 Modality Performed Procedure Step Retrieve SOP Class N-GET Attributes

### F.8.2 Operations

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

|  |  |  |
| --- | --- | --- |
| **Attribute Name** | **Tag** | **Req. Type (SCU/SCP)** |
| … |  |  |
| Patient’s Sex | (0010,0040) | 3/2 |
| **Gender Identity Sequence** | **(0010,xxxx)** | **3/3** |
| **>Gender Code Sequence** | **(0010,xxx4)** | **3/3** |
| ***>>Include Table 8-2a. “Enhanced Coded Entry Macro with Optional Matching Key Support and Optional Meaning”*** | | |
| **>Start DateTime** | **(0010,xxx6)** | **3/3** |
| **>Stop DateTime** | **(0010,xxx7)** | **3/3** |
| **>Gender Comment** | **(0010,xxx8)** | **3/3** |
| **Sex for Clinical Use Sequence** | **(0010,xxx2)** | **3/3** |
| **>SFCU Code Sequence** | **(0010,xxx9)** | **3/3** |
| ***>>Include Table 8-2a. “Enhanced Coded Entry Macro with Optional Matching Key Support and Optional Meaning”*** | | |
| **>Start DateTime** | **(0010,xxx6)** | **3/3** |
| **>Stop DateTime** | **(0010,xxx7)** | **3/3** |
| **>SFCU Comment** | **(0010,xxx1)** | **3/3** |
| **>SFCU Reference** | **(0010,xx10)** | **3/3** |
| **Person Names to Use Sequence** | **(0010,xxx3)** | **3/3** |
| **>Name to use** | **(0010,xx12)** | **3/3** |
| **>Start DateTime** | **(0010,xxx6)** | **3/3** |
| **>Stop DateTime** | **(0010,xxx7)** | **3/3** |
| **>Name to Use Comment** | **(0010,xx13)** | **3/3** |
| **Sex at Birth Code Sequence** | **(0010,xx25)** | **3/3** |
| **>*Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | |
| **Recorded Sex or Gender Sequence** | **(0010,xx14)** | **3/3** |
| **>Recorded Value** | **(0010,xx15)** | **3/3** |
| **>International Equivalent Code Sequence** | **(0010,xx24)** | **3/3** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | |
| **>RSG Type Code Sequence** | **(0010,xx16)** | **3/3** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | |
| **>Acquisition Datetime** | **(0010,xx17)** | **3/3** |
| **>Start DateTime** | **(0010,xxx6)** | **3/3** |
| **>Stop DateTime** | **(0010,xxx7)** | **3/3** |
| **>Jurisdiction** | **(0010,xx18)** | **3/3** |
| **>Source Field Name** | **(0010,xx19)** | **3/3** |
| **>Source Field Definition** | **(0010,xx20)** | **3/3** |
| **>Source Document Reference** | **(0010,xx26)** | **3/3** |
| **Pronoun Code Sequence** | **(0010,xx22)** | **3/3** |
| **>Pronoun Code sequence** | **(0010,xx22)** | **3/3** |
| ***>>Include Table 8.8-1 “Code Sequence Macro Attributes”*** | | |
| **>Start DateTime** | **(0010,xxx6)** | **3/3** |
| **>Stop DateTime** | **(0010,xxx7)** | **3/3** |
| **>Pronoun Comment** | **(0010,xx23)** | **3/3** |
| **…** |  |  |

Update Part 4, Table K.6-1. Attributes for the Modality Worklist Information Model

