**Integrating the Healthcare Enterprise**

# IHE Patient Care Coordination Technical Framework Supplement

# International Patient Summary (IPS)

HL7® FHIR® R4

Using Resources at FMM Level 0-N

## Revision 1.0 – Draft for Public


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**Please verify you have the most recent version of this document.** See here for Trial Implementation and Final Text versions and here for Public Comment versions.

## Foreword

This is a supplement to the IHE Patient Care Coordination Technical Framework V11.0. Each supplement undergoes a process of public comment and trial implementation before being incorporated into the volumes of the Technical Frameworks.

This supplement is published on March 17, 2020 for public comment. Comments are invited and can be submitted at http://ihe.net/PCC_Public_Comments. In order to be considered in development of the trial implementation version of the supplement, comments must be received by April 16, 2020.

This supplement describes changes to the existing technical framework documents.

"Boxed" instructions like the sample below indicate to the Volume Editor how to integrate the relevant section(s) into the relevant Technical Framework volume.

*Amend section X.X by the following:*

Where the amendment adds text, make the added text **bold underline**. Where the amendment removes text, make the removed text **~~bold strikethrough~~**. When entire new sections are added, introduce with editor's instructions to "add new text" or similar, which for readability are not bolded or underlined.

General information about IHE can be found at www.ihe.net.

Information about the IHE Patient Care Coordination domain can be found at ihe.net/IHE_Domains.

Information about the organization of IHE Technical Frameworks and Supplements and the process used to create them can be found at http://ihe.net/IHE_Process and http://ihe.net/Profiles.

The current version of the IHE Patient Care Coordination Technical Framework can be found at http://ihe.net/Technical_Frameworks.

 

**CONTENTS**



 

 

 

 

## Introduction to this Supplement

Whenever possible, IHE profiles are based on established and stable underlying standards. However, if an IHE domain determines that an emerging standard has high likelihood of industry adoption, and the standard offers significant benefits for the use cases it is attempting to address, the domain may develop IHE profiles based on such a standard. During Trial Implementation, the IHE domain will update and republish the IHE profile as the underlying standard evolves.

Product implementations and site deployments may need to be updated in order for them to remain interoperable and conformant with an updated IHE profile.

This IPS Profile incorporates content from Release 4 of the emerging HL7 FHIR specification. HL7 describes FHIR Change Management and Versioning at https://www.hl7.org/fhir/versions.html.

HL7 provides a rating of the maturity of FHIR content based on the FHIR Maturity Model (FMM): level 0 (draft) through N (Normative). See http://hl7.org/fhir/versions.html#maturity.

The FMM levels for FHIR content used in this profile are:

| FHIR Content (Resources, ValueSets, etc. | FMM Level |
|---|---|
| Consent | 2 |
| Patient | N |
| Medication Statement | 3 |
| AllergyIntolerance | 3 |
| Condition | 3 |
| Procedure | 3 |
| Immunization | 3 |
| DeviceUseStatement | 0 |
| Observation | N |
| VitalSigns | 5 |
| Data Types | N |
| DiagnosticReport | 3 |

This IPS Profile directly follows a joint project between CEN TC/251 and HL7 that has produced a content specification (CEN), a regional (Europe) guide for implementing the IPS Standard (CEN), and two Implementation Guides (HL7) for CDA and FHIR, which conform to the CEN IPS dataset and business rules standard. ISO TC/215 has agreed to submit ISO 27269 Health Informatics – The International Patient Summary (EN 17269:2019) for DIS ballot. The CEN DTS 17288 Implementation guideline for Europe has been submitted for its final ballot

 

September of 2019. The HL7 CDA IG has been completed and published as STU, the HL7 FHIR IG, already positively balloted, will be submitted to a new ballot cycle in September 2019 and likely published as STU by the end of 2019.

IHE International has been encouraged to both profile this work, and to contribute efforts towards Connectathon testing, Conformity Assessment, and demonstration opportunities. This profile will profile the IPS, based on the HL7's IPS Implementation Guides that realize the CEN EN 17269 IPS dataset, to support multiple international use cases that will profile the use of this specification to support multiple international use cases for testing and deployment in commercial products. This also encourages implementation and testing among vendors to provide additional feedback and real-world use of the standard. Candidates for recommended changes to the underlying Implementation Guides (IGs) will be submitted to HL7 for further consideration. Candidates for recommended changes to the underlying standard will be submitted to CEN for further consideration and recommendations.

This work effort will also include specification considerations for testing. Structure of such documentation is pending further consideration and has yet to be specified.

This supplement also references and draws upon the following documents. The reader should review these documents as needed:

1. System of Concepts for Continuity of Care ISO

## Open Issues and Questions

1. Formalizing the process of iterative updates to HL7 and CEN and associated modifications to the profile (2019/09/30).
2. Volume 1 needs test language for content creator and content consumer (2019/11/13).
3. Workflow considerations have been discussed, but there is no example for any workflow content module related to International Patient Summary (IPS) (2019/10/24).
4. Level of specificity for volume 3 content is pending further research (2019/11/13).
5. SNOMED-CT Copyright language needs to be updated because the "International Health Terminology Standards Development Organisation" is Now known as SNOMED International. Note also that the IPS utilizes SNOMED's recently-released Global Patient Set https://www.snomed.org/news-and-events/articles/global-patient-set-(1) (2019/10/28).
6. The optionality terminology used in this profile are taken directly from the CEN IPS Standard. Alignment between CEN/HL7 conformance and IHE conformance is (0 = 0, R = RE/R2, M = R, C = C, F = fixed value, NP = Not present).
7. IHE is anticipating continued updates to the HL7 CDA IPS specification, corresponding updates will be made to this document once the HL7 Specification document is published and publicly available this IHE profile will be updated to point to that final content.

 

8. The IPS CDA specification constructs will be updated to reflect alignment with CDA updates in HL7. Public comment version describes the intended modeling, but template identifiers and conformance statement identifiers will be updated to align with the HL7 IPS CDA anticipated updates.
9. HL7 CDA pg.58 Patient Contact's / Preferred HP's Address role element = error, are these tool errors (2020/02/11)?
10. Care plan only supports 1 narrative. No support for coded care plan, but not required by CEN. This is available in IHE: 6.3.3.6.15 Coded Care Plan Section 1.3.6.1.4.1.19376.1.5.3.1.3.36 (2020/02/11).
11. The Complete options described in Section X.2 (e.g., Complete CDA Option and Complete FHIR Option) currently are not modeled in Volume 3. This will be updated after public comment.
12. There are 2 value sets defined for problem list (only the first is specified by the IG) below. What is the difference? The name implies that only disorders are in the specified list, and not clinical findings. : CORE Problem List 2.16.840.1.113883.11.22.7 ('The CORE Problem List Subset of SNOMED CT

    The Clinical Observations Recordings and Encoding (CORE) Problem List Subset is a UMLS CORE Project with the purpose of defining a UMLS subset that is most useful for documenting and encoding clinical information at a summary level. The CORE Problem List Subset includes SNOMED CT concepts and codes that can be used for the problem list, discharge diagnoses, or reason of encounter. https://www.nlm.nih.gov/research/umls/Snomed/core_subset.html}There are 2 value sets defined for problem list (only the first is specified by the IG) below. What is the difference? The name implies that only disorders are in the specified list, and not clinical findings. : CORE Problem List 2.16.840.1.113883.11.22.7 ('The CORE Problem List Subset of SNOMED CT
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13. Allergy Intolerance category (e.g., food, medication, environment, biologic) needs a new LOINC Code (2020/02/28).
14. Until HL7 assigns new OIDs for the restructured IPS CDA sections, their OIDs will remain as TBD within this profile.
15. HL7 CDA IPS Advance Directives Section only supports directive description, but none of the other advance directive elements specified by CEN are supported. Including the

 

elements that are specified as required if known. Draft modeling is provided in this profile.

16. HL7 CDA IPS Allergies and Intolerances Section Value sets do not match value sets in the FHIR IPS.
17. HL7 CDA IPS Allergies and Intolerances Section does not support Allergy Severity and Allergy Category. Draft modeling is provided in this profile.
18. HL7 CDA IPS Functional Status only supports a text section, but none of the other functional status elements specified by CEN are supported. Including the elements that are specified as required if known. Draft modeling is provided in this profile.
19. HL7 CDA IPS History of Past Illness has differences in naming between element between HL7 and CEN, 'History of Past Illness' name is different (this is HL7), CEN/ISO uses 'History of Past Problems'.
20. HL7 CDA IPS History of Pregnancy does not support a time stamp for outcome date, required by CEN, and does not support specialist contact, optional by CEN. Draft modeling is provided in this profile.
21. HL7 CDA IPS History of Pregnancy does not allow for Null value to be represented.
22. HL7 CDA IPS Care Plan only supports 1 narrative. No support for coded care plan, but not required by CEN. Draft modeling is provided in this profile.
23. IPS Results is R in HL7 and Optional in CEN. HL7's optionality used for this profile.
24. HL7 CDA IPS Social History section Lifestyle Factor Observation specified for Alcohol and Smoking but does not support other social history metrics listed as the types of social history metrics identified by the standards. Value set for Social History Type defined but not used. Lifestyle factor description, Text description not supported at entry level for the social history observation. Draft modeling is provided in this profile.
25. HL7 CDA IPS Coded Vital Signs Section available in HL7 IPS but defined in CEN as Optional. Draft modeling is provided in this profile.
26. HL7 CDA IPS Immunization does not support substanceAdministration. Draft modeling is provided in this profile.
27. Why is the Patient-uv-ips Structure definition Resource (http://hl7.org/fhir/uv/ips/StructureDefinition/Patient-uv-ips) a 0..* cardinality? You should not have more than one patient for a patient summary.
28. Review the FHIR modeling for the specialist contact located in the table in Section 6.6.X.1.2.4.
29. The value set for Problem type in History of Past Problems (sectionPastIllnessHx.entry.pastProblem.Condition-uv-ips.category) is not really what CEN/ISO was looking for: A means of categorizing the different types of problem. This

 

can be represented by a value set, for example it could be findings, preliminary diagnosis, diagnosis, clinical risks and medical alerts. Note, 'Medical Alerts', i.e., one type of alert, are represented here in this first iteration of this standard.

30. Problem type in History of Past Problems (sectionPastIllnessHx.entry.pastProblem.Condition-uv-ips.category) has no SNOMED-CT qualifier value for Medical Alert.
31. Add a slice for current Observation-pregnancy-status-uv-ips pregnancy composition. section:sectionPregnancyHx.entry to include a space for pregnancy details in IPS FHIR IG.
32. For current Observation-pregnancy-status-uv-ips pregnancy status.code - provide guidance list - 3rd entry with a pregnancyHistory (sister hasMember.Reference(Observation (list)) (IF PREGNANT) add slice - immediately for current pregnancy: permitted behavior, not required behavior.
33. For Composition.Section.sectionPlanOfCare there should be more than 1 plan care type and it should be able to represent dates.
34. Review input on the FHIR modeling or specialist contact in 6.6.X.1.2.11 IPS Problems
35. Gherkin Language for the test scripts exist in the Appendix, however the scripts on the Cucumber tool need to be updated and specified.
36. SNOMED Terminology - Is there a specific link for the internationally available subset and does it have a name?
37. Proposed CDA entry for IPS Coded Vital Signs constraints should be incorporated into Art-Décor to be consistent with the HL7 CDA IPS tooling.
38. Until such time that HL7 includes coded functional status it will exist within this profile.

## Closed Issues

1. For the trigger events – is this triggered only in anticipation of international travel or might this be a routine patient summary (2019/09/30)?

   The IPS is for both anticipated care and non-anticipated care (2019/11/12).

2. Consideration to relationship to other international standards (e.g., ISO 22857:2013 Health informatics — Guidelines on data protection to facilitate trans-border flows of personal health data) (2019/10/24).

   This ISO 22857:2013 Health informatics — Guidelines on data protection to facilitate trans-border flows of personal health data will be referenced in the security considerations in section X.5 (2019/11/12).

3. Consider referencing relationship to System of Concepts for Continuity of Care ISO 13940:2015 (2019/10/28).

 

The reference to System of Concepts for Continuity of Care ISO 13940:2015 will be put into the introduction (2019/11/12).

4. How to specify the Test plan documentation (2019/09/30).

   The test plan language will be included within the appropriate sections using test language that will then be extracted into gazelle after publication (2019/11/13).

5. Use Case #3: Managing Work-Related Illness While Working Abroad, includes content that is not in the current version of the HL7/CEN/ISO IPS specifications, how and when to incorporate additional content needs to be determined and agreed upon (2019/10/24).

   Upon further research there is reference to work history in these underlying standards. The removal of the specific Occupational Data for Health reference and just referencing work history makes this use case in line with the baseline standards (2019/11/13).

 

## IHE Technical Frameworks General Introduction

The IHE Technical Framework General Introduction is shared by all of the IHE domain technical frameworks. Each technical framework volume contains links to this document where appropriate.

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## IHE Technical Frameworks General Introduction Appendices

The IHE Technical Framework General Introduction Appendices are components shared by all of the IHE domain technical frameworks. Each technical framework volume contains links to these documents where appropriate.

## Appendix A – Actor Summary Definitions

No new actors

## Appendix B – Transaction Summary Definitions

No new transactions

## Appendix D – Glossary

| New (or modified) Glossary Term | Definition |
|---|---|
| International Patient Summary (IPS) | Minimal and non-exhaustive Patient Summary, specialty-agnostic, condition-independent, but readily usable by all clinicians for the unscheduled (cross-border) care of a patient. |

 

# Volume 1 – Profiles

## Domain-specific additions

N/A

*Add new Section X*

# X International Patient Summary (IPS) Profile

This profile will profile the International Patient Summary (IPS), based on the HL7's IPS Implementation Guides that realize the CEN EN 17269 IPS dataset, to support multiple international use cases that will profile the use of this specification to support multiple international use cases for testing and deployment for commercial products. This also encourages implementation and testing among vendors to provide additional feedback real world use of the standard. Candidates for recommended changes to the underlying HL7 IGs will be submitted to HL7 for further consideration. Candidates for recommended changes to the underlying standard will be submitted to CEN for further consideration.

