### Header Relationships

This section describes classes related to the root ClinicalDocument class via an ActRelationship.

#### ParentDocument

The ParentDocument represents the source of a document revision, addenda, or transformation. ParentDocument.text is modeled as an ED data type - allowing for the expression of the MIME type of the parent document. It is not to be used to embed the related document, and thus ParentDocument.text.BIN is precluded from use.

Allowable values for the intervening relatedDocument.typeCode are shown in the following table.

| Table 50: Value set for relatedDocument.typeCode (CNE)  |
| --- |
| **Code**  | **Definition** |
| APND (append) | The current document is an addendum to the ParentDocument. |
| RPLC (replace) | The current document is a replacement of the ParentDocument. |
| XFRM (transform) | The current document is a transformation of the ParentDocument. |

A conformant CDA document can have a single relatedDocument with typeCode "APND"; a single relatedDocument with typeCode "RPLC"; a single relatedDocument with typeCode "XFRM"; a combination of two relatedDocuments with typeCodes "XFRM" and "RPLC"; or a combination of two relatedDocuments with typeCodes "XFRM" and "APND". No other combinations are allowed.

| Table 51: Value set for ParentDocument.classCode (CNE)  |
| --- |
| **Code**  | **Definition** |
| DOCCLIN (clinical document) [**default**]  | A clinical document. |

| Table 52: Value set for ParentDocument.moodCode (CNE)  |
| --- |
| **Code**  | **Definition** |
| EVN (event) [**default**]  | An actual occurrence of an event.  |

**Document Identification, Revisions, and Addenda**

A clinical document can be replaced by a new document and/or appended with an addendum.

A replacement document is a new version of the parent document. The parent document is considered superseded, but a system may retain it for historical or auditing purposes. The parent document being replaced is referenced via act relationship relatedDocument, where relatedDocument.typeCode is set to equal "RPLC" (for "replaces"). An example is a report found to contain an error that is subsequently replaced by the corrected report.

An addendum is a separate document that references the parent document, and may extend or alter the observations in the prior document. The parent document remains a current component of the patient record, and the addendum and its parent are both read by report recipients. The parent report (represented by the ParentDocument class) being appended is referenced via act relationship relatedDocument, where relatedDocument.typeCode is set to equal "APND" (for "appends").

Every CDA document must have a unique ClinicalDocument.id, and thus the replacement or addendum documents each have ClinicalDocument.id that is different from that of the parent document.

CDA documents may also contain a ClinicalDocument.setId and a ClinicalDocument.versionNumber, which together support a document identification and versioning scheme used in some document management systems. In this scheme, all documents in a chain of replacements have the same ClinicalDocument.setId and are distinguished by an incrementing ClinicalDocument.versionNumber. The initial version of a document gets, in addition to a new unique value for ClinicalDocument.id, a new value for ClinicalDocument.setId, and has the value of ClinicalDocument.versionNumber set to equal "1". A replacement document gets a new globally unique ClinicalDocument.id value, and uses the same value for ClinicalDocument.setId as the parent report being replaced, and increments the value of ClinicalDocument.versionNumber by 1. (Note that version number must be incremented by one when a report is replaced, but can also be incremented more often to meet local requirements.)

These relationships are illustrated in the following exhibit "Document Identification, Revisions, and Addenda Scenarios". Typical scenarios are a simple relacement (e.g. ClinicalDocument.id "1.2.345.6789.266" replacing ClinicalDocument.id "1.2.345.6789.123") and a simple append (e.g. ClinicalDocument.id "1.2.345.6789.456" appends ClinicalDocument.id "1.2.345.6789.123"). More complex scenarios that might be anticipated include: [1] replacement of an addendum (e.g. ClinicalDocument.id "1.2.345.6789.224" replaces ClinicalDocument.id "1.2.345.6789.456", which itself is an addendum to ClinicalDocument.id "1.2.345.6789.123") - expected behavior would be to render the replacement as the addendum (e.g. render ClinicalDocument.id "1.2.345.6789.224" as the addendum to ClinicalDocument.id "1.2.345.6789.123"); [2] addendum to a replaced document (e.g. ClinicalDocument.id "1.2.345.6789.456" appends ClinicalDocument.id "1.2.345.6789.123", which has been replaced by ClinicalDocument.id "1.2.345.6789.266") - expected behavior would be to render the addendum along with the replacement (e.g. render ClinicalDocument.id "1.2.345.6789.456" as an addendum to ClinicalDocument.id "1.2.345.6789.266").

**Document transformations**

A CDA document can be a transformation from some other format, meaning that it has undergone a machine translation from some other format (such as DICOM SR). In this case, relatedDocument.typeCode should be set to "XFRM".

A proper transformation must ensure that the human readable clinical content of the report is not impacted. Local business rules determine whether or not a transformed report replaces the source, but typically this would not be the case. If it is, an additional relationship of type "RPLC" is to be used. The "XFRM" relationship can also be used when translating a document in a local format into CDA for the purpose of exchange. In this case, the target of the "XFRM" relationship is the local document identifier.