### K.6.1 Modality Worklist SOP Class

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Description / Module** | **Tag** | **Matching Key Type** | **Return Key Type** | **Remark/Matching Type** |
| … |  |  |  |  |
| Patient’s Sex | (0010,0040) | O | 2 |  |
| **Gender Identity Sequence** | **(0010,xxxx)** | **O** | **2** |  |
| **>Gender Code Sequence** | **(0010,xxx4)** | **O** | **2** |  |
| ***>>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | | | |
| **>Start DateTime** | **(0010,xxx6)** | **O** | **2** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **O** | **2** |  |
| **>Gender Comment** | **(0010,xxx8)** | **O** | **2** |  |
| **Sex for Clinical Use Sequence** | **(0010,xxx2)** | **O** | **2** |  |
| **>SFCU Code Sequence** | **(0010,xxx9)** | **O** | **2** |  |
| ***>>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | | | |
| **>Start DateTime** | **(0010,xxx6)** | **O** | **2** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **O** | **2** |  |
| **>SFCU Comment** | **(0010,xxx1)** | **O** | **2** |  |
| **>SFCU Reference** | **(0010,xx10)** | **O** | **2** |  |
| **Person Names to Use Sequence** | **(0010,xxx3)** | **O** | **2** |  |
| **>Name to use** | **(0010,xx12)** | **O** | **2** |  |
| **>Start DateTime** | **(0010,xxx6)** | **O** | **2** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **O** | **2** |  |
| **>Name to Use Comment** | **(0010,xx13)** | **O** | **2** |  |
| **Sex at Birth Code Sequence** | **(0010,xx25)** | **O** | **2** |  |
| ***>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | | | |
| **Recorded Sex or Gender Sequence** | **(0010,xx14)** | **O** | **2** |  |
| **>Recorded Value** | **(0010,xx15)** | **O** | **2** |  |
| **>International Equivalent Code Sequence** | **(0010,xx24)** | **O** | **2** |  |
| ***>>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | | | |
| **>RSG Type Code Sequence** | **(0010,xx16)** | **O** | **2** |  |
| ***>>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | | | |
| **>Acquisition Datetime** | **(0010,xx17)** | **O** | **2** |  |
| **>Start DateTime** | **(0010,xxx6)** | **O** | **2** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **O** | **2** |  |
| **>Jurisdiction** | **(0010,xx18)** | **O** | **2** |  |
| **>Source Field Name** | **(0010,xx19)** | **O** | **2** |  |
| **>Source Field Definition** | **(0010,xx20)** | **O** | **2** |  |
| **>Source Document Reference** | **(0010,xx26)** | **O** | **2** |  |
| **Pronoun Code Sequence** | **(0010,xx22)** | **O** | **2** |  |
| **>Pronoun Code sequence** | **(0010,xx22)** | **O** | **2** |  |
| ***>>*** ***Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | | | |
| **>Start DateTime** | **(0010,xxx6)** | **O** | **2** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **O** | **2** |  |
| **>Pronoun Comment** | **(0010,xx23)** | **O** | **2** |  |
| **…** |  |  |  |  |

