

Supplement 233

PATIENT MODEL GENDER ENHANCEMENTS

WG-06

DICOM Summary

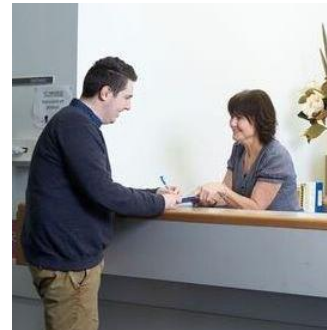


- Adds optional attributes to the Patient Study Module and to various normalized services.
- Updates and adds CID code lists. New codes are defined by DICOM for SPCU.
- Updates TID 1007 Subject Context, Patient.
- Clarifies use of Patient's Sex (0010,0040) to match the HL7v2.9.1 definition.
- Provides examples of use.

Use Case

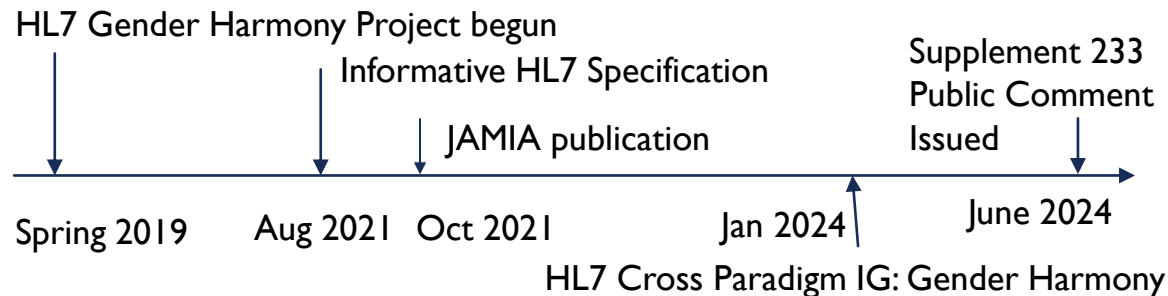
Transgender patient presents for imaging and admit.
Anatomic Female but undergoing hormone transition to male.

- Gender Identity = M
- Sex for Imaging = F
- Sex for Lab = M or more complicated
- Sex for other clinical devices = F



Birth sex, administrative sex, sex, gender identity are not consistently used or understood.

Background



- Informative HL7 Specification
 - Describes logical model for sex and gender identity data representation
 - Participation included SDOs (HL7, DICOM, IEEE, NCPDP), US, Canadian & Australian governments, LGBTQIA+ Advocates, EHR vendors (Epic, Allscripts), AMA, ACP, ACLA.
- JAMIA publication - <https://academic.oup.com/jamia/article/29/2/354/6382238>
- HL7 Cross Paradigm IG: Gender Harmony - Sex and Gender Representation (covers HL7 V2, CDA, and FHIR normative updates)

Gender Harmony Elements



Gender Identity (GI)

- Source:
 - Patient *only*
- Optional Attributes
- May change between studies
- Used for guiding patient clinician interactions.

Sex Parameters for Clinical Use Category (SPCU)

- Source:
 - Clinician
 - Clinical rules system
 - Clinical observations
- Optional Attributes
- May change between studies
- Used for machine setup, analysis, and interpretation.

GH Element Specifics-3



Name to Use

- Source:
 - Patient
- May change between studies
- Optional Attributes
- Used for guiding patient clinician interactions.

Pronouns

- Source:
 - Patient
- May change between studies
- Optional Attributes
- Used for guiding patient clinician interactions.

Proposed HL7 Minimum Value Sets



Gender Identity

Term	Definition
Female	Identifies as female gender. SNOMED 446141000124107
Male	Identifies as male gender. SNOMED 446151000124109
Nonbinary	Identifies as nonbinary gender. SNOMED 33791000087105

- Expect local extensions. E.g., Canada has a national SNOMED extension for “two spirit”.
- UMLS and SNOMED codes have been established.
- DICOM CID xxx1 Person Gender Identity uses SNOMED

Sex Parameters for Clinical Use (SPCU)

Term	Definition
Female-typical	Available data indicates that diagnostics, analytics, and treatments should consider best practices associated with female reference populations.
Male-typical	Available data indicates that diagnostics, analytics, and treatments should consider best practices associated with male reference populations.
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 typical male or female parameters, reference ranges, etc.