This work effort will also include specification considerations for testing. Structure of such documentation is pending further consideration and has yet to be specified.

## X.1 IPS Actors, Transactions, and Content Modules

This section defines the actors, transactions, and/or content modules in this profile. General definitions of actors are given in the Technical Frameworks General Introduction Appendix A. IHE Transactions can be found in the Technical Frameworks General Introduction Appendix B. Both appendices are located at http://ihe.net/Technical_Frameworks/#GenIntro

Figure X.1-1 shows the actors directly involved in the IPS Profile and the direction that the content is exchanged.

A product implementation using this profile may group actors from this profile with actors from a workflow or transport profile to be functional. The grouping of the content module described in this profile to specific actors is described in more detail in Required Actor Groupings PCC TF-1: X.6 or in Cross Profile Considerations PCC TF-1: X.6.

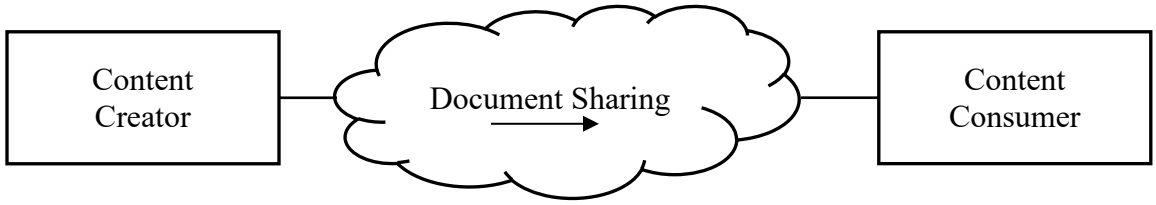


**Figure X.1-1: IPS Actor Diagram**

Table X.1-1 lists the content module(s) defined in the IPS Profile. To claim support with this profile, an actor shall support all required content modules (labeled "R") and may support optional content modules (labeled "O").

 

**Table X.1-1: IPS – Actors and Content Modules**

| Actors | Content Modules | Optionality | Reference |
|---|---|---|---|
| Content Creator | Document Sharing [PCC-1] See Note 1 | R | PCC TF-2: 3.1 |
| Content Consumer | Document Sharing [PCC-1] See Note 1 | R | PCC TF-2: 3.1 |

Note 1: For FHIR transactions, see the MHD Profile

### X.1.1 Actor Descriptions and Actor Profile Requirements

Content module requirements are documented in PCC TF-2 Content Modules. This section documents any additional requirements on profile's actors.

#### X.1.1.1 Content Creator

The Content Creator shall be responsible for the creation of content and sharing of an International Patient Summary document containing the data elements defined in PCC TF-3: 6.3.1.D.5 or, where the FHIR is used, containing the FHIR Composition bundle defined in PCC TF-3:6.6.x.1.

**CDA Test Language**

GIVEN a Patient with data in a health information system that implements the IPS Content Creator with the CDA Option

WHEN a patient visit is completed, or an IPS is requested by the provider or the patient for whatever reason (e.g., in anticipation of international travel)

THEN the Content Consumer will create a CDA Document

AND that document will conform to the CDA Document described in section PCC IPS TF-3: 6.3.1.D.

**FHIR Test Language**

GIVEN a Patient with data in a health information system that implements the Content Creator with the FHIR Option

WHEN a patient visit is completed, or an IPS is requested by the provider or the patient for whatever reason (e.g., in anticipation of international travel)

THEN the Content Consumer will create a FHIR Document Bundle

AND that document will conform to the FHIR Document described in section PCC IPS TF-3: 6.6.x.2.1.

##### X.1.1.1.1 Trigger Events

Upon the completion of a patient visit, in anticipation of cross border travel, or as a request for an IPS document.

 

### X.1.1.2 Content Consumer

A Content Consumer is responsible for viewing, importing, or other processing options for an International Patient Summary document content created by an IPS Content Creator. This is specified in Document Sharing [PCC-1] transaction in PCC TF-2: 3.1.

**CDA Test Language**

1) The Content Consumer SHALL be able to access documents using appropriate actors from the IHE IPS Profile it is grouped with as described above.
2) GIVEN a Content Consumer which is grouped with appropriate actors to access documents
3) WHEN a user selects a document to view
4) THEN the content consumer can access this document for display using the appropriate actors.

The Content Consumer SHALL support processing of the document as needed by the profile.

1) There is no IPS specific processing

**View Option:**

SHALL render the document for viewing:

1) GIVEN that a document has been selected for display.
2) WHEN that document is rendered
3) THEN the rendering meets the requirements for CDA Release 2 content presentation semantics (see Section 1.2.4 of the CDA Specification: Human readability and rendering CDA Documents)
4) AND CDA Header information providing context critical information shall also be rendered in a human readable manner.
5) AND the content consumer provides a mechanism to view using the source stylesheet.

**Document Import Option:**

1) GIVEN a Content Consumer that implements the Document Import Option
2) AND a document has been selected for import if authorized
3) WHEN that document is imported
4) THEN the Content Consumer also supports the View Option
5) AND the Content Consumer supports local storage of the entire document

 

6) AND the document origin is tracked
7) AND the imported document can be viewed without retrieving it again

Separate GIVEN/WHEN/THEN for an optional capability

1) GIVEN a Content Consumer that implements the Document Import Option
   AND the base test has been completed
   AND the original document has been updated or deprecated
2) WHEN the user is shown the document from local storage
3) THEN the Content Consumer can check to see if the document has been updated or deprecated
   AND let the end user know the status of the remote document.

**Section Import Option:**

1) GIVEN a Content Consumer that implements the Section Import Option
2) AND a section(s) has been selected for import
3) WHEN that section(s) is imported
4) THEN the Content Consumer supports the import of one or more sections of the document
5) AND the Content Consumer offers a means to copy the imported section(s) into local data structures as free text.
6) AND the section origin is tracked
7) AND the imported section can be viewed without retrieving it again

Separate GIVEN/WHEN/THEN for an optional capability

1) GIVEN a Content Consumer that implements the Section Import Option
   AND the base test has been completed
   AND the original information has been updated or deprecated
2) WHEN the user is shown the imported section(s) in local data structures
3) THEN the Content Consumer can check to see if the information has been updated or deprecated
   AND let the end user know the status of the remote section(s).

 

**Discrete Data Import Option:**

1) GIVEN a Content Consumer that implements the Discrete Data Import Option for one or more sections, and a CDA document containing those sections
2) AND the user is offered the possibility to select among the specific sections that include structured content a set of clinically relevant record for import
3) AND a section(s) has been selected for import
4) WHEN the user or a consuming system selects those sections from the CDA Document for discrete data import
5) THEN structured data from the entries in those sections is stored and/or processed locally by the consumer.

Separate GIVEN/WHEN/THEN for an optional capability

1) GIVEN a Content Consumer that implements the Discrete Data Import Option

   AND the base test has been completed

   AND the original document has been updated or deprecated
2) WHEN the user is shown the document from local storage
3) THEN the Content Consumer can check to see if the discrete data being viewed has been updated or deprecated

Separate GIVEN/WHEN/THEN for an optional capability

1) GIVEN a Content Consumer that implements the Discrete Data Import Option with the XDS Document Source Actor

   AND the base test has been completed

   AND the original document has been updated or deprecated
2) WHEN the user is shown the document from local storage
3) THEN the Content Consumer can query the Document Registry about a document from which discrete data was previously imported
4) AND the Content Consumer can find out if the discrete data being viewed has been updated or deprecated.

 

**FHIR Test Language**

The Content Consumer SHALL be able access documents using appropriate actors from the IHE profile it is grouped with as described above.

1) GIVEN a Content Consumer which is grouped with appropriate actors to access documents
2) WHEN a user selects a document to view
3) THEN the content consumer can access this document for display using the appropriate actors.

The Content Consumer SHALL support processing of the document as needed by the profile.

1) There is no IPS specific processing

**View Option:**

SHALL render the Composition.text for FHIR Document Bundle for viewing

1) GIVEN that a document has been selected for display.
2) WHEN that document is rendered
3) THEN the rendering meets the requirements for CDA Release 2 content presentation semantics (see Section 1.2.4 of the CDA Specification: Human readability and rendering CDA Documents)
4) AND CDA Header information providing context critical information shall also be rendered in a human readable manner.
5) AND the content consumer provides a mechanism to view using the source stylesheet.

**Document Import Option:**

1) GIVEN a Content Consumer that implements the Document Import Option
2) AND a document has been selected for import
3) WHEN that document is imported
4) THEN the Content Consumer also supports the View Option
5) AND the Content Consumer supports local storage of the entire document
6) AND the document origin is tracked
7) AND the imported document can be viewed without retrieving it again

 

Separate GIVEN/WHEN/THEN for an optional capability

1) GIVEN a Content Consumer that implements the Document Import Option

AND the base test has been completed

AND the original document has been updated or deprecated

2) WHEN the user is shown the document from local storage
3) THEN the Content Consumer can check to see if the document has been updated or deprecated

   AND let the end user know the status of the remote document.

**Section Import Option:**

1) GIVEN a Content Consumer that implements the Section Import Option for section content of Composition.text for FHIR Document Bundle
2) AND a section(s) has been selected for import
3) WHEN that section(s) is imported
4) THEN the Content Consumer supports the import of one or more sections of the document
5) AND the Content Consumer offers a means to copy the imported section(s) into local data structures as free text.
6) AND the section origin is tracked
7) AND the imported section can be viewed without retrieving it again

Separate GIVEN/WHEN/THEN for an optional capability

1) GIVEN a Content Consumer that implements the Section Import Option

AND the base test has been completed

AND the original information has been updated or deprecated

2) WHEN the user is shown the imported section(s) in local data structures
3) THEN the Content Consumer can check to see if the information has been updated or deprecated

   AND let the end user know the status of the remote section(s).

**Discrete Data Import Option:**

1) GIVEN a Content Consumer that implements the Discrete Data Import Option for section content of Composition.text for FHIR Document Bundle.

 

2) AND the user is offered the possibility to select among the specific sections that include structured content a set of clinically relevant record for import
3) AND a section(s) has been selected for import
4) WHEN the user or a consuming system selects those sections from the CDA Document for discrete data import
5) THEN structured data from the entries in those sections is stored and/or processed locally by the consumer.

Separate GIVEN/WHEN/THEN for an optional capability

1) GIVEN a Content Consumer that implements the Discrete Data Import Option

AND the base test has been completed

AND the original document has been updated or deprecated

2) WHEN the user is shown the document from local storage
3) THEN the Content Consumer can check to see if the discrete data being viewed has been updated or deprecated

Separate GIVEN/WHEN/THEN for an optional capability

1) GIVEN a Content Consumer that implements the Discrete Data Import Option with the XDS Document Source

AND the base test has been completed

AND the original document has been updated or deprecated

2) WHEN the user is shown the document from local storage
3) THEN the Content Consumer can query the Document Registry about a document from which discrete data was previously imported
4) AND the Content Consumer can find out if the discrete data being viewed has been updated or deprecated.

## X.2 IPS Actor Options

Options that may be selected for each actor in this profile, if any, are listed in the Table X.2-1. Dependencies between options, when applicable, are specified in notes.

 

**Table X.2-1: International Patient Summary – Actors and Options**

| Actor | Option Name | Reference |
|---|---|---|
| Content Creator | *CDA Option* Note 1 | Section X.2.1 |
| | *CDA Complete Option* Note 1 | Section X.2.2 |
| | *FHIR Option* Note 1 | Section X.2.3 |
| | *FHIR Complete Option* Note 1 | Section X.2.4 |
| Content Consumer | View Option Note 2 | PCC TF-2: 3.1.1 |
| | Document Import Option Note 2 | PCC TF-2: 3.1.2 |
| | Section Import Option Note 2 | PCC TF-2: 3.1.3 |
| | Discrete Data Import Option Note 2 | PCC TF-2: 3.1.4 |
| | Complete Discrete Data Import Option Note 2 | Section X.2.5 |

Note 1: The Content Creator must be able to support at least one of these options.

Note 2: The Content Consumer must implement at least one of these options.

### X.2.1 CDA Option

This option defines the processing requirements placed on the Content Creators for producing a CDA structured document version of the International Patient Summary document. The CDA details are in Volume 3, Section 6.3.1.

### X.2.2 CDA Complete Option

This option defines the International Patient Summary where all of the optional components (e.g., Advanced Directives, Functional Status, History of Past Illnesses, History of Pregnancy, Plan of Care, Social History, and Vital Signs) will become required if known. The processing requirements placed on the Content Creators for producing a Complete CDA structured document version of the International Patient Summary document are in are detailed in Volume 3, Section TBD.

### X.2.3 FHIR Option

This option defines the processing requirements placed on the Content Creators for producing a FHIR document bundle version of the International Patient Summary document. The FHIR bundle details are in Volume 3, Section 6.6.x.1.

### X.2.4 FHIR Complete Option

This option defines the processing requirements placed on the Content Creators for producing a FHIR document bundle version of the International Patient Summary document. The FHIR bundle details are in Volume 3, Section TBD.

 

### X.2.5 Complete Discrete Data Import Option

The Content Creator implementing this option shall be able to discretely import all relent content provided by the content creator.

## X.3 IPS Required Actor Groupings

No required actor groupings

## X.4 IPS Overview

This profile will profile the International Patient Summary (IPS), based on the HL7's IPS Implementation Guides that realize the CEN EN 17269 IPS dataset, to support multiple international use cases that will profile the use of this specification to support multiple international use cases for testing and deployment for commercial products. This also encourages implementation and testing among vendors to provide additional feedback real world use of the standard. Candidates for recommended changes to the underlying standard and or IGs will be submitted to HL7 and CEN for further consideration.

### X.4.1 Concepts

Patients that are traveling to other jurisdictions may be seeking care or in need of care during their travel. The listed use case scenarios describe a variety of care needs that can be supported by this content profile.