[Link to wide graphic (opens in a new window)](file:///C%3A%5CUsers%5Crickg%5CDocuments%5CLantana%5Cprojects%5Chl7%5CCDA_R2_NormativeWebEdition2005%5Cinfrastructure%5Ccda%5Cgraphics%5CL-cda_figure1.gif)

#### ServiceEvent

This class represents the main Act, such as a colonoscopy or an appendectomy, being documented.

In some cases, the ServiceEvent is inherent in the ClinicalDocument.code, such as where ClinicalDocument.code is "History and Physical Report" and the procedure being documented is a "History and Physical" act. A ServiceEvent can further specialize the act inherent in the ClinicalDocument.code, such as where the ClinicalDocument.code is simply "Procedure Report" and the procedure was a "colonoscopy". If ServiceEvent is included, it must be equivalent to or further specialize the value inherent in the ClinicalDocument.code, and shall not conflict with the value inherent in the ClinicalDocument.code, as such a conflict would constitute an ambiguous situation.

ServiceEvent.effectiveTime can be used to indicate the time the actual event (as opposed to the encounter surrounding the event) took place.

| Table 53: Value set for documentationOf.typeCode (CNE)  |
| --- |
| **Code** | **Definition** |
| DOC (documents) [**default**]  | The current document is a documentation of the related ServiceEvent. |

| Table 54: Value set for ServiceEvent.classCode (CNE)  |
| --- |
| **Code** | **Definition** |
| ACT (act) [**default**]  | A healthcare service. |
| Any ACT subtype | See vocabulary domain "ActClassRoot" for allowable values.  |

| Table 55: Value set for ServiceEvent.moodCode (CNE)  |
| --- |
| **Code**  | **Definition** |
| EVN (event) [**default**]  | An actual occurrence of an event.  |

The performer participant represents clinicians who actually and principally carry out the ServiceEvent. Performer.time can be used to specify the time during which the performer is involved in the activity. Performer.functionCode can be used to specify addition detail about the function of the performer (e.g. scrub nurse, third assistant). Its value set is drawn from the ParticipationFunction vocabulary domain, and has a CWE coding strength.

| Table 56: Value set for performer.typeCode (CNE)  |
| --- |
| **Code** | **Definition** |
| PRF (performer) | A person who actually and principally carries out an action. |
| PPRF (primary performer) | The principal performer of the ServiceEvent. |
| SPRF (secondary performer) | A person assisting in the ServiceEvent through their substantial presence and involvement. This may include assistants, technicians, associates, or other performers.  |

A performer is an entity in the role of assigned entity (AssignedEntity class). An assigned entity is a person assigned to the role by the scoping organization. The entity playing the role is a person (Person class). The entity scoping the role is an organization (Organization class).

#### Order

This class represents those orders that are fulfilled by this document. For instance, a provider orders an X-Ray. The X-Ray is performed. A radiologist reads the X-Ray and generates a report. The X-Ray order identifier is transmitted in the Order class, the performed X-Ray procedure is transmitted in the ServiceEvent class, and the ClinicalDocument.code would be valued with "Diagnostic Imaging Report".

| Table 57: Value set for InFulfillmentOf.typeCode (CNE)  |
| --- |
| **Code** | **Definition** |
| FLFS (fulfills) [**default**]  | The current document fulfills the order stated in ActOrder. |

| Table 58: Value set for Order.classCode (CNE)  |
| --- |
| **Code** | **Definition** |
| ACT (act) [**default**]  | A healthcare service. |
| Any ACT subtype | See vocabulary domain "ActClassRoot" for allowable values.  |

| Table 59: Value set for Order.moodCode (CNE)  |
| --- |
| **Code** | **Definition** |
| RQO (request) [**default**]  | A request or order to perform the stated act. |

#### Consent

This class references the consents associated with this document. The type of consent (e.g. a consent to perform the related ServiceEvent, a consent for the information contained in the document to be released to a third party) is conveyed in Consent.code. Consents referenced in the CDA Header have been finalized (Consent.statusCode must equal "completed") and should be on file.

| Table 60: Value set for authorization.typeCode (CNE)  |
| --- |
| **Code**  | **Definition** |
| AUTH (authorized by) [**default**]  | The consent authorizes or certifies acts specified in the current document. |

| Table 61: Value set for Consent.classCode (CNE)  |
| --- |
| **Code** | **Definition** |
| CONS (consent) [**default**]  | The Consent class represents informed consents and medico-legal transactions. |

| Table 62: Value set for Consent.moodCode (CNE)  |
| --- |
| **Code** | **Definition** |
| EVN (event) [**default**]  | An actual occurrence of an event.  |

| Table 63: Value set for Consent.statusCode (CNE)  |
| --- |
| **Code** | **Definition** |
| completed | The consent being referenced by the CDA document has been finalized and is on file. |

#### EncompassingEncounter

This optional class represents the setting of the clinical encounter during which the documented act(s) or ServiceEvent occurred. Documents are not necessarily generated during an encounter, such as when a clinician, in response to an abnormal lab result, attempts to contact the patient but can't, and writes a Progress Note.