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

### Q.4.3 Relevant Patient Information Model SOP Classes

…

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Description / Module** | **Tag** | **Matching Key Type** | **Return Key Type** | **Remark/Matching Type** |
| … |  |  |  |  |
| Patient’s Sex | (0010,0040) | - | 2 |  |
| **Gender Identity Sequence** | **(0010,xxxx)** | **O** | **2** |  |
| **>Gender Code Sequence** | **(0010,xxx4)** | **O** | **2** |  |
| ***>>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | | | |
| **>Start DateTime** | **(0010,xxx6)** | **O** | **2** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **O** | **2** |  |
| **>Gender Comment** | **(0010,xxx8)** | **O** | **2** |  |
| **Sex for Clinical Use Sequence** | **(0010,xxx2)** | **O** | **2** |  |
| **>SFCU Code Sequence** | **(0010,xxx9)** | **O** | **2** |  |
| ***>>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | | | |
| **>Start DateTime** | **(0010,xxx6)** | **O** | **2** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **O** | **2** |  |
| **>SFCU Comment** | **(0010,xxx1)** | **O** | **2** |  |
| **>SFCU Reference** | **(0010,xx10)** | **O** | **2** |  |
| **Person Names to Use Sequence** | **(0010,xxx3)** | **O** | **2** |  |
| **>Name to use** | **(0010,xx12)** | **O** | **2** |  |
| **>Start DateTime** | **(0010,xxx6)** | **O** | **2** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **O** | **2** |  |
| **>Name to Use Comment** | **(0010,xx13)** | **O** | **2** |  |
| **Sex at Birth Code Sequence** | **(0010,xx25)** | **O** | **2** |  |
| ***>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | | | |
| **Recorded Sex or Gender Sequence** | **(0010,xx14)** | **O** | **2** |  |
| **>Recorded Value** | **(0010,xx15)** | **O** | **2** |  |
| **>International Equivalent Code Sequence** | **(0010,xx24)** | **O** | **2** |  |
| ***>>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | | | |
| **>RSG Type Code Sequence** | **(0010,xx16)** | **O** | **2** |  |
| ***>>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | | | |
| **>Acquisition Datetime** | **(0010,xx17)** | **O** | **2** |  |
| **>Start DateTime** | **(0010,xxx6)** | **O** | **2** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **O** | **2** |  |
| **>Jurisdiction** | **(0010,xx18)** | **O** | **2** |  |
| **>Source Field Name** | **(0010,xx19)** | **O** | **2** |  |
| **>Source Field Definition** | **(0010,xx20)** | **O** | **2** |  |
| **>Source Document Reference** | **(0010,xx26)** | **O** | **2** |  |
| **Pronoun Code Sequence** | **(0010,xx22)** | **O** | **2** |  |
| **>Pronoun Code sequence** | **(0010,xx22)** | **O** | **2** |  |
| ***>>*** ***Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | | | |
| **>Start DateTime** | **(0010,xxx6)** | **O** | **2** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **O** | **2** |  |
| **>Pronoun Comment** | **(0010,xx23)** | **O** | **2** |  |
| **…** |  |  |  |  |

Update Part 4, Table V.6-2. Attributes for the Substance Approval Query Information Model

### V.6.2 Substance Approval Query SOP Class

…

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Description / Module** | **Tag** | **Matching Key Type** | **Return Key Type** | **Remark/Matching Type** |
| Patient’s Sex | (0010,0040) | - | 2 |  |
| **Gender Identity Sequence** | **(0010,xxxx)** | **-** | **2** |  |
| **>Gender Code Sequence** | **(0010,xxx4)** | **-** | **2** |  |
| ***>>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | | | |
| **>Start DateTime** | **(0010,xxx6)** | **-** | **2** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **-** | **2** |  |
| **>Gender Comment** | **(0010,xxx8)** | **-** | **2** |  |
| **Sex for Clinical Use Sequence** | **(0010,xxx2)** | **-** | **2** |  |
| **>SFCU Code Sequence** | **(0010,xxx9)** | **-** | **2** |  |
| ***>>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | | | |
| **>Start DateTime** | **(0010,xxx6)** | **-** | **2** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **-** | **2** |  |
| **>SFCU Comment** | **(0010,xxx1)** | **-** | **2** |  |
| **>SFCU Reference** | **(0010,xx10)** | **-** | **2** |  |
| **Person Names to Use Sequence** | **(0010,xxx3)** | **-** | **2** |  |
| **>Name to use** | **(0010,xx12)** | **-** | **2** |  |
| **>Start DateTime** | **(0010,xxx6)** | **-** | **2** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **-** | **2** |  |
| **>Name to Use Comment** | **(0010,xx13)** | **-** | **2** |  |
| **Sex at Birth Code Sequence** | **(0010,xx25)** | **-** | **2** |  |
| ***>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | | | |
| **Recorded Sex or Gender Sequence** | **(0010,xx14)** | **-** | **2** |  |
| **>Recorded Value** | **(0010,xx15)** | **-** | **2** |  |
| **>International Equivalent Code Sequence** | **(0010,xx24)** | **-** | **2** |  |
| ***>>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | | | |
| **>RSG Type Code Sequence** | **(0010,xx16)** | **-** | **2** |  |
| ***>>Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | | | |
| **>Acquisition Datetime** | **(0010,xx17)** | **-** | **2** |  |
| **>Start DateTime** | **(0010,xxx6)** | **-** | **2** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **-** | **2** |  |
| **>Jurisdiction** | **(0010,xx18)** | **-** | **2** |  |
| **>Source Field Name** | **(0010,xx19)** | **-** | **2** |  |
| **>Source Field Definition** | **(0010,xx20)** | **-** | **2** |  |
| **>Source Document Reference** | **(0010,xx26)** | **-** | **2** |  |
| **Pronoun Code Sequence** | **(0010,xx22)** | **-** | **2** |  |
| **>Pronoun Code sequence** | **(0010,xx22)** | **-** | **2** |  |
| ***>>*** ***Include Table C.6-2a “Enhanced Code Value Keys Macro with Optional Keys”*** | | | | |
| **>Start DateTime** | **(0010,xxx6)** | **-** | **2** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **-** | **2** |  |
| **>Pronoun Comment** | **(0010,xx23)** | **-** | **2** |  |
| **…** |  |  |  |  |