### X.4.2 Use Cases

#### X.4.2.1 Use Case #1: Emergency Care Abroad

##### X.4.2.1.1 Emergency Care Abroad Use Case Description

A student is attending University and is taking a semester abroad. He has fallen off his bike on his way to class, breaking his left arm, and was taken to the local hospital. The IPS shows that the patient is severely allergic to NSAIDs and the attending clinician provides an alternative method of pain management for the patient.

 

#### X.4.2.1.2 Emergency Care Abroad Process Flow

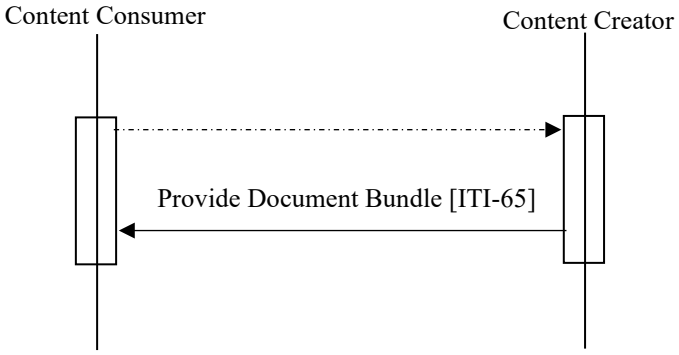


**Figure X.4.2.2-1: Basic Process Flow in IPS Profile**

**Pre-conditions:**

A student is attending University in a study abroad program.

The student is transported to the hospital.

**Main Flow:**

After getting access to the student's international patient summary it is discovered that he is allergic to NSAIDs.

Based on this information the provider is able to make an informed decision when prescribing medication for pain management.

**Post-conditions:**

The student is able to use his medication without any adverse effects.

### X.4.2.2 Use Case #2: Elective Surgery Abroad

#### X.4.2.2.1 Elective Surgery Abroad Use Case Description

A man schedules a procedure in another country for medical services that are unavailable in their own country. Since the patient lives outside of this country the patient provides an available copy of his IPS generated from his patient record to the surgeon so that the surgeon can be informed before going into the surgery about any relevant issues that may affect the surgery. In accordance with local policy information about the healthcare visit is provided in the form of a new IPS for the patient to take home.

 

#### X.4.2.2.2 Elective Surgery Abroad Process Flow

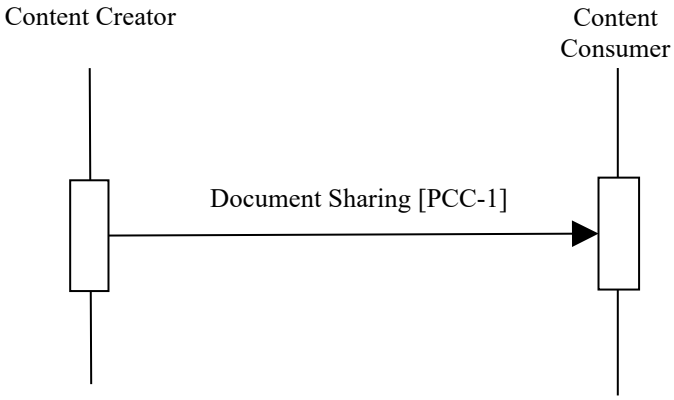


**Figure X.4.2.2.2-1: Basic Process Flow in IPS Profile**

**Pre-conditions:**

A patient is looking for elective surgery in another country.

The patient requests that a copy of his IPS be made available either in paper or electronic form.

**Main Flow:**

Based on this information in the IPS the surgeon is able to make informed decisions during the surgery.

Surgery is successful.

**Post-conditions:**

Information about the healthcare visit is provided in the form of an IPS back to patient to take home.

### X.4.2.3 Use Case #3: Managing Work-Related Illness While Working Abroad

#### X.4.2.3.1 Managing Work-Related Illness While Working Abroad Use Case Description

A 43-year-old woman is assigned to train personnel in another country to demonstrate use of a polyurethane foam product in hospitals. After 4 months, she develops respiratory symptoms and is found to have new-onset asthma. The attending clinician reviews her IPS, which includes information about her new job. The clinician infers the causal link between the new work and the

 

asthma and recommends changes in her job activities. In accordance to local policy a new International Patient Summary (IPS) is created.

### X.4.2.3.2 Managing Work-Related Illness While Working Abroad Process Flow

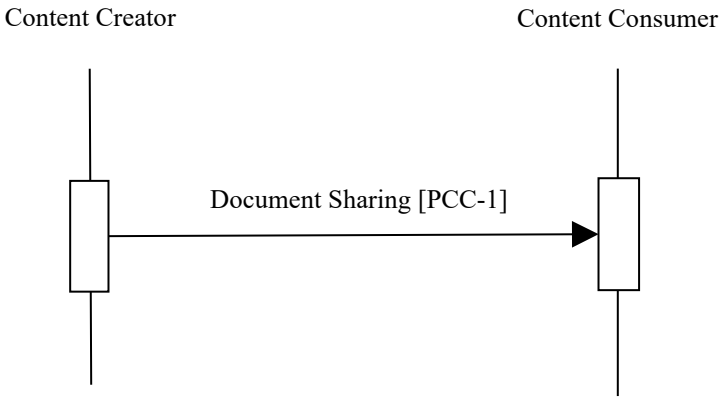


**Figure X.4.2.3.2-1: Basic Process Flow in IPS Profile**

**Pre-conditions:**

A patient is sent to another country for work by her company.

She has a medical exam prior to arriving in the new country where her medical record is updated.

**Main Flow:**

The patient develops asthma symptoms and consults a provider in the country she is working.

Using the patient's international patient summary with occupational health data included, the provider is able to see that exposure from work is causing these symptoms. The provider recommends a change in work practice to avoid further exposure and prescribes inhalers to the patient.

**Post-conditions:**

The engineering company provides portable ventilation exhaust systems to reduce exposures to other workers. The woman provides training to others without engaging in direct demonstration of foam production.

The new diagnosis of asthma related to this occupational hazard is added to the patient's EMR for the care provider's EMR.

 

A New IPS is created, including the original information imported by the provider plus the new diagnosis of asthma related to this occupational hazard, and made available for the patient to take home at the end of the episode of care.

### X.4.2.4 Use Case #4: Within Border Emergency Care

#### X.4.2.4.1 Within Border Emergency Care Use Case Description

An elderly woman is visiting her new grandchild in another part of the country. During their visit, the woman had a stroke and was taken to the hospital. Her IPS shows a history of heart disease problems, one previous stroke, and the details of her medication. The attending clinician treats the stroke by adjusting her current medication dosages. In accordance with local policy new information about the healthcare visit is made available in an IPS.

#### X.4.2.4.2 Within Border Emergency Care Process Flow

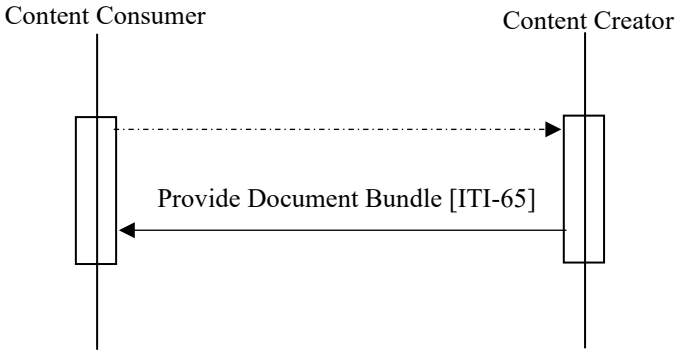


**Figure X.4.2.4.2-1: Basic Process Flow in IPS Profile**

**Pre-conditions:**

An elderly woman is traveling to another jurisdiction.

**Main Flow:**

The patient has a stroke.

The patient is sent to a hospital for treatment.

The hospital accesses the patient's IPS.

The hospital adjusts the patient's medications based on past medical history to prevent future episodes.

**Post-conditions:**

The patient is discharged.

Information about the healthcare visit is made available in an IPS format using XD*.

 

## X.5 IPS Security Considerations

See ITI TF-2.x: Appendix Z.8 “Mobile Security Considerations”

Consider the ISO 22857:2013 Health informatics — Guidelines on data protection to facilitate trans-border flows of personal health data for trans-border information exchange security considerations.

## X.6 IPS Cross Profile Considerations

The use of the IHE XD* family of transactions is encouraged to support standards-based interoperability between systems acting as the IPS Content Creator and IPS Content Consumer, including exchange of FHIR documents. However, this profile does not require any groupings with ITI XD* actors to facilitate transport of the content document it defines.

A Document Source in XDS.b, a Portable Media Creator in XDM, or a Document Source in XDR might be grouped with the IPS Content Creator. A Document Consumer in XDS.b, a Portable Media Importer in XDM, or a Document Recipient in XDR might be grouped with the PCS Content Consumer. A registry/repository-based infrastructure is defined by the IHE Cross Enterprise Document Sharing (XDS.b).

The On-Demand Documents Option of the XDS.b Profile may be considered or required by local implementations to assure summary documents include a composite summary of information for the patient.

XDW may be used to define workflow for international patient care management of trans border patient care using Cross-Enterprise Document Workflow Content Profile to manage and track the tasks related to patient-centric workflows.

A reliable messaging-based infrastructure is defined by the IHE Cross Enterprise Document Reliable Interchange (XDR) Profile. A Document Source in XDR might be grouped with the IPS Content Creator. A Document Recipient in XDR might be grouped with the IPS Content Consumer.

Detailed descriptions of these transactions can be found in the IHE IT Infrastructure Technical Framework.

 

# Appendices to Volume 1

N/A

# Volume 3 – Content Modules

 

# 5 IHE Namespaces, Concept Domains and Vocabularies

*Add to Section 5 IHE Namespaces, Concept Domains and Vocabularies*

## 5.1 IHE Patient Care Coordination Namespaces

The Patient Care Coordination registry of OIDs is located at https://wiki.ihe.net/index.php/PCC_Vocabulary_Registry_and_Data_Dictionary

Additions to the Patient Care Coordination OID Registry are:

No new OIDs

## 5.2 IHE Patient Care Coordination Concept Domains

For a listing of the PCC Concept Domains see: (not yet listed on the IHE Wiki)

| conceptDomain | conceptDomainName | Description |
|---|---|---|
| 2.16.840.1.113883.6.96 | SNOMED-CT | SNOMED Controlled Terminology |
| 2.16.840.1.113883.6.1 | LOINC | Logical Observation Identifier Names and Codes |
| 2.16.840.1.113883.6.900 | ICD10 | International Classification of Diseases, Clinical Modifiers, Version 10 |

## 5.3 IHE Patient Care Coordination Format Codes and Vocabularies

### 5.3.1 IHE Format Codes

| Profile | Format Code | Media Type | Template ID |
|---|---|---|---|
| International Patient Summary (IPS) | urn:ihe:pcc:ips:2020 | text/xml | 2.16.840.1.113883.10.22.1.1 |

2.16.840.1.113883.10.22.1.1

### 5.3.2 IHEActCode Vocabulary

N/A

### 5.3.3 IHERoleCode Vocabulary

N/A

 

# 6 PCC HL7 V3 CDA Content Modules

## 6.1 Conventions

HL7 V3 CDA Conventions are defined in Appendix E to the *IHE Technical Frameworks General Introduction*.

## 6.2 Folder Modules

NA

## 6.3 Content Modules

This section defines each IHE Patient Care Coordination Content Modules in detail, specifying the standards used and the information defined.

### 6.3.1 CDA Document Content Modules

### 6.3.1.D International Patient Summary (IPS) Document Content Module

#### 6.3.1.D.1 Format Code

The XDSDocumentEntry format code for this content is **urn:ihe:pcc:ips:2020**.

#### 6.3.1.D.2 Parent Template

This document is a specialization of the HL7 IPS Document template (OID = 2.16.840.1.113883.10.22.1.1)

#### 6.3.1.D.3 Referenced Standards

All standards which are referenced in this document are listed below with their common abbreviation, full title, and link to the standard.