In some cases, the setting of the encounter is inherent in the ClinicalDocument.code, such as where ClinicalDocument.code is "Diabetes Clinic Progress Note". The setting of an encounter can also be transmitted in the HealthCareFacility.code attribute. If HealthCareFacility.code is sent, it should be equivalent to or further specialize the value inherent in the ClinicalDocument.code (such as where the ClinicalDocument.code is simply "Clinic Progress Note" and the value of HealthCareFacility.code is "cardiology clinic"), and shall not conflict with the value inherent in the ClinicalDocument.code, as such a conflict would constitute an ambiguous situation.

EncompassingEncounter.dischargeDispositionCode can be used to depict the disposition of the patient at the time of hospital discharge (e.g., discharged to home, expired, against medical advice, etc.).

| Table 64: Value set for componentOf.typeCode (CNE)  |
| --- |
| **Code** | **Definition** |
| COMP (component) [**default**]  | The current document is a documentation of events that occurred during the EncompassingEncounter. |

| Table 65: Value set for EncompassingEncounter.classCode (CNE)  |
| --- |
| **Code** | **Definition** |
| ENC (encounter) [**default**]  | An interaction between a patient and healthcare participant(s) for the purpose of providing patient service(s) or assessing the health status of a patient.  |

| Table 66: Value set for EncompassingEncounter.moodCode (CNE)  |
| --- |
| **Code** | **Definition** |
| EVN (event) [**default**]  | An actual occurrence of an event.  |

The location participant (location class) relates a healthcare facility (HealthCareFacility class) to the encounter to indicate where the encounter took place. The entity playing the role of HealthCareFacility is a place (Place class). The entity scoping the HealthCareFacility role is an organization (Organization class).

The setting of an encounter (e.g. cardiology clinic, primary care clinic, rehabilitation hospital, skilled nursing facility) can be expressed in HealthCareFacility.code. Note that setting and physical location are not the same. There is a many-to-many relationship between setting and the physical location where care is delivered. Thus, a particular room can provide the location for cardiology clinic one day, and for primary care clinic another day; and cardiology clinic today might be held in one physical location, but in another physical location tomorrow.

When the location is an organization, this is indicated by the presence of a scoping Organization, without a playing Place.

| Table 67: Value set for location.typeCode (CNE)  |
| --- |
| **Code** | **Definition** |
| LOC (location) [**default**]  | The location where the service is done. May be a static building (or room therein) or a moving location (e.g., ambulance, helicopter, aircraft, train, truck, ship, etc.)  |

| Table 68: Value set for HealthCareFacility.classCode (CNE)  |
| --- |
| **Code** | **Definition** |
| SDLOC (service delivery location) [**default**]  | A role played by a place at which services may be provided. |
| Any SDLOC (RoleClassServiceDeliveryLocation) subtype | See vocabulary domain "RollClassServiceDeliveryLocation" for allowable values.  |

The responsibleParty participant represents the participant having primary legal responsibility for the encounter. This differs from the legalAuthenticator participant in that the legalAuthenticator may or may not be the responsible party, and is serving a medical records function by signing off on the document, moving it into a completed state.

| Table 69: Value set for responsibleParty.typeCode (CNE)  |
| --- |
| **Code** | **Definition** |
| RESP (responsible party) [**default**]  | The provider (person or organization) who has primary responsibility for the encounter. The responsible provider is not necessarily present in an encounter, but is accountable for the action through the power to delegate, and the duty to review actions with the performing participant.  |

A responsibleParty is a person or organization in the role of an assigned entity (AssignedEntity class). An assigned entity is a person assigned to the role by the scoping organization. The entity playing the role is a person (Person class). The entity scoping the role is an organization (Organization class).

When the responsible party is an organization, the value for AssignedEntity.classCode is "ASSIGNED", and the responsible party is reflected by the presence of a scoping Organization, without a playing entity.

The encounterParticipant participant represents clinicians directly associated with the encounter (e.g. by initiating, terminating, or overseeing it).

| Table 70: Value set for encounterParticipant.typeCode (CNE)  |
| --- |
| **Code** | **Definition** |
| ADM (admitter) | The practitioner who admits a patient to a hospital stay. |
| ATND (attender) | The primary practitioner that oversees a patient's care during an encounter. |
| CONS (consultant) | An advising practioner participating in the encounter by performing evaluations and making recommendations. |
| DIS (discharger) | The practitioner who discharges a patient from a hospital stay. |
| REF (referrer) | A person having referred the patient for services resulting in the encounter. |

An encounterParticipant is an entity in the role of assigned entity (AssignedEntity class). An assigned entity is a person assigned to the role by the scoping organization. The entity playing the role is a person (Person class). The entity scoping the role is an organization (Organization class).

#### Rule

TBD