Update Table CC.2.5-3. UPS SOP Class N-CREATE/N-SET/N-GET/C-FIND Attributes

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

…

Table CC.2.5-3. UPS SOP Class N-CREATE/N-SET/N-GET/C-FIND Attributes

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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** |
| … |  |  |  |  |  |  |  |  |
| Patient’s Sex | (0010,0040) | 2/2 | Not Allowed | O | 3/2 | R | 2 |  |
| **Gender Identity Sequence** | **(0010,xxxx)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Gender Code Sequence** | **(0010,xxx4)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| ***>>Include CC.2.5-2a. “UPS Code Sequence Macro”*** | | | | | | | | |
| **>Start DateTime** | **(0010,xxx6)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Gender Comment** | **(0010,xxx8)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **Sex for Clinical Use Sequence** | **(0010,xxx2)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>SFCU Code Sequence** | **(0010,xxx9)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| ***>>Include CC.2.5-2a. “UPS Code Sequence Macro”*** | | | | | | | | |
| **>Start DateTime** | **(0010,xxx6)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>SFCU Comment** | **(0010,xxx1)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>SFCU Reference** | **(0010,xx10)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **Person Names to Use Sequence** | **(0010,xxx3)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Name to use** | **(0010,xx12)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Start DateTime** | **(0010,xxx6)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Name to Use Comment** | **(0010,xx13)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **Sex at Birth Code Sequence** | **(0010,xx25)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Include CC.2.5-2a. “UPS Code Sequence Macro”** | | | | | | | | |
| **Recorded Sex or Gender Sequence** | **(0010,xx14)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Recorded Value** | **(0010,xx15)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>International Equivalent Code Sequence** | **(0010,xx24)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| ***>Include CC.2.5-2a. “UPS Code Sequence Macro”*** | | | | | | | | |
| **>RSG Type Code Sequence** | **(0010,xx16)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| ***>Include CC.2.5-2a. “UPS Code Sequence Macro”*** | | | | | | | | |
| **>Acquisition Datetime** | **(0010,xx17)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Start DateTime** | **(0010,xxx6)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Jurisdiction** | **(0010,xx18)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Source Field Name** | **(0010,xx19)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Source Field Definition** | **(0010,xx20)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Source Document Reference** | **(0010,xx26)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **Pronoun Code Sequence** | **(0010,xx22)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Pronoun Code sequence** | **(0010,xx22)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| ***>>Include CC.2.5-2a. “UPS Code Sequence Macro”*** | | | | | | | | |
| **>Start DateTime** | **(0010,xxx6)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Stop DateTime** | **(0010,xxx7)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |
| **>Pronoun Comment** | **(0010,xx23)** | **3/3** | **Not Allowed** | **O** | **3/3** | **-** | **3** |  |