**Table 6.3.1.D.3-1: International Patient Summary - Referenced Standards**

| Abbreviation | Title | URL |
|---|---|---|
| FprEN 17269 | Health informatics - The Patient Summary for Unscheduled, Cross-border CareHealth informatics - The Patient Summary for Unscheduled, Cross-border Care | https://www.ehealth-standards.eu/ |
| HL7 IPS CDA | HL7 CDA® R2 Implementation Guide International Patient Summary STU Release 1 | https://www.hl7.org/implement/standards/product_brief.cfm?product_id=483 |
| ISO 27269 | ISO/DIS 27269 Health informatics — The international patient summary | https://www.iso.org/standard/79491.html |

 

### 6.3.1.D.4 Data Element Requirement Mappings to CDA

940 This section identifies the mapping of data between referenced standards into the CDA implementation guide.

**Table 6.3.1.D.4-1: IPS - Data Element Requirement Mappings to CDA**

| Clinical Data Element CDA | IPS |
|---|---|
| **Header** | **Header** |
| author | author |
| custodian | custodian |
| documentationOf | documentationOf |
| legalAuthenticator | legalAuthenticator |
| recordTarget | recordTarget |
| relatedDocument | relatedDocument |
| patient Contacts | IPS Patient Contacts |
| **Sections** | **Sections** |
| Advance Directives | IPS Advance Directives Section |
| Allergies | IPS Allergies and Intolerances |
| Functional Status | IPS Functional Status Section |
| History of Past Illness | IPS History of Past Illness Section |
| History of Pregnancy | IPS History of Pregnancy Section |
| History of Procedures | IPS History of Procedures Section |
| Immunizations | IPS Immunizations Section |
| Medical Devices | IPS Medical Devices Section |
| Medication Summary | IPS Medication Summary Section |
| Plan of Care | IPS Coded Plan of Care Section |
| Problem | IPS Problem Section |
| Results | IPS Results Section |
| Social History | IPS Social History Section |
| Vitals | IPS Coded Vital Signs |
| **Entries** | **Entries** |
| Allergy Intolerance and Concern | IPS Allergy and Intolerance Concern |
| Allergy Certainty | IPS Allergy Certainty Observation |
| Allergy or Intolerance | IPS Allergy or Intolerance |
| Allergy Status Observation | IPS Allergy Status Observation |
| Allergy Severity Observation | IPS Allergy Severity Observation |
| Allergy Category Observation | IPS Allergy Category Observation |
| Body Author | IPS Body Author |
| CDA Device | IPS CDA Device |
| Certainty Observation | IPS Certainty Observation |

 

| Clinical Data Element CDA | IPS |
|---|---|
| Coded Advance Directive Observation | IPS Coded Advance Directive Observation |
| Coded Functional Assessment Observation | IPS Coded Functional Assessment Observation |
| Coded Functional Assessment Organizer | IPS Coded Functional Assessment Organizer |
| Coded Disability Observation | IPS Coded Disability Observation |
| Coded Vital Signs Organizer | IPS Coded Vital Signs Organizer |
| Coded Vital Signs Observation | IPS Coded Vital Signs Observation |
| Comment Activity | IPS Comment Activity |
| Criticality Observation | IPS Criticality Observation |
| Current Pregnancy Observation | IPS Current Pregnancy Observation |
| 'Immunization | IPS Immunization |
| Immunization Medication Information | IPS Immunization Medication Information |
| Internal Reference | IPS Internal Reference |
| Laboratory Result Observation | IPS Laboratory Result Observation |
| Manufactured Material | IPS Manufactured Material |
| Medical Device | IPS Medical Device |
| Medication Information (detail) | IPS Medication Information (detail) |
| Medication Statement | IPS Medication Statement |
| Observation Media | IPS Observation Media |
| Pathology Result Observation | IPS Pathology Result Observation |
| Planned Encounter | Planned Encounter |
| Planned Immunization | Planned Immunization |
| Planned Observation | Planned Observation |
| Planned Procedure | Planned Procedure |
| Pregnancy Expected Delivery Date | IPS Pregnancy Expected Delivery Date Observation |
| Pregnancy Outcome Observation | IPS Pregnancy Outcome Observation |
| Pregnancy Status Observation | IHE IPS Pregnancy Status Observation |
| Problem Concern Entry | IPS Problem Concern Entry |
| Problem Entry | IPS Problem Entry |
| Problem Status Observation | IPS Problem Status Observation |
| Procedure Entry | IPS Procedure Entry |
| Radiology Result Observation | IPS Radiology Result Observation |
| Reaction Manifestation | IPS Reaction Manifestation |
| Result Observation | IPS Result Observation |
| Result Organizer | IPS Result Organizer |
| Severity Observation | IPS Severity Observation |
| Social History Alcohol Use | IPS Social History Alcohol Use |
| Social History Observation | IPS Social History Observation |
| Social History Tobacco Use | IPS Social History Tobacco Use |

 

| Clinical Data Element CDA | IPS |
|---|---|
| Specimen Collection | IPS Specimen Collection |

### 6.3.1.D.5 International Patient Summary (IPS) Document Content Module Specification

This section specifies the header, section, and entry content modules which comprise the International Patient Summary (IPS) Document Content Module, using the Template ID as the key identifier.

Sections that are used according to the definitions in other specifications are identified with the relevant specification document. Additional constraints on vocabulary value sets, not specifically constrained within the section template, are also identified.

**Table 6.3.1.D.5-1: International Patient Summary (IPS) Document Content Module Specification**

| | | | | | |
|---|---|---|---|---|---|
| **Template Name** | | International Patient Summary (IPS) | | | |
| **Template ID** | | TBD | | | |
| **Parent Template** | | International Patient Summary 2.16.840.1.113883.10.22.1.1 (Hl7) | | | |
| **General Description** | | The International Patient Summary is a "Minimal and non-exhaustive Patient Summary, specialty-agnostic, condition-independent, but readily usable by all clinicians for the unscheduled (cross-border) care of a patient." (HL7) | | | |
| **Document Code** | | SHALL be code="60591-5" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Patient Summary | | | |
| **Opt and Card** | **Condition** | **Header Element or Section Name** | **Template ID** | **Specification Document** | **Vocabulary Constraint** |
| **Header Elements** | | | | | |
| M [1..*] | | author | 2.16.840.1.113883.10.22.2.2 | HL7 IPS CDA | |
| M [1..1] | | custodian | 2.16.840.1.113883.10.22.2.3 | HL7 IPS CDA | |
| M [1..1] | | documentationOf | 2.16.840.1.113883.10.22.2.6 | HL7 IPS CDA | |
| R [0..1] | | legalAuthenticator | 2.16.840.1.113883.10.22.2.4 | HL7 IPS CDA | |
| M [1..1] | | recordTarget | 2.16.840.1.113883.10.22.2.1 | HL7 IPS CDA | |
| R [0..*] | | relatedDocument | 2.16.840.1.113883.10.22.2.7 | HL7 IPS CDA | |

 

| Sections | | | | | |
|---|---|---|---|---|---|
| O [0..1] | | IPS Advance Directives | TBD | PCC IPS 6.3.3.10.S.1 | See Open Issues |
| M [1..1] | | IPS Allergies and Intolerances | TBD | PCC IPS 6.3.3.10.S.2 | See Vocabulary Open Issues |
| O [0..1] | | IPS Functional Status | TBD | PCC IPS 6.3.3.10.S.6 | See Open Issues |
| O [0..1] | | IPS History of Past Illness | 2.16.840.1.113883.10.22.3.7 | HL7 IPS CDA | See Vocabulary Open Issues |
| O [0..1] | | IPS History of Pregnancy | TBD | PCC IPS 6.3.3.10.S.3 | See Open Issues |
| R [0..1] | | IPS History of Procedures | 2.16.840.1.113883.10.22.3.4 | HL7 IPS CDA | |
| R [0..1] | | IPS Immunizations | 2.16.840.1.113883.10.22.3.5 | PCC IPS 6.3.3.10.S.4 | See Open Issues |
| R [0..1] | | IPS Medical Devices | 2.16.840.1.113883.10.22.3.6 | HL7 IPS CDA | See Vocabulary Open Issues |
| M [1..1] | | IPS Medication Summary | 2.16.840.1.113883.10.22.3.1 | HL7 IPS CDA | See Vocabulary Open Issues |
| O [0..1] | | IPS Coded Plan of Care | TBD | PCC IPS 6.3.3.10.S.7 | See Open Issues |
| M [1..1] | | IPS Problems | 2.16.840.1.113883.10.22.3.3 | HL7 IPS CDA | See Vocabulary Open Issues |
| R [0..1] | | IPS Results | 2.16.840.1.113883.10.22.3.14 | HL7 IPS CDA | See Open Issues |
| O [0..1] | | IPS Social History | TBD | PCC IPS 6.3.3.10.S.8 | See Open Issues |
| O [0..1] | | IPS Coded Vital Signs | TBD | PCC IPS 6.3.3.10.S.5 | See Open Issues |

### 6.3.2 CDA Header Content Modules

Not applicable

### 6.3.3 CDA Section Content Modules

*Add to section 6.3.3.10 Section Content Modules*

### 6.3.3.10 CDA Section Content Modules

**IMPORTANT NOTE:**

 

Per Open Issue #8, the IPS CDA specification constructs will be updated to reflect alignment with CDA updates in HL7. The public comment version describes the intended modeling but template identifiers and conformance statement identifiers will be updated to align with the HL7 IPS CDA anticipated updates.

### 6.3.3.10.S1 IPS Advance Directives Section Content Module

**Table 6.3.3.10.S1-1: IPS Advance Directives Section**

| | | | | | |
|---|---|---|---|---|---|
| **Template Name** | | IPS Advance Directives Section | | | |
| **Template ID** | | Advance Directives Section 2.16.840.1.113883.10.22.3.12 (HL7) | | | |
| **Parent Template** | | N/A | | | |
| **General Description** | | The advance directive section shall include entries for references to consent and advance directive documents (e.g., Durable Power of Attorney, Code Status) when known as described in the Entry Content Modules. | | | |
| **Section Code** | | <code code=' ' codeSystem='2.16.840.1.113883.6.96' codeSystemName='SNOMED CT'/> The <code> element records the type of advance directive. It should use one of the following SNOMED codes in the table below.<br>Code Description Data Type 304251008 Resuscitation BL 52765003 Intubation 225204009 IV Fluid and Support 89666000 CPR 281789004 Antibiotics 78823007 Life Support 61420007 Tube Feedings 116859006 Transfusion of blood product 71388002 Other Directive <value> | | | |
| **Author** | | May vary | | | |
| **Informant** | | May vary | | | |
| **Subject** | | current recordTarget | | | |
| **Opt and Card** | **Condition** | **Data Element or Section Name** | **Template ID** | **Specification Document** | **Vocabulary Constraint** |
| **Entries** | | | | | |
| R<br>[0..*] | | IPS Coded Advance Directive Observation | TBD (see Open Issue #16) | 6.3.4.E14 | |

 

### 6.3.3.10.S2 IPS Allergies and Intolerances Section Content Module

**Table 6.3.3.10.S2-1: IPS Allergies Section**

| | | | | | |
|---|---|---|---|---|---|
| **Template Name** | | IHE IPS Allergies and Intolerances Section | | | |
| **Template ID** | | TBD (see Open Issue #16) | | | |
| **Parent Template** | | IPS Allergies and Intolerances Section 2.16.840.1.113883.10.22.3.2 (HL7) | | | |
| **General Description** | | This section documents the relevant allergies or intolerances (conditions) for that patient, describing the kind of reaction (e.g., rash, anaphylaxis,..); preferably the agents that cause it; and optionally the criticality and the certainty of the allergy.<br>At a minimum, it should list currently active and any relevant historical allergies and adverse reactions.<br>If no information about allergies is available, or if no allergies are known this should be clearly documented in the section.<br>The optional author and informant elements are used when necessary to convey the provenance and authoring of the section content in case it is different from what is announced in the CDA header.<br>The optional author and informant elements are used when necessary to convey the provenance and authoring of the section content in case it is different from what is announced in the CDA header.<br>This template adds support for Allergy Severity and Allergy Category | | | |
| **Section Code** | | TBD | | | |
| **Author** | | May vary | | | |
| **Informant** | | May vary | | | |
| **Subject** | | current recordTarget | | | |
| **Opt and Card** | **Condition** | **Data Element or Section Name** | **Template ID** | **Specification Document** | **Vocabulary Constraint** |
| **Subsections** | | | | | |
| All HL7 IPS CDA subsections and entries are inherited. The only entries constrained are listed in the entries section below. | | | | | |
| **Entries** | | | | | |
| R<br>[1..*] | | IPS Allergy and Intolerance Concern | 2.16.840.1.113883.10.22.4.1 | PCC IPS 6.3.4.E2 | |

970

 

### 6.3.3.10.S3 IPS History of Pregnancy Section Content Module

**Table 6.3.3.10.S3-1: IPS History of Pregnancy Section**

| | | | | | |
|---|---|---|---|---|---|
| **Template Name** | | IHE IPS History of Pregnancy Section | | | |
| **Template ID** | | TBD (see Open Issue #16) | | | |
| **Parent Template** | | IPS History of Pregnancy Section 2.16.840.1.113883.10.22.3.11 (HL7) | | | |
| **General Description** | | The history of pregnancy section shall contain information about whether the patient is currently pregnant (optional with the Expected Delivery Date) or not.<br>It may contain addition summarizing information about the outcome of earlier pregnancies.<br>The optional author and informant elements are used when necessary to convey the provenance and authoring of the section content in case it is different from what is announced in the CDA header.<br><br>This template adds support to allow for null value, a time stamp for outcome date, and specialist contact | | | |
| **Section Code** | | TBD | | | |
| **Author** | | May vary | | | |
| **Informant** | | May vary | | | |
| **Subject** | | current recordTarget | | | |
| **Opt and Card** | **Condition** | **Data Element or Section Name** | **Template ID** | **Specification Document** | **Vocabulary Constraint** |
| **Sections** | | | | | |
| All HL7 IPS CDA subsections and entries are inherited. The only entries constrained are listed in the entries section below. | | | | | |
| **Entries** | | | | | |
| R<br>[0..1] | | IHE IPS Pregnancy Status Observation | TBD (see Open Issue #16) | PCC IPS 6.3.4.E12 | |
| NP<br>[0..0] | | IPS Pregnancy Status Observation | 2.16.840.1.113883.10.22.4.27 | HL7 IPS CDA | |
| R<br>[0..*] | | IPS Current Pregnancy Observation | TBD (see Open Issue #16) | PCC IPS 6.3.4.E13 | |

 

### 6.3.3.10.S4 IPS Immunizations Section Content Module

**Table 6.3.3.10.S4-1: IPS Immunizations Section**

| | | | | | |
|---|---|---|---|---|---|
| **Template Name** | | IHE IPS Immunizations Section | | | |
| **Template ID** | | TBD (see Open Issue #16) | | | |
| **Parent Template** | | IPS Immunization 2.16.840.1.113883.10.22.3.5 (HL7) | | | |
| **General Description** | | The Immunizations Section defines a patient's current immunization status and pertinent immunization history.<br>The primary use case for the Immunization Section is to enable communication of a patient's immunization status.<br>The section includes current immunization status, and may contain the entire immunization history that is relevant to the period of time being summarized.<br>The optional author and informant elements are used when necessary to convey the provenance and authoring of the section content in case it is different from what is announced in the CDA header.<br>IHE Profiles this section to include Indication to specify target diseases to support the FprEN 17269 IPS target disease data element | | | |
| **Section Code** | | TBD | | | |
| **Author** | | May vary | | | |
| **Informant** | | May vary | | | |
| **Subject** | | current recordTarget | | | |
| **Opt and Card** | **Condition** | **Data Element or Section Name** | **Template ID** | **Specification Document** | **Vocabulary Constraint** |
| **Subsections** | | | | | |
| All HL7 IPS CDA subsections and entries are inherited. The only entries constrained are listed in the entries section below. | | | | | |
| **Entries** | | | | | |
| M<br>[1..*] | | IHE IPS Immunization | TBD (see Open Issue #16) | PCC IPS 6.3.4.E1 | |