- SPCU of “Specified” will often be accompanied by comments and/or URI to provide the specified ranges to used, procedures to follow, etc. URIs may reference clinical reports, hospital policies, etc.
- DICOM CIDxxx2 Sex Parameters for Clinical Use uses DCM codes.

Proposed HL7 Minimum Value Sets

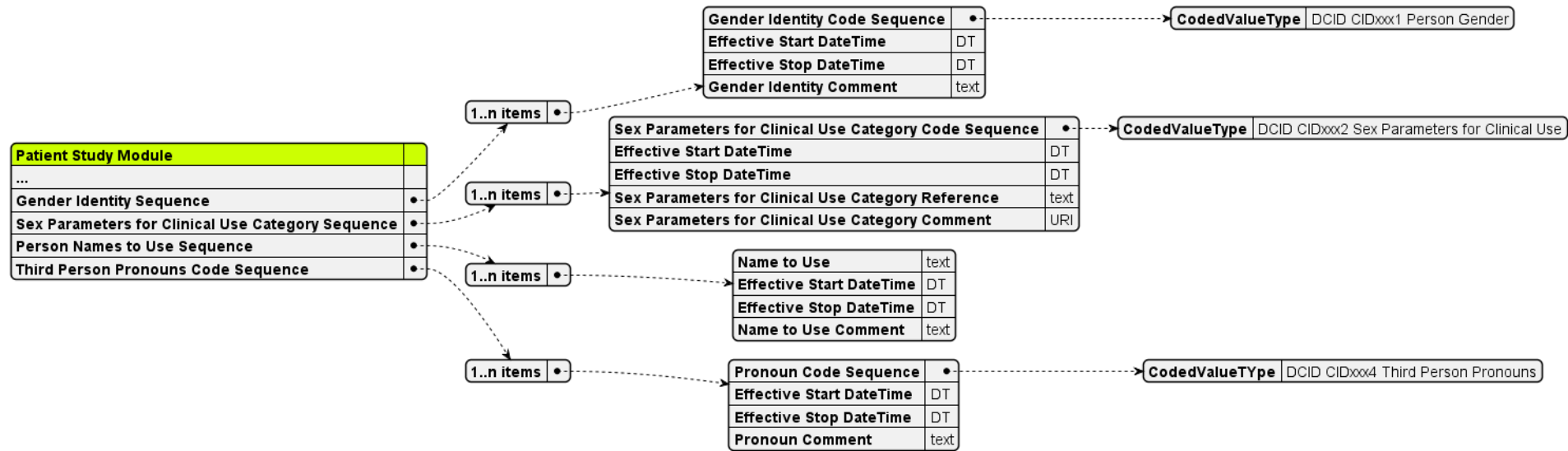


Pronouns

Term	Definition
He, Him, His, Himself	English personal pronouns, typically associated with masculinity, that are requested by a person to be used by them.
She, Her, Hers, Herself	English personal pronouns, typically associated with femininity, that are requested by a person to be used by them.
They, Them, Their, Theirs, Themselves	English personal pronouns, typically not associated with masculinity or femininity, that are requested by a person to be used by them.

- Based on LOINC answer list for Personal Pronouns - Reported, LL5144-2 Personal pronouns / Answers: 10; Scale: Nom; Code: -; Score: -.
- DICOM CIDxxx4 Third Person Pronouns uses LOINC

New Attributes



Modules Modified



- The optional sex and gender attributes are added to the following modules:
 - Patient Demographics Module (Normalized)
 - Performed Procedure Step Relationship (Normalized)
 - Patient Study Module (Composite)
 - Unified Procedure Step Relationship Module (Normalized)
- The definition of Patient's Sex (0010,0040) is updated.
 - The original definition only specified the enumerated codes to be used. It is updated to match HL7 v2.9.1 PID-8 updates. This attribute is set according to hospital policy.

Services Modified



- The modified modules result in updates to the following services:
 - Study Root SOP Class Group (C-FIND)
 - Modality Performed Procedure Step
 - Modality Worklist
 - Relevant Patient Information Model
 - Substance Approval Query
 - Unified Procedure Step

Other Modifications



- Application level confidentiality profiles updated
- Updated TID 1007 Subject Context, Patient
- New and updated CID
 - CID 7455 Sex
 - New CID Person Gender Identity
 - New CID Sex Parameters for Clinical Use (SPCU)
 - New CID Third Person Pronouns
- New DICOM codes for SPCU