# Part 6

Update Part 6, Table 6-1. Registry of DICOM Data Elements

Table 6-1. Registry of DICOM Data Elements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Tag | Name | Keyword | VR | VM |
| (0010,xxxx) | Gender Identity Sequence |  | SQ | 1 |
| (0010,xxx1) | SFCU Comment |  | LT | 1..n |
| (0010,xxx2) | Sex for Clinical Use Sequence |  | SQ | 1 |
| (0010,xxx3) | Patient Name to Use Sequence |  | SQ | 1 |
| (0010,xxx4) | Gender Code Sequence |  | SQ | 1 |
| (0010,xxx6) | Start Time |  | DT | 1 |
| (0010,xxx7) | Stop Time |  | DT | 1 |
| (0010,xxx8) | Gender Comment |  | LT | 1..n |
| (0010,xxx9) | SFCU Code Sequence |  | SQ | 1 |
| (0010,xx10) | SFCU Reference |  | URI | 1..n |
| (0010,xx11) | Patient Name to Use |  | LT | 1 |
| (0010,xx13) | Name to Use Comment |  | LT | 1..n |
| (0010,xx14) | Recorded Sex or Gender Sequence |  | SQ | 1 |
| (0010,xx15) | Recorded Value Code Sequence |  | SQ | 1 |
| (0010,xx16) | Identity Type Code Sequence |  | SQ | 1 |
| (0010,xx17) | Acquisition Datetime |  | DT | 1 |
| (0010,xx18) | Jurisdiction |  | LT | 1 |
| (0010,xx19) | Source Field Name |  | LT | 1 |
| (0010,xx20) | Source Field Definition |  | LT? URI? | 1 |
| (0010,xx21) | Third Person Pronouns Sequence |  | SQ | 1 |
| (0010,xx22) | Pronoun Code Sequence |  | SQ | 1 |
| (0010,xx23) | Pronoun Comment |  | LT | 1..n |
| (0010,xx24) | International Equivalent Code Sequence |  | SQ | 1 |
| (0010,xx25) | Sex at Birth Code Sequence |  | SQ | 1 |
| (0010,xx26) | Source Document Reference |  | URI | 1 |

Update Part 15 Table E.1-1. Application Level Confidentiality Profile Attributes

# Part 15

## E.1 APPLICATION LEVEL CONFIDENTIALITY PROFILES

….

Table E.1-1. Application Level Confidentiality Profile Attributes

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Attribute Name | Tag | Retd. (from [PS3.6](http://dicom.nema.org/medical/dicom/current/output/chtml/part06/PS3.6.html)) | In Std. Comp. IOD (from [PS3.3](http://dicom.nema.org/medical/dicom/current/output/chtml/part03/PS3.3.html)) | Basic Prof. | Rtn. Safe Priv. Opt. | Rtn. UIDs Opt. | Rtn. Dev. Id. Opt. | Rtn. Inst. Id. Opt | Rtn. Pat. Chars. Opt. | Rtn. Long. Full Dates Opt. | Rtn. Long. Modif. Dates Opt. | Clean Desc. Opt. | Clean Struct. Cont. Opt. | Clean Graph. Opt. |
| Patient’s Sex | (0010,0040) | N | Y | Z |  |  |  |  | K |  |  |  |  |  |
| **Gender Identity Sequence** | **(0010,xxxx)** | **N** | **Y** | **X** |  |  |  |  | **K** |  |  |  |  |  |
| **Sex for Clinical Use Sequence** | **(0010,xxx2)** | **N** | **Y** | **X** |  |  |  |  | **K** |  |  |  |  |  |
| **Person Names to Use Sequence** | **(0010,xx12)** | **N** | **Y** | **X** |  |  |  |  | **K** |  |  |  |  |  |
| **Sex at Birth Code Sequence** | **(0010,xx25)** | **N** | **Y** | **X** |  |  |  |  | **K** |  |  |  |  |  |
| **Recorded Sex or Gender Sequence** | **(0010,xx14)** | **N** | **Y** | **X** |  |  |  |  | **K** |  |  |  |  |  |
| **Third Person Pronoun Sequence** | **(0010,xx21)** | **N** | **Y** | **X** |  |  |  |  | **K** |  |  |  |  |  |