975

### 6.3.3.10.S5 IPS Coded Vital Signs Section Content Module

**Table 6.3.3.10.S5-1: IPS Coded Vital Signs Section**

| | | | | | |
|---|---|---|---|---|---|
| **Template Name** | | IHE IPS Coded Vital Signs Section | | | |
| **Template ID** | | TBD (see Open Issue #16) | | | |
| **Parent Template** | | TBD (see Open Issue #16) | | | |
| **General Description** | | This section assembles relevant observation results to record the vital signs associated with a patient that include the primary vital signs plus additional measurements such as height, weight and BMI.<br><br>Coded Vital signs section to include Coded values for vital signs | | | |
| **Section Code** | | 8716-3 VITAL SIGNS | | | |
| **Author** | | May vary | | | |
| **Informant** | | May vary | | | |
| **Subject** | | current recordTarget | | | |
| **Opt & Card** | **Condition** | **Data Element or Section Name** | **Template ID** | **Specification Document** | **Vocabulary Constraint** |
| **Entries** | | | | | |
| R<br>[1..*] | | IPS Coded Vital signs Organizer | TBD (see Open Issue #16) | 6.3.4.E7 | |
| O<br>[0..*] | | IPS Coded Vital signs Observation | TBD (see Open Issue #16) | 6.3.4.E6 | |

 

## 6.3.3.10.S6 IPS Functional Status Section Content Module

**Table 6.3.3.10.S6-1: IPS Functional Status Section**

| | | | | | |
|---|---|---|---|---|---|
| **Template Name** | | IHE Functional Status Section | | | |
| **Template ID** | | TBD (see Open Issue #16) | | | |
| **Parent Template** | | IPS Functional Status Section 2.16.840.1.113883.10.22.3.8 (HL7) | | | |
| **General Description** | | The functional status section shall contain a narrative description of capability of the patient to perform acts of daily living, including possible needs of the patient to be continuously assessed by third<br>parties. The invalidity status may in fact influence decisions about how to administer treatments.<br>The optional author and informant elements are used when necessary to convey the provenance and authoring of the section content in case it is different from what is announced in the CDA header.<br>This profile extends the IPS Functional Status Section to include coded functional status | | | |
| **Section Code** | | TBD | | | |
| **Author** | | May vary | | | |
| **Informant** | | May vary | | | |
| **Subject** | | current recordTarget | | | |
| **Opt and Card** | **Condition** | **Data Element or Section Name** | **Template ID** | **Specification Document** | **Vocabulary Constraint** |
| **Subsections** | | | | | |
| All HL7 IPS CDA subsections and entries are inherited. The only entries constrained are listed in the entries section below. | | | | | |
| **Entries** | | | | | |
| R<br>[0..*] | | IPS Coded Functional Assessment Observation | TBD (see Open Issue #16) | PCC IPS 6.3.4.E3 | |
| R<br>[0..*] | | IPS Coded Functional Assessment Organizer | TBD (see Open Issue #16) | PCC IPS 6.3.4.E4 | |
| R<br>[0..*] | | IPS Coded Disability Assessment Observation | TBD (see Open Issue #16) | PCC IPS 6.3.4.E5 | |

 

### 6.3.3.10.S7 IPS Coded Plan of Care Section Content Module

**Table 6.3.3.10.S7-1: IPS Coded Plan of Care Section**

| | | | | | |
|---|---|---|---|---|---|
| **Template Name** | | IPS Coded Plan of Care Section | | | |
| **Template ID** | | TBD (see Open Issue #16) | | | |
| **Parent Template** | | IPS Plan of Care Section 2.16.840.1.113883.10.22.3.9 (HL7) | | | |
| **General Description** | | Dynamic, personalized plan including identified needed healthcare activity, health objectives and healthcare goals, relating to one or more specified health issues in a healthcare process<br>The care plan section contains a narrative description of the expectations for care including proposals, goals, and order requests for monitoring, tracking, or improving the condition of the patient.<br>The optional author and informant elements are used when necessary to convey the provenance and authoring of the section content in case it is different from what is announced in the CDA header.<br>This profile extends the IPS Plan of Care Section to support more than one care plan and to support a coded care plan. | | | |
| **Section Code** | | 18776-5 R TREATMENT PLAN | | | |
| **Author** | | May vary | | | |
| **Informant** | | May vary | | | |
| **Subject** | | current recordTarget | | | |
| **Opt and Card** | **Condition** | **Data Element or Section Name** | **Template ID** | **Specification Document** | **Vocabulary Constraint** |
| **Entries** | | | | | |
| O<br>[0..*] | | Planned Observation | TBD (see Open Issue #16) | PCC IPS<br>6.3.4.E8 | |
| O<br>[0..*] | | Planned Procedure | TBD (see Open Issue #16) | PCC IPS<br>6.3.4.E9 | |
| O<br>[0..*] | | Planned Encounter | TBD (see Open Issue #16) | PCC IPS<br>6.3.4.E10 | |
| O<br>[0..*] | | Planned Immunization | TBD (see Open Issue #16) | PCC IPS<br>6.3.4.E11 | |

985

 

### 6.3.3.10.S8 IPS Social History Section Content Module

**Table 6.3.3.10.S8-1: IPS Social History Section**

| | | | | | |
|---|---|---|---|---|---|
| **Template Name** | | IHE IPS Social History Section | | | |
| **Template ID** | | TBD (see Open Issue #16) | | | |
| **Parent Template** | | IPS Social History Section 2.16.840.1.113883.10.22.3.10 (HL7) | | | |
| **General Description** | | The social history section contains a description of the person's Health related "lifestyle factors" or "lifestyle observations" (e.g., smoke habits; alcohol consumption; diets, risky habits.)<br>The optional author and informant elements are used when necessary to convey the provenance and authoring of the section content in case it is different from what is announced in the CDA header.<br>This profile extends the IPS Social History Section to support IPS Social History Observation | | | |
| **Section Code** | | TBD | | | |
| **Author** | | May vary | | | |
| **Informant** | | May vary | | | |
| **Subject** | | current recordTarget | | | |
| **Opt and Card** | **Condition** | **Data Element or Section Name** | **Template ID** | **Specification Document** | **Vocabulary Constraint** |
| **Subsections** | | | | | |
| All HL7 IPS CDA subsections and entries are inherited. The only entries constrained are listed in the entries section below. | | | | | |
| **Entries** | | | | | |
| R<br>[0..*] | | IPS Social History Observation | TBD (see Open Issue #16) | 6.3.4.E15 | |

### 6.3.4 CDA Entry Content Modules

990 **6.3.4.E1 IHE IPS Immunization**

This document is an instance of the HL7 CDA IPS Immunization (2.16.840.1.113883.10.22.4.15).

A <substanceAdministration> event may indicate one or more reasons for the use of the immunization.

995 1) SHOULD contain zero or more [0..*] entryRelationship (CONF:X-X).
   1. SHALL contain exactly one [1..1] @typeCode="RSON" (CONF:X-X).
   2. SHALL contain exactly one [1..1] act (CONF:X-X).
      1. SHALL contain exactly one [1..1] @classCode="ACT" (CONF:X-X).

 

2. SHALL contain exactly one [1..1] @moodCode="EVN" (CONF:X-X).
3. SHALL contain exactly one [1..1] observation (CONF:X-X).
    1. SHALL contain exactly one [1..1] code (ValueSet: CoreProblemListDisordersUvIps urn:oid:2.16.840.1.113883.11.22.16 DYNAMIC) (CONF:X-20).

### 6.3.4.E2 IPS Allergy and Intolerance Concern

**Table 6.3.4.E2-1: IPS Allergy and Intolerance Concern**

| | |
|---|---|
| **Template Name** | IPS Allergy or Intolerance Concern |
| **Template ID** | TBD (see Open Issue #16) |
| **Parent Template** | NA |
| **General Description** | This template reflects a discrete observation about a patient's allergy or intolerance.<br>Because it is a discrete observation, it will have a statusCode of "completed".<br>The effectiveTime, also referred to as the "biologically relevant time" is the time at which the observation holds for the patient.<br>For a provider seeing a patient in the clinic today, observing a history of penicillin allergy that developed five years ago, the effectiveTime is five years ago.<br>The effectiveTime of the Allergy - Intolerance Observation gives an indication of whether or not the underlying allergy/intolerance is resolved. If known to be resolved, then an effectiveTime/high would be present.<br>If the date of resolution is not known, then effectiveTime/high will be present with a nullFlavor of "UNK".<br>It is recommended that the agent responsible for an allergy or adverse reaction would be used for describing the allergy, however the possibility that pre-coordinate codes (e.g., "allergy to nuts") will be used has been here also considered.<br>The agent responsible for an allergy or adverse reaction it is not always a manufactured material (for example, food allergies), nor is it necessarily consumed; however the playingEntity classCode = "MMAT" for all agents, manufactured or not is expected to be used. This choice depends on the characteristics of the base CDA R2 specification.<br>This open template adds two entryrRelationships to allow for documentation of the Allergy Severity and the Allergy Category |
| All HL7 IPS CDA subsections and entries are inherited. The only entries constrained are listed in the entries section below. | |

| Opt and Card | entryRelationship | Description | Template ID | Specification Document | Vocabulary Constraint |
|---|---|---|---|---|---|
| R [0..1] | IPS Allergy Severity Observation | The contained entry describes the gravity of the potential risk for future life-threatening adverse reactions when exposed to a substance known to cause an adverse reaction in that individual. When the 'worst case' result is assessed to have a life-threatening or organ system threatening potential, it is considered to be of high criticality. | TBD (see Open Issue #16) | PCC IPS 6.3.4.E2.1 | |

 

| | | | | | |
|---|---|---|---|---|---|
| R [0..1] | IPS Allergy Category Observation | The contained entry describes the Allergy substance category (e.g., food, medication, environment, biologic) | TBD (see Open Issue #16) | PCC IPS 6.3.4.E2.2 | |

### 6.3.4.E2.1 IPS Allergy Severity Observation

1) SHALL contain exactly one [1..1] @classCode="OBS" (CONF:X-X).
2) SHALL contain exactly one [1..1] @moodCode="EVN" (CONF:X-X).
3) SHALL contain exactly one [1..1] templateId (CONF:X-X).
4) SHALL contain exactly one [1..1] code="64750-3" Severity of symptoms (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:X-X).
5) SHALL contain exactly one [1..1] statusCode="completed" (CONF:X-X).
6) SHALL contain exactly one [1..1] value, which SHALL be selected from ValueSet Reaction-event-severity http://hl7.org/fhir/ValueSet/reaction-event-severity DYNAMIC (CONF:X-X).

### 6.3.4.E2.2 IPS Allergy Category Observation

1) SHALL contain exactly one [1..1] @classCode="OBS" (CONF:4463-7).
2) SHALL contain exactly one [1..1] @moodCode="EVN" (CONF:4463-8).
3) SHALL contain exactly one [1..1] templateId="TBD" (CONF:4463-9).
4) SHALL contain exactly one [1..1] code="ALCAT_TBD" Allergy Category (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:4463-10).
5) SHOULD contain zero or one [0..1] text (CONF:4463-11).
6) SHALL contain exactly one [1..1] statusCode="completed" (CONF:4463-12).
7) SHALL contain exactly one [1..1] value (ValueSet: AllergyIntoleranceCategory urn:oid:2.16.840.1.113883.4.642.3.133 DYNAMIC) (CONF:X-13).

### 6.3.4.E3 IPS Coded Functional Assessment Observation

An individual's ability to perform normal daily activities required to meet basic needs, fulfil usual roles and maintain health and well-being.

The contained entry describes the results of reviews of an individual's mobility, transfer skills, and activities of daily living, etcetera, to determine also his/her autonomy.

1) SHALL contain exactly one [1..1] observation (CONF:X-X).
    1. SHALL contain exactly one [1..1] @classCode="OBS" (CONF:X-X).
    2. SHALL contain exactly one [1..1] @moodCode="EVN" (CONF:X-X).

 

3. SHALL contain exactly one [1..1] code, which SHALL be selected from CodeSystem LOINC (urn:oid:2.16.840.1.113883.6.1) (CONF:X-X).

   Note: contains the type of assessment

4. SHOULD contain zero or one [0..1] text (CONF:X-X).

   Note: contains the Functional Assessment description

5. SHALL contain exactly one [1..1] effectiveTime (CONF:X-X).

   Note: Date of assessment

6. SHALL contain exactly one [1..1] value (CONF:X-X).

   Note: Value type shall be consistent with the scale associated with the assessment identified in /code

### 6.3.4.E4 IPS Coded Functional Assessment Organizer

The functional assessment may have an organizer that refers to a group of assessments and that organizer contains a group of functional assessments.

1) SHALL contain exactly one [1..1] @classCode="CLUSTER" (CONF:X-X).
2) SHALL contain exactly one [1..1] @moodCode="EVN" (CONF:X-X).
3) SHALL contain exactly one [1..1] templateId (CONF:X-X).
   1. SHALL contain exactly one [1..1] @root="TBD" (CONF:X-X).
4) SHALL contain at least one [1..*] id (CONF:X-X).

   The code selected should indicate the category that groups the contained functional status evaluation observations (e.g., mobility, self-care, communication).

5) SHOULD contain zero or more [0..*] author (CONF:X-X).
6) SHALL contain at least one [1..*] component (CONF:4463-28).
   1. SHALL contain exactly one [1..1] IPS Coded Functional Assessment Observation (CONF:X-X).

### 6.3.4.E5 IPS Coded Disability Observation

The contained entry describes disabilities, covering impairments, activity limitations, and participation restrictions. An impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations.

1) SHALL contain exactly one [1..1] @classCode="OBS" (CONF:X-X).
2) SHALL contain exactly one [1..1] @moodCode="EVN" (CONF:X-X).

 

3) SHALL contain exactly one [1..1] templateId="TBD" (CONF:X-X).
4) SHALL contain exactly one [1..1] code="85216-0" Disability examination note (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:X-X).
5) SHOULD contain zero or one [0..1] text (CONF:X-X).

   Note: contains the Disability description.
6) SHALL contain exactly one [1..1] effectiveTime (CONF:X-X).
7) SHALL contain exactly one [1..1] value, which SHALL be selected from ValueSet CoreProblemListDisordersUvIps urn:oid:2.16.840.1.113883.11.22.16 DYNAMIC (CONF:X-X).
8) SHOULD contain zero or more [0..*] author (CONF:X-X).

### 6.3.4.E6 IPS Coded Vital Signs Organizer

This template provides a mechanism for grouping vital signs (e.g., grouping systolic blood pressure and diastolic blood pressure).

1) SHALL contain exactly one [1..1] @classCode="CLUSTER" (CONF:X-X).
2) SHALL contain exactly one [1..1] @moodCode="EVN" (CONF:X-X).
3) SHALL contain exactly one [1..1] templateId="TBD" (CONF:X-X).
4) SHALL contain at least one [1..*] id (CONF:X-X).
5) SHALL contain exactly one [1..1] code="46680005" Vital Signs (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96) (CONF:X-X).
6) SHALL contain exactly one [1..1] statusCode="completed" (CONF:X-X).
7) SHALL contain exactly one [1..1] effectiveTime (CONF:X-X).

   Note: The effectiveTime is an interval that spans the effectiveTimes of the contained vital signs observations.
8) SHOULD contain zero or more [0..*] author (CONF:X-X).
9) SHALL contain at least one [1..*] component (CONF:X-X).
   2. SHALL contain exactly one [1..1] IPS Coded Vital Signs Observation (CONF:X-X).

### 6.3.4.E7 IPS Coded Vital Signs Observation

Specifies coded vital signs pertaining to the subject of care's health condition.

1) SHALL contain exactly one [1..1] @classCode="OBS" (CONF:X-X).
2) SHALL contain exactly one [1..1] @moodCode="EVN" (CONF:X-X).
3) SHALL contain exactly one [1..1] templateId="TBD" (CONF:X-X).

 

4) SHALL contain at least one [1..*] id (CONF:X-X).
5) SHALL contain exactly one [1..1] code, which SHOULD be selected from ValueSet Vital Sign Result Type urn:oid:2.16.840.1.113883.3.88.12.80.62 DYNAMIC (CONF:X-X).
6) SHOULD contain zero or one [0..1] text (CONF:X-X).

   Note: contains result description

7) SHALL contain exactly one [1..1] statusCode="completed" (CONF:X-X).
8) SHALL contain exactly one [1..1] effectiveTime (CONF:X-X).
9) SHALL contain exactly one [1..1] value with @xsi:type="PQ" (CONF:X-X).
   1. SHALL contain exactly one [1..1] @unit (CONF:X-X).
10) MAY contain zero or one [0..1] interpretationCode (ValueSet: Observation Interpretation (HL7) urn:oid:2.16.840.1.113883.1.11.78) (CONF:X-X).
11) MAY contain zero or one [0..1] methodCode (CONF:X-X).
12) MAY contain zero or one [0..1] targetSiteCode (CONF:X-X).
13) SHOULD contain zero or more [0..*] author (CONF:X-X).

### 6.3.4.E8 Planned Observation

1) SHALL contain exactly one [1..1] @classCode="OBS" (CONF:X-X).
2) SHALL contain exactly one [1..1] @moodCode (ValueSet: Planned moodCode (Observation) urn:oid:2.16.840.1.113883.11.20.9.25 DYNAMIC) (CONF:X-X).
3) SHALL contain exactly one [1..1] templateId="TBD" (CONF:X-X).
4) SHALL contain at least one [1..*] id (CONF:X-X).
5) SHALL contain exactly one [1..1] code, which SHALL be selected from CodeSystem LOINC (urn:oid:2.16.840.1.113883.6.1) DYNAMIC (CONF:X-X).
6) SHALL contain exactly one [1..1] statusCode="active" (CONF:X-X).
7) SHOULD contain zero or one [0..1] effectiveTime (CONF:X-X).

   Note: The effectiveTime in a planned observation represents the time that the observation should occur.

8) MAY contain zero or more [0..*] value (CONF:X-X).
9) MAY contain zero or more [0..*] methodCode (CONF:X-X).

   Note: In a planned observation the provider may suggest that an observation should be performed using a particular method.

 

10) SHOULD contain zero or more [0..*] targetSiteCode, which SHALL be selected from ValueSet Body Site Value Set urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 DYNAMIC (CONF:X-X).

    Note: The targetSiteCode is used to identify the part of the body of concern for the planned observation.

11) MAY contain zero or more [0..*] performer (CONF:X-X).

    Note: The clinician who is expected to perform the observation could be identified using procedure/performer.

12) SHOULD contain zero or more [0..*] author (CONF:X-X).

### 6.3.4.E9 Planned Procedure

Inherit from IPS Procedure Entry 2.16.840.1.113883.10.22.4.17

1) SHALL contain exactly one [1..1] @classCode="PROC" (CONF:X-X).
2) SHALL contain exactly one [1..1] @moodCode (ValueSet: Planned moodCode (Act/Encounter/Procedure) urn:oid:2.16.840.1.113883.11.20.9.23) (CONF:X-X).
3) SHALL contain exactly one [1..1] templateId="TBD" (CONF:X-X).
4) SHALL contain at least one [1..*] id (CONF:X-X).
5) MAY contain zero or one [0..1] code, which SHOULD be selected from CodeSystem SNOMED CT (urn:oid:2.16.840.1.113883.6.96) DYNAMIC (CONF:X-X).
6) SHALL contain exactly one [1..1] statusCode="active" (CONF:X-X).
7) SHOULD contain zero or one [0..1] effectiveTime (CONF:X-X).

    Note: The effectiveTime in a planned procedure represents the time that the procedure should occur.

8) MAY contain zero or more [0..*] methodCode (CONF:X-X).

    Note: In a planned procedure the provider may suggest that a procedure should be performed using a particular method.

9) MAY contain zero or more [0..*] targetSiteCode, which SHALL be selected from ValueSet Body Site Value Set urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 DYNAMIC (CONF:X-X).

    Note: The targetSiteCode is used to identify the part of the body of concern for the planned procedure.

10) MAY contain zero or more [0..*] performer (CONF:X-X).

    Note: The clinician who is expected to perform the procedure could be identified using procedure/performer

 

11) MAY contain zero or more [0..*] author (CONF:X-X).

Note: The author in a planned procedure represents the clinician who is requesting or planning the procedure.

### 6.3.4.E10 Planned Encounter

The care plan may include encounter entries in to identify those encounters that are or are proposed to be part of the care plan.

1) SHALL contain exactly one [1..1] @classCode="ENC" (CONF:X-X).
2) SHALL contain exactly one [1..1] @moodCode (ValueSet: Planned moodCode (Act/Encounter/Procedure) urn:oid:2.16.840.1.113883.11.20.9.23) (CONF:X-X).
3) SHALL contain exactly one [1..1] templateId="TBD" (CONF:X-X).
4) SHALL contain at least one [1..*] id (CONF:X-X).
5) SHOULD contain zero or one [0..1] code (ValueSet: Encounter Planned urn:oid:2.16.840.1.113883.11.20.9.52 DYNAMIC) (CONF:X-X).
6) SHALL contain exactly one [1..1] statusCode="active" (CONF:X-X).
7) SHOULD contain zero or one [0..1] effectiveTime (CONF:X-X).
8) MAY contain zero or more [0..*] performer (CONF:X-X).

   Note: Performers represent clinicians who are responsible for assessing and treating the patient.

   1. SHALL contain exactly one [1..1] assignedEntity (CONF:X-X).

9) SHOULD contain zero or more [0..*] author (CONF:X-X).

   Note: The author in a planned encounter represents the clinician who is requesting or planning the encounter.

10) MAY contain zero or more [0..*] participant (CONF:X-X).

    1. SHALL contain exactly one [1..1] @typeCode="LOC" (CONF:X-X).
    2. SHALL contain exactly one [1..1] participantRole (CONF:X-X).

    Note: This location participation captures where the planned or ordered encounter may take place.

### 6.3.4.E11 Planned Immunization

Inherit from 2.16.840.1.113883.10.22.4.15 IPS Immunization.

1) SHALL contain exactly one [1..1] @classCode="SBADM" (CONF:X-X).
2) SHALL contain exactly one [1..1] @moodCode (ValueSet: Planned moodCode (SubstanceAdministration/Supply) urn:oid:2.16.840.1.113883.11.20.9.24) (CONF:X-X).

 

3) MAY contain zero or more [0..*] templateId="TBD" (CONF:X-X).
4) SHALL contain at least one [1..*] id (CONF:X-X).
5) MAY contain zero or one [0..1] statusCode="active" (CONF:X-X).
6) SHALL contain exactly one [1..1] effectiveTime (CONF:X-X).

   Note: The effectiveTime in a planned immunization activity represents the time that the immunization activity should occur

### 6.3.4.E12 IHE IPS Pregnancy Status Observation

Pregnancy status - update from Boolean to value set

1) SHALL contain exactly one [1..1] templateId="TBD" (CONF:X-X).
2) SHALL contain exactly one [1..1] code="82810-3" Pregnancy status (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:X-X).
3) SHALL contain exactly one [1..1] statusCode="completed" (CONF:X-X).
4) SHOULD contain zero or one [0..1] effectiveTime (CONF:X-X).

   Note: Date of observation

5) SHALL contain exactly one [1..1] value (ValueSet: IPS Pregnancy Status https://build.fhir.org/ig/HL7/fhir-ips/ValueSet-pregnancy-status-uv-ips.html DYNAMIC) (CONF:X-X).
6) SHOULD contain zero or more [0..*] entryRelationship (CONF:X-X)
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC)
   2. SHALL contain exactly one [1..1] IPS Pregnancy Expected Delivery Date Observation (identifier: urn:oid: 2.16.840.1.113883.10.22.4.29)

### 6.3.4.E13 IPS Current Pregnancy Observation

This observation supports documentation of pregnancy details related to a current pregnancy.

1) SHALL contain exactly one [1..1] @classCode="OBS" (CONF:X-X).
2) SHALL contain exactly one [1..1] @moodCode="EVN" (CONF:X-X).
3) SHALL contain exactly one [1..1] templateId="TBD" (CONF:X-X).
4) SHALL contain exactly one [1..1] code (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1 DYNAMIC) (CONF:X-X).
5) SHOULD contain zero or one [0..1] text (CONF:X-X).

 

6) SHALL contain exactly one [1..1] statusCode="complete" (CONF:X-X).
7) SHOULD contain zero or one [0..1] effectiveTime (CONF:X-X).
8) SHALL contain exactly one [1..1] value (CONF:X-X).

### 6.3.4.E14 IPS Coded Advance Directive Observation

This clinical statement represents Advance Directive Observation findings (e.g., "resuscitation status is Full Code") rather than orders. It should not be considered a legal document or a substitute for the actual Advance Directive document. The related legal documents are referenced using the reference/externalReference element.

The Advance Directive Observation describes the patient's directives, including but not limited to:

- Medications
- Transfer of Care to Hospital
- Treatment
- Procedures
- Intubation and Ventilation
- Diagnostic Tests
- Tests

The observation/value element contains the detailed patient directive which may be coded or text. For example, a category directive may be antibiotics, and the details would be intravenous antibiotics only.

1) SHALL contain exactly one [1..1] templateId="TBD" (CONF:4463-126).
2) SHALL contain at least one [1..*] id (CONF:X-X).
3) SHALL contain exactly one [1..1] code (ValueSet: Advance Directive Type Code urn:oid:2.16.840.1.113883.1.11.20.2) (CONF:X-X).
4) SHALL contain exactly one [1..1] statusCode (CONF:X-X).
5) SHALL contain zero or one [0..1] effectiveTime (CONF:X-X).
    3. SHALL contain exactly one [1..1] low (CONF:X-X).
    4. SHALL contain exactly one [1..1] high (CONF:X-X).

    Note: If the Advance Directive does not have a specified ending time, the <high> element SHALL have the nullFlavor attribute set to NA

6) SHALL contain exactly one [1..1] value with @xsi:type="BL" (CONF:X-X).

 

7) MAY contain zero or more [0..*] performer (CONF:X-X).
8) SHALL contain exactly one [1..1] participant (CONF:X-X).

   Note: The participant "VRF" represents the clinician(s) who verified the patient advance directive observation.

   1. SHALL contain exactly one [1..1] participantRole (CONF:X-X).
      1. SHOULD contain zero or one [0..1] code, which SHALL be selected from ValueSet PersonalRelationshipRoleType urn:oid:2.16.840.1.113883.2.20.3.90 (CONF:X-X).

9) SHOULD contain zero or more [0..*] reference (CONF:X-X).
   1. SHALL contain exactly one [1..1] @typeCode="REFR" (CONF:X-X).
   2. SHALL contain exactly one [1..1] externalDocument (CONF:X-X).
      1. SHALL contain at least one [1..*] id (CONF:X-X).
      2. MAY contain zero or one [0..1] text (CONF:X-X).
         1. MAY contain zero or one [0..1] reference (CONF:X-X).

            Note 1: The URL of a referenced advance directive document

            Note 2: If a URL is referenced, then it **SHOULD** have a corresponding linkHTML element in narrative block

10) MAY contain zero or one [0..1] @typeCode="OBS" (CONF:4463-124).
11) MAY contain zero or one [0..1] @contextConductionInd="EVN" (CONF:4463-125).

### 6.3.4.E15 IPS Social History Observation

This template supports any social history observation available through LOINC codes, including tobacco use quantity, alcohol use behavior, patient's diet, current/past job(s), usual (longest-held) work, employment status, retirement date(s), combat zone period(s), occupational data for household member, occupations, lifestyle, exercise, exposure risks, environmental health risk factors, or other types of dependencies such as drugs.