# Part 16

Add FHIR as a coding scheme, Proposal 1

Table 8-1. Coding Schemes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Coding Scheme  Designator  (0008,0102) | Coding Scheme UID  (0008,010C) | Coding Scheme Name (0008,0115) | Coding Scheme Responsible Organization (0008,0109( | Coding Scheme Resources Sequence (0008,0109) Type: URL | Description |
|  |  |  |  |  |  |
| **FHIR** |  |  | **HL7** |  | **FHIR codes are defined by the pair of a value set URL and a text string as a code. The URL points to the value set and the definition of the codes.**  **These codes are encoded in DICOM as a URN Code Value (0008,0120) that is the concatenation of the value set URL and the code value.**  **E.g., a FHIR code “female” from the value set** [**http://hl7.org/fhir/administrative-gender**](http://hl7.org/fhir/administrative-gender)**, the URN Code Value (0008,0120) would be** [**http://hl7.org/fhir/administrative-gender/female**](http://hl7.org/fhir/administrative-gender/female)**.** |
| … |  |  |  |  |  |
| ICAO9303 |  |  | ICAO9303 | https://www.icao.int/publications/pages/publication.aspx?docnum=9303 | ICAO 9303 codes for sex field |

Add FHIR codes using HL7v3 Coding Scheme method, Proposal 2

Table 8-2. HL7v3 Coding Schemes

|  |  |  |
| --- | --- | --- |
| Coding Scheme Designator | Coding Scheme UID | Description |
| … | … | … |
| **AdministrativeGender** | **2.16.840.1.113883.4.642.3.1** | **Administrative Genders used in HL7v2 PID-8 field, and various other locations in V3 and FHIR.** |
| **<SFCU value set>** | **2.16.840.1.113883.4.642.3.3181** | **TBD** |

Add CID’s to PS 3.16

### CIDxxx1 Person Gender

**Resources: HTML | FHIR JSON | FHIR XML | IHE SVS XML**

**Type: Extensible**

**Version: 202xmmdd**

**UID: 1.2.840.TBD**

Table CID CIDxxx1. Person Gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Coding Scheme Designator | Code Value | Code Meaning |  | UMLS Concept ID |
| SCT | Female | Identifies as female gender | To be promoted May 2022 | 446141000124107 |
| SCT | Male | Identifies as male gender | To be promoted May 2022 | 446151000124109 |
| SCT | Nonbinary | Identifies as nonbinary gender | To be promoted May 2022 | 33791000087105 |
|  |  |  |  |  |

Note: 1. HL7 uses a variety of null flavors to encode various reasons that Person Gender may be missing or not known. ***Issue: Should DICOM try to capture reasons like “refused to answer” as distinct from missing with no reason provided.***

2. The person gender codes will be extended with local, regional, and national extensions. For example, Canada has chosen to add codes for “two spirit” and other gender identities.