1) SHALL contain exactly one [1..1] templateId="TBD" (CONF:X-X).
2) SHALL contain exactly one [1..1] code, which SHALL be selected from CodeSystem LOINC (urn:oid:2.16.840.1.113883.6.1) DYNAMIC (CONF:X-X).
3) SHOULD contain zero or one [0..1] text (CONF:X-X).
4) SHALL contain exactly one [1..1] effectiveTime (CONF:X-X).

   Note: Date of observation

5) ) SHALL contain exactly one [1..1] value (CONF:X-X).

 

## 6.4 Section not applicable

Not applicable.

## 6.5 PCC Value Sets and Concept Domains

Not applicable.

## 6.6 HL7 FHIR Content Module

### 6.6.X.1 FHIR Resource Bundle Content

These are the FHIR resource locations and structure definitions of the resources where the data elements are located.

| FHIR Resource location | Optionality | Cardinality | Structured Definition |
|---|---|---|---|
| Composition | R | 1..1 | http://hl7.org/fhir/uv/ips/StructureDefinition/Composition-uv-ips |
| Allergy Intolerance | R | 1..* | http://hl7.org/fhir/uv/ips/StructureDefinition/AllergyIntolerance-uv-ips |
| Condition | R | 1..* | http://hl7.org/fhir/uv/ips/StructureDefinition/Condition-uv-ips |
| Device | RE | 0..* | http://hl7.org/fhir/uv/ips/StructureDefinition/Device-observer-uv-ips |
| Device (use statement) | RE | 0..* | http://hl7.org/fhir/uv/ips/StructureDefinition/DeviceUseStatement-uv-ips |
| ImagingStudy-uv-ips | O | 0..* | http://hl7.org/fhir/uv/ips/StructureDefinition/Observation-imaging-uv-ips |
| Immunization | RE | 0..* | http://hl7.org/fhir/uv/ips/StructureDefinition/Immunization-uv-ips |
| Medication | R | 1..* | http://hl7.org/fhir/uv/ips/StructureDefinition/Medication-uv-ips |
| Medication Statement | R | 0..* | http://hl7.org/fhir/uv/ips/StructureDefinition/MedicationStatement-uv-ips |
| Observation (generic result) | O | 0..* | http://hl7.org/fhir/uv/ips/StructureDefinition/Observation-uv-ips |
| Observation (laboratory result) | O | 0..* | http://hl7.org/fhir/uv/ips/StructureDefinition/Observation-laboratory-uv-ips |
| Observation (pathology result) | O | 0..* | http://hl7.org/fhir/uv/ips/StructureDefinition/Observation-pathology-uv-ips |
| Observation-alcoholUse-uv-ips | O | 0..* | http://hl7.org/fhir/uv/ips/StructureDefinition/Observation-alcoholuse-uv-ips |
| Observation-imaging-uv-ips | O | 0..* | http://hl7.org/fhir/uv/ips/StructureDefinition/Observation-imaging-uv-ips |

 

| FHIR Resource location | Optionality | Cardinality | Structured Definition |
|---|---|---|---|
| Observation-pregnancy-edd-uv-ips | O | 0..* | http://hl7.org/fhir/uv/ips/StructureDefinition/Observation-pregnancy-edd-uv-ips |
| Observation-pregnancy-outcome-uv-ips | O | 0..* | http://hl7.org/fhir/uv/ips/StructureDefinition/Observation-pregnancy-outcome-uv-ips |
| Observation-pregnancy-status-uv-ips | O | 0..* | http://hl7.org/fhir/uv/ips/StructureDefinition/Observation-pregnancy-status-uv-ips |
| Observation-tobaccoUse-uv-ips | O | 0..* | http://hl7.org/fhir/uv/ips/StructureDefinition/Observation-tobaccouse-uv-ips |
| Patient-uv-ips | R | 0..* | http://hl7.org/fhir/uv/ips/StructureDefinition/Patient-uv-ips |
| Procedure-uv-ips | RE | 0..* | http://hl7.org/fhir/uv/ips/StructureDefinition/Procedure-uv-ips |
| VitalSigns | O | 0..* | http://hl7.org/fhir/StructureDefinition/vitalsigns |

#### 6.6.X.1.2 FHIR Resource Data Specifications

The following table shows the mapping of the FHIR Resources supporting the content for International Patient Summary data Elements/Attributes.

##### 6.6.X.1.2.1 IPS Advanced Directives Section (Composition.section:sectionAdvanceDirectives)

The following table documents the IPS Advanced directives Section, which provides guidance on the location of the data elements within the Composition resource.

| IPS Data Elements | Cardinality | FHIR Resource Location | References |
|---|---|---|---|
| Advance Directives | R | Composition.section:sectionAdvanceDirectives | |
| Advance Directive | R | sectionAdvanceDirectives.entry | |
| Person Authorizing Directive | RE | sectionAdvanceDirectives.entry.advanceDirectivesConsent.consent.performer.patient<br>OR<br>sectionAdvanceDirectives.entry.advanceDirectivesConsent.consent.performer.RelatedPerson | 6.6.X.1.2.1.Z.1 |
| Person Authorizing Name | RE | sectionAdvanceDirectives.entry.advanceDirectivesConsent.consent.performer.patient.name<br>OR<br>sectionAdvanceDirectives.entry.advanceDirectivesConsent.consent.performer.RelatedPerson.name | 6.6.X.1.2.1.Z.2 |
| Person Authorizing Role | RE | sectionAdvanceDirectives.entry.advanceDirectivesConsent.consent.performer.RelatedPerson.relationshiptype | 6.6.X.1.2.1.Z.3 |

 

| IPS Data Elements | Cardinality | FHIR Resource Location | References |
|---|---|---|---|
| Person Authorizing Telecoms | RE | sectionAdvanceDirectives.entry.advanceDirectivesConsent.consent.performer.patient.telecom where the Person Authorizing the directive is the patient<br>OR<br>sectionAdvanceDirectives.entry.advanceDirectivesConsent.consent.performer.RelatedPerson.telecom where the Person Authorizing the directive is a patient representative | 6.6.X.1.2.1.Z.4 |
| Directive Category | O | sectionAdvanceDirectives.entry.advanceDirectivesConsent.consent.category | |
| Directive Description | C | sectionAdvanceDirectives.text | |
| Reference to Legal Document | C | sectionAdvanceDirectives.entry.advanceDirectivesConsent.consent.source[x].sourceReference.DocumentReference | |

### 6.6.X.1.2.1.Z Advanced directives Resource References

#### 6.6.X.1.2.1.Z.1 Person Authorizing Directive

If the person authorizing the Advanced directive is the patient then the Person Authorizing Directive element should be found in:
sectionAdvanceDirectives.entry.advanceDirectivesConsent.consent.performer.patient

If the person authorizing the Advanced directive is a patient representative then the Person Authorizing Directive element should be found in:
sectionAdvanceDirectives.entry.advanceDirectivesConsent.consent.performer.RelatedPerson

#### 6.6.X.1.2.1.Z.2 Person Authorizing Name

If the person authorizing the Advanced directive is the patient then the Person Authorizing Name element should be found in:
sectionAdvanceDirectives.entry.advanceDirectivesConsent.consent.performer.patient.name

If the person authorizing the Advanced directive is a patient representative then the Person Authorizing Name element should be found in:
sectionAdvanceDirectives.entry.advanceDirectivesConsent.consent.performer.RelatedPerson.name

#### 6.6.X.1.2.1.Z.3 Person Authorizing Role

The authorizing role does not apply if the person authorizing is the patient.

 

### 6.6.X.1.2.1.Z.4 Person Authorizing Telecoms

If the person authorizing the Advanced directive is the patient then the Person Authorizing Telecoms should be found in: sectionAdvanceDirectives.entry.advanceDirectivesConsent.consent.performer.patient.telecom

If the person authorizing the Advanced directive is a patient representative then the Person Authorizing Telecoms should be found in: sectionAdvanceDirectives.entry.advanceDirectivesConsent.consent.performer.RelatedPerson.telecom

### 6.6.X.1.2.2 IPS Allergy Intolerance Section (AllergyIntolerance-us-ips)

The following table documents the IPS Allergy Intolerance Section, which provides guidance on the location of the data elements within the AllergyIntolerance resource.

| IPS Data Elements | Cardinality | FHIR Resource Location | References |
|---|---|---|---|
| Allergies/Intolerances content status | C | AllergyIntolerance.code.absentOrUnknownAllergy | |
| Allergies and Intolerances | C | AllergyIntolerance.identifier | |
| Allergy/Intolerance description | R | AllergyIntolerance.code.text | |
| Allergy/Intolerance Clinical status | R | AllergyIntolerance.clinicalStatus | |
| Allergy/Intolerance Onset Date | RE | AllergyIntolerance.onset.onsetDateTime | |
| Allergy/Intolerance End Date | C | AllergyIntolerance.abatement-dateTime-uv-ips | |
| Allergy/Intolerance Criticality | O | AllergyIntolerance.criticality | |
| Allergy/Intolerance Certainty | O | AllergyIntolerance.verificationStatus | |
| Allergy/Intolerance Type of propensity | RE | AllergyIntolerance.type | |
| Allergy/Intolerance Diagnosis | O | AllergyIntolerance.code | |
| Allergy/Intolerance Reaction | RE | AllergyIntolerance.reaction | |
| Allergy/Intolerance Manifestation of the reaction | RE | AllergyIntolerance.reaction.manifestation | |
| Allergy/Intolerance Severity | RE | AllergyIntolerance.reaction.severity | |

 

| IPS Data Elements | Cardinality | FHIR Resource Location | References |
|---|---|---|---|
| Allergy/Intolerance Agent code | R | AllergyIntolerance.code | |
| Allergy/Intolerance Category | O | AllergyIntolerance.category | |

### 6.6.X.1.2.3 IPS Functional Status Section (Composition.section.sectionFunctionalStatus)

The following table documents the IPS Functional Status Section, which provides guidance on the location of the data elements within the Composition resource.

| IPS Data Elements | Cardinality | FHIR Resource Location | References |
|---|---|---|---|
| Disabilities | C | Composition.section.sectionFunctionalStatus.entry.disability | |
| Disability | R | Composition.section.sectionFunctionalStatus.entry.disability.condition | |
| Disability Description | R | Composition.section.sectionFunctionalStatus.entry.disability.condition.text | |
| Disability Code | O | Composition.section.sectionFunctionalStatus.entry.disability.condition.code | |
| Onset Date | O | Composition.section:sectionFunctionalStatus.entry.disability.condition.onset[x]:onsetDateTime | |
| Functional Assessments (determines autonomy) | C | Composition.section.sectionFunctionalStatus.entry.functionalAssessement | |
| Functional Assessment (type performed) | R | Composition.section.sectionFunctionalStatus.entry.functionalAssessement.ClinicalImpression.finding.itemCodeableConcept | |
| Functional Assessment description | R | Composition.section.sectionFunctionalStatus.entry.functionalAssessement.ClinicalImpression.description | |
| Date of assessment | RE | Composition.section.sectionFunctionalStatus.entry.functionalAssessement.ClinicalImpression.effective[x].effectiveTime | |
| Functional Status assessment Type | RE | Composition.section.sectionFunctionalStatus.entry.functionalAssessement.ClinicalImpression.code | |
| assessment Result | C | Composition.section.sectionFunctionalStatus.entry.functionalAssessement.ClinicalImpression.code | |
| Functional Assessment | C | Composition.section.sectionFunctionalStatus.entry.functionalAssessement | |

 

### 6.6.X.1.2.4 IPS History of Past Problems Section (Condition-uv-ips)

The following table documents the IPS History of Past Problems Section, which provides guidance on the location of the data elements within the Condition resource.

| IPS Data Elements | Cardinality | FHIR Resource Location | References |
|---|---|---|---|
| History of Past Illness | O | Condition-uv-ips | |
| Problem type | RE | sectionPastIllnessHx.entry.pastProblem.Condition-uv-ips.category | 6.6.X.1.2.4.Z.1 |
| Problem Description | R | Condition.text | |
| Problem Diagnosis | R | Condition.code | |
| Problem Severity | O | Condition.severity | |
| Problem Onset Date | RE | Condition.onset | |
| Problem Status | O | Condition.clinicalStatus | |
| Date Problem Resolved | RE | Condition.abatementDateTime | |
| Specialist Contact for problem | O | Condition.asserter.practionerRole | |

### 6.6.X.1.2.4.Z IPS History of Past Problems References

#### 6.6.X.1.2.4.Z.1 Problem type

Expand the HL7 http://terminology.hl7.org/CodeSystem/condition-category extensible value set to include:

- 148006 Preliminary diagnosis (contextual qualifier) (qualifier value)
- 5558000 Working diagnosis (contextual qualifier) (qualifier value)
- 30207005 Risk of (contextual qualifier) (qualifier value)
- Medical Alert SNOMED-CT qualifier value is pending see open issues

### 6.6.X.1.2.5 IPS History of Pregnancy Section (Observation-pregnancy-status-uv-ips)

The following table documents the IPS History of Pregnancy Section, which provides guidance on the location of the data elements within the Observation-pregnancy-status-uv-ips resource.