### CIDxxx2 Sex for Clinical Use

**Resources: HTML | FHIR JSON | FHIR XML | IHE SVS XML**

**Type: Non-Extensible**

**Version: 202xmmdd**

**UID: 1.2.840.TBD**

Table CID CIDxxx2. Sex for Clinical Use

| Coding Scheme Designator | Code Value | Code Meaning | Code Definition (from FHIR) |
| --- | --- | --- | --- |
| <SFCU value set> | female | Female | Available data indicates that diagnostics, analytics, and treatments should consider best practices associated with female reference populations. |
| <SFCU value set> | male | Male | Available data indicates that diagnostics, analytics, and treatments should consider best practices associated with male reference populations. |
| <SFCU value set> | specified | Specified | Available data indicates that diagnostics, analytics, and treatment best practices may be undefined or not aligned with sex-derived reference populations. Additional information (usually, but not always, in the form of comments and/or observations) is available, but it does not align with male sex for clinical use or female sex for clinical use. |
| <SFCU value set> | unknown | Unknown | No information can be provided. |

Note: <https://build.fhir.org/ig/HL7/fhir-gender-harmony/branches/main/ValueSet-sex-for-clinical-use-category-vs.html> for current IG draft

### CIDxxx3 International Equivalent Sexes

**Resources: HTML | FHIR JSON | FHIR XML | IHE SVS XML**

**Type: Non-Extensible**

**Version: 202xmmdd**

**UID: 1.2.840.TBD**

Table CID CIDxxx3. International Equivalent Sexes

|  |  |  |
| --- | --- | --- |
| Coding Scheme Designator | Code Value | Code Meaning |
| ICAO 9303 | F | A value which corresponds to female (‘F’) has been recorded in some context. |
| ICAO 9303 | M | A value which corresponds to male (‘M’) has been recorded in some context. |
| ICAO 9303 | X | A value which corresponds to 'X' (any non-M or non-F value) has been recorded or the value is unspecified. |

Note: ICAO: International Civil Aviation Organization, Doc 9303 Machine Readable Travel Documents, Eighth Edition, 2021

### CIDxxx4 Third Person Pronouns

**Resources: HTML | FHIR JSON | FHIR XML | IHE SVS XML**

**Type: Extensible**

**Version: 202xmmdd**

**UID: 1.2.840.TBD**

Table CID CIDxxx4. Third Person Pronouns

|  |  |  |
| --- | --- | --- |
| Coding Scheme Designator | Code Value | Code Meaning |
| LOINC | LA29518-0 | He/him/his/his/himself |
| LOINC | LA29519-8 | She/her/her/hers/herself |
| LOINC | LA29520-6 | They/them/their/theirs/themselves |

Add annex with use case and examples to Part 17

# Part 17

# Annex XX Sex and Gender Examples

## XX.1 Pet/CT Use Case

(same case as HL7 Gender Harmony example for DICOM, but with examples of MWL, MPPS, PET image, etc.)

## XX.2 Find Relevant Priors

1. Query by patient ID from MWL/ Order to PACS
   1. Response looks reasonable, proceed to selection by appropriate SOP classes (VT, MR, etc.) (body part, modality, order, etc.) and instances
   2. Response looks insufficient
      1. Try query by birthdate
      2. Try
2. If MWL has name to use (new), query by that name and birthdate
   1. Response looks reasonable, proceed to selection by appropriate SOP classes (VT, MR, etc.)
3. Query by patient name, birthdate from MWL
   1. Response looks reasonable, proceed to selection by appropriate SOP classes (VT, MR, etc.)
4. Query by patient name, sex, ID from MWL
   1. Response looks reasonable, proceed to selection by appropriate SOP classes (VT, MR, etc.)
5. Patient got new name, new ID, and there is some patient link/ patient merge process. **TODO** look at IHE stuff around link/merge.

**TODO** look at the stuff just added as part of archive inventory

Generic patient reconciliation process.

Day -1: v2 order arrives, PACS and operator retrieve priors

Day 0: PACS/MWL Provider convert v2 order into MWL

Day 0: Modality operator selects priors

Day 0: Modality/PACS provider first guess priors

Example: intentionally anonymous patient with broken arm.

**TODO**  re-read hanging protocol

**TODO** obtaining outside priors (is this in scope for a DICOM annex? but perhaps worth some notes)