 

| IPS Data Elements | Cardinality | FHIR Resource Location | References |
|---|---|---|---|
| Current Pregnancy Status | R | Observation-pregnancy-status-uv-ips.value[x] | |
| Pregnancy Description | C | Observation-pregnancy-status-uv-ips.text | |
| Pregnancy Details | C | composition.section:sectionPregnancyHx.entry:currentPregnancyObservation | 6.6.X.1.2.5.Z.1 |
| Date of Observation | R | Observation-pregnancy-status-uv-ips.observation.encounter.effective[x] | |
| Pregnancy State | R | Observation-pregnancy-status-uv-ips.observation.valueCodeableConcept | |
| Expected Date of Delivery | RE | Observation-pregnancy-edd-uv-ips.observation.valueDateTime | |
| Specialist contact | O | Observation.performer.practionerRole | |
| Previous History of Pregnancies | O | Observation-pregnancy-status-uv-ips.value[x] | |
| Previous pregnancies status | C | Observation-pregnancy-status-uv-ips.value[x] | |
| Previous pregnancies description | C | Observation-pregnancy-status-uv-ips.text | |
| Previous pregnancy details | R | composition.section:sectionPregnancyHx.entry:currentPregnancyObservation | |
| Outcome | RE | Observation-pregnancy-outcome-uv-ips.observation.code | |
| Outcome date | R | Observation-pregnancy-outcome-uv-ips.observation.effective[x].value | |
| Specialist contact | O | Observation.performer.practionerRole | |
| Summary Metric | C | composition.section:sectionPregnancyHx.entry:currentPregnancyObservation | |

### 6.6.X.1.2.5.Z IPS History of Pregnancy References

#### 6.6.X.1.2.5.Z.1: Pregnancy Details

In this new slice these are the resources that may be included:

0..* observations to reflect additional observations relating to the pregnancy

### 6.6.X.1.2.6 IPS History of Procedures Section (Procedure-uv-ips.Procedure)

The following table documents the IPS History of Procedures Section, which provides guidance on the location of the data elements within the Procedure-uv-ips resource.

 

| IPS Data Elements | Cardinality | FHIR Resource Location | References |
|---|---|---|---|
| Procedure content status | C | Procedure-uv-ips.Procedure.code:absentOrUnknownProcedure.section:sectionProceduresHx.entry | |
| Procedure (list of performed) | C | Procedure-uv-ips.Procedure.identifier | |
| Procedure code (description of type of elements in list) | R | Procedure-uv-ips.Procedure.code | |
| description | RE | Procedure-uv-ips.Procedure.text | |
| Body site | O | Procedure-uv-ips.Procedure.bodySite | |
| Procedure date | R | Procedure-uv-ips.Procedure.performedDateTime | |

### 6.6.X.1.2.7 IPS Immunizations Section (Immunization-uv-ips)

The following table documents the IPS Immunizations Section, which provides guidance on the location of the data elements within the Immunization resource.

| IPS Data Elements | Cardinality | FHIR Resource Location | References |
|---|---|---|---|
| Immunization content status | C | Immunization.vaccineCode.vaccineCode:absentOrUnknownImmunization | |
| Vaccine for type of disease | R | Immunization.vaccineCode | |
| Target diseases | O | Immunization.protocolApplied.targetDisease | |
| Target disease | R | Immunization.protocolApplied.targetDisease | |
| Date of Immunization | R | Immunization.occurance[x].occurrenceDateTime | |
| Product administered | O | Immunization.vaccineCode | |
| Brand name | RE | Immunization.vaccineCode | |
| Performer | O | Immunization.performer | |
| Route of administration | O | Immunization.route | |

### 6.6.X.1.2.8 IPS Medical Devices Section (Device-uv-ips)

The following table documents the IPS I Medical Devices Section, which provides guidance on the location of the data elements within the `Device-uv-ips` resource.

 

| IPS Data Elements | Cardinality | FHIR Resource Location | References |
|---|---|---|---|
| Device content status | C | Device-uv-ips | |
| Device Type | R | Device-uv-ips.Device.type | |
| Device Identifier | RE | Device-uv-ips.Device.udiCarrier | |
| use start date | R | DeviceUseStatement-uv-ips.Device.timing[x].timingPeriod | |
| use end date | O | DeviceUseStatement-uv-ips.Device.timing[x].timingPeriod | |

### 6.6.X.1.2.9 IPS Medication Summary (MedicationStatement-uv-ips)

The following table documents the IPS Medication Summary Section, which provides guidance on the location of the data elements within the `MedicationStatement-uv-ips` resource.

| IPS Data Elements | Cardinality | FHIR Resource Location | References |
|---|---|---|---|
| Medication summary content status | C | sectionMedications.entry:medicationStatement.Medication[x]: medicationCodeableConcept | |
| Reason | O | section:sectionMedications.entry.entry:medicationStatement.reasonCode | |
| Product code | R | MedicationStatement.medication[x]:medicationCodeableConcept | |
| Product common name (and strength) | RE | MedicationStatement.medication[x]:medicationCodeableConcept<br>AND/OR<br>MedicationStatement.text | 6.6.X.1.2.9.Z.1 |
| Pharmaceutical dose form | R | Medication-uv-ips.Medication.form | |
| Brand name | O | MedicationStatement.medication[x]:medicationCodeableConcept<br>AND/OR<br>MedicationStatement.text | 6.6.X.1.2.9.Z.2 |
| Active ingredients | R | Medication-uv-ips.Medication.ingredient | |
| Substance code | R | Medication-uv-ips.Medication.ingredient.itemCodeableConcept | |
| Strength | R | Medication-uv-ips.Medication.ingredient.strength | |
| Administration instructions | R | MedicationStatement.dosage | |
| Instruction | O | MedicationStatement.dosage.patientInstruction | |
| Period of medication use | R | MedicationStatement.effective[x].effectivePeriod | |

 

| IPS Data Elements | Cardinality | FHIR Resource Location | References |
|---|---|---|---|
| Route of administration | O | MedicationStatement.route | |
| Dose instruction | R | MedicationStatement.dosage.additionalInstruction | |
| Number of units per intake | R | MedicationStatement.dosage.doseAndRate.dose[x].doseQuantity | |
| Frequency of intakes | R | MedicationStatement.dosage.doseAndRate.rate[x].rateQuantity | |

### 6.6.X.1.2.9.Z IPS Medication Summary References

#### 6.6.X.1.2.9.Z.1 Product common name (and strength)

Product common name (and strength) can be represented as either a codable concept or as a text string.

#### 6.6.X.1.2.9.Z.2 Brand name

Brand name can be represented as either a codable concept or as a text string.

### 6.6.X.1.2.10 IPS Plan of Care Section (Composition.Section.sectionPlanOfCare)

The following table documents the IPS Plan of Care Section, which provides guidance on the location of the data elements within the `Composition` resource.

| IPS Data Elements | Cardinality | FHIR Resource Location | References |
|---|---|---|---|
| Plan | R | N/A | |
| Plan type | O | Composition.Section.sectionPlanOfCare.code | |
| Plan date | RE | N/A | |
| Plan description | C | Composition.Section.sectionPlanOfCare.code.text | |
| Recommendations (list) | C | N/A | |
| Recommendation (label concept) | R | N/A | |
| Recommendations for treatment | R | N/A | |
| Given recommendation date | RE | N/A | |
| Applicable date | RE | N/A | |
| Extensive plan | C | Composition.Section.sectionPlanOfCare.code.entry | |

 

### 6.6.X.1.2.11 IPS Problems (Condition)

The following table documents the IPS Plan of Care Section, which provides guidance on the location of the data elements within the `Condition` resource.

| IPS Data Elements | Cardinality | FHIR Resource Location | References |
|---|---|---|---|
| Problems content status | C | Condition.code.absentOrUnknownProblem | |
| Problems (list) | C | Condition.category | |
| Problem (label concept) | M | Condition.identifier | |
| Problem type | RE | Condition.category | |
| Problem Description | R | Condition.text | |
| Diagnosis | R | Condition.code | |
| Severity | RE | Condition.severity | |
| Onset date | RE | Condition.onset[x].onsetDateTime | |
| Problem status | O | Condition.clinicalStatus | |
| Specialist contact | O | Condition.asserter.practionerRole | |

### 6.6.X.1.2.12 IPS Results Section (Observation-uv-ips)

The following table documents the IPS Results Section, which provides guidance on the location of the data elements within the `Observation` resource.

| IPS Data Elements | Cardinality | FHIR Resource Location | References |
|---|---|---|---|
| Date of observation | R | Section:results.observation.entry.efffective[x] | |
| Observation type | R | Observation.category | |
| Results description | RE | Observation.comment | |
| Results value | C | Observation.value | |
| Performer | R | Observation.performer (reference) | |
| Observer | R | Section:results.observation.entry.performer | |

 

### 6.6.X.1.2.13 IPS Social History Section (Observation-tobaccoUse-uv-ips)

The following table documents the IPS Social History Section, which provides guidance on the location of the data elements within the `Observation-tobaccoUse-uv-ips` resource.

| IPS Data Elements | Cardinality | FHIR Resource Location | References |
|---|---|---|---|
| Life style factor (label concept) | C | Section:socialhistory.entry | 6.6.X.1.2.13.Z.1 |
| Life style factor description | C | Section:socialhistory.entry | |
| Life style factor details | M | Section:socialhistory.entry | |
| Reference date range | RE | Section:socialhistory.entry | |

### 6.6.X.1.2.13.Z IPS Social History References

### 6.6.X.1.2.13.Z.1 Life style factor (label concept)

Any social history observation may be represented in the open entry under section:socialHistory, including alternate metrics for smoking and alcohol use, as well as work information (e.g., current/past job(s), longest-held occupation, etc.).

### 6.6.X.1.2.14 IPS Vital Signs Section

The following table documents the IPS Vital Signs Section, which provides guidance on the location of the data elements within the `Vital Signs` resource.

| IPS Data Elements | Cardinality | FHIR Resource Location | References |
|---|---|---|---|
| Vital Sign Date of observation | RE | VitalSigns.observation.effective[x].effectiveDateTime | |
| Vital Sign Observation type | RE | VitalSigns.observation.code | |
| Vital Sign Result description | R | VitalSigns.observation.text<br>OR<br>sectionVitalSigns.entry:vitalSign.observation.text | 6.6.X.1.2.14.Z.1 |
| Vital Sign Value | RE | SectionVitalSigns.observation.value[x] | |

### 6.6.X.1.2.14.Z IPS Vital Signs References

### 6.6.X.1.2.14.Z.1 Vital Sign Result description

- VitalSigns.observation.text for a single section level narrative block

 

- sectionVitalSigns.entry:vitalSign.observation.text for distinct elements for each description

# 7 DICOM Content Definitions

Not applicable

 

# Appendices to Volume 3

 

# Appendix A – IPS Gherkin Test Scripts

This appendix shows the test scripts that will be used to guide the development of conformance testing.

## A.1 IPS Content Creator CDA Option Test Script

The Test Script Used to carry out the test for the IPS Content Creator CDA Option

### A.1.1 Test Steps

1) GIVEN a Patient with data in a health information system that implements the IPS Content Creator with the CDA Option
2) WHEN a patient visit is completed, or an IPS is requested by the provider or the patient for whatever reason (e.g., in anticipation of international travel)
3) THEN the Content Consumer will create a CDA Document
4) AND that document will conform to the CDA Document described in section PCC IPS TF-3: 6.3.1.D1.

## A.2 IPS Content Creator FHIR Option Test Script

The Test Script Used to carry out the test for the IPS Content Creator FHIR Option

### A.2.1 Test Steps

1) GIVEN a Patient with data in a health information system that implements the Content Creator with the FHIR Option
2) WHEN a patient visit is completed, or an IPS is requested by the provider or the patient for whatever reason (e.g., in anticipation of international travel)
3) THEN the Content Consumer will create a FHIR Document Bundle
4) AND that document will conform to the FHIR Document described in section PCC IPS TF-3: 6.6.x.2.1.

## A.3 IPS Content Creator CDA Complete Option Test Script

The Test Script Used to carry out the test for the IPS Content Creator CDA Complete Option.

### A.3.1 Test Steps

TBD

## A.4 IPS Content Creator FHIR Complete Option Test Script

The Test Script Used to carry out the test for the IPS Content Creator FHIR Complete Option.

 

### A.4.1 Test Steps

TBD

## A.5 IPS Content Consumer View Option Test Script

The Test Script Used to carry out the test for the IPS Content Consumer View Option.

### A.5.1 Test Steps

1) GIVEN that a document has been selected for display.
2) WHEN that document is rendered
3) THEN the rendering meets the requirements for CDA Release 2 content presentation semantics (see Section 1.2.4 of the CDA Specification: Human readability and rendering CDA Documents)
4) AND CDA Header information providing context critical information shall also be rendered in a human readable manner.
5) AND the content consumer provides a mechanism to view using the source stylesheet.

## A.6 IPS Content Consumer Document Import Option Test Script

The Test Script Used to carry out the test for the IPS Content Consumer Document Import Option

### A.6.1 Test Steps

1) GIVEN a Content Consumer that implements the Document Import Option
2) AND a document has been selected for import if authorized
3) WHEN that document is imported
4) THEN the Content Consumer also supports the View Option
5) AND the Content Consumer supports local storage of the entire document
6) AND the document origin is tracked
7) AND the imported document can be viewed without retrieving it again

## A.7 IPS Content Consumer Section Import Option Test Script

The Test Script Used to carry out the test for the IPS Content Consumer Section Import Option.

### A.7.1 Test Steps

1) GIVEN a Content Consumer that implements the Section Import Option
2) AND a section(s) has been selected for import

 

3) WHEN that section(s) is imported
4) THEN the Content Consumer supports the import of one or more sections of the document
5) AND the Content Consumer offers a means to copy the imported section(s) into local data structures as free text.
6) AND the section origin is tracked
7) AND the imported section can be viewed without retrieving it again

## A.8 IPS Content Consumer Discrete Data Import Option Test Script

The Test Script Used to carry out the test for the IPS Content Consumer Discrete Data Import Option.

### A.8.1 Test Steps

1) GIVEN a Content Consumer that implements the Document Import Option
2) AND a document has been selected for import if authorized
3) WHEN that document is imported
4) THEN the Content Consumer also supports the View Option
5) AND the Content Consumer supports local storage of the entire document
6) AND the document origin is tracked
7) AND the imported document can be viewed without retrieving it again

## A.9 IPS Content Consumer Complete Discrete Data Import Option Test Script

The Test Script Used to carry out the test for the IPS Content Consumer Complete Discrete Data Import Option.

### A.9.1 Test Steps

TBD

 

# Volume 4 – National Extensions

*Add appropriate Country section*

Not applicable

 