Implementation Guide for CDA Release 2
ToC Consolidated CDA IG
Working Group Draft

PROTOTYPE: FOR DISCUSSION
AND DEMONSTRATION USE ONLY
(Consolidated Developer Documentation)

Contents

Acknowledgments

Revision History

Rev	Date	By Whom	Changes
New	Jan 2012	Rama Ramakrishnan	Initial creation
v 1.0	February 2012	Rama Ramakrishnan	Updated model content

Chapter

1

DOCUMENT TEMPLATES

Topics:

- *Consultation Request*
- *Consultation Summary*
- *Discharge Instructions*
- *Discharge Summary*

This section contains the document level constraints for CDA documents that are compliant with this implementation guide.

Consultation Request

[ClinicalDocument: templateId 2.16.840.1.113883.3.1275.1.1.4.1]

1. **SHALL** conform to *Consol General Header Constraints* template (templateId: 2.16.840.1.113883.10.20.22.1.1)
2. **SHALL** contain exactly one [1..1] **realmCode/@code**="US" (CONF:5249)
3. **SHALL** contain exactly one [1..1] **typeId** (CONF:5361)
4. **SHALL** contain exactly one [1..1] **id** (CONF:5363)
5. **SHALL** contain exactly one [1..1] **code** (CONF:5253)
6. **SHALL** contain exactly one [1..1] **title** (CONF:5254)
7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:5256)
8. **SHALL** contain exactly one [1..1] **confidentialityCode**, which **SHALL** be selected from ValueSet 2.16.840.1.113883.1.11.16926 *BasicConfidentialityKind* **STATIC** (CONF:5259)
9. **SHALL** contain exactly one [1..1] **languageCode**, which **SHALL** be selected from ValueSet 2.16.840.1.113883.1.11.11526 *Language* **DYNAMIC** (CONF:5372)
10. **MAY** contain zero or one [0..1] **setId** (CONF:5261)
11. **MAY** contain zero or one [0..1] **versionNumber** (CONF:5264)
12. Contains exactly one [1..1] **component**, where its type is *Component2*
13. **SHALL** contain at least one [1..*] **recordTarget** (CONF:5266)

The recordTarget records the patient whose health information is described by the clinical document; it must contain at least one patientRole element.

  a. Such recordTargets **SHALL** contain exactly one [1..1] **patientRole** (CONF:5268)

   a. This patientRole **SHALL** contain at least one [1..*] **addr** (CONF:5271)
   b. This patientRole **SHALL** contain at least one [1..*] **id** (CONF:5268)
   c. This patientRole **SHALL** contain at least one [1..*] **telecom** (CONF:5280)
   d. This patientRole **SHALL** contain exactly one [1..1] **patient** (CONF:5283)

    a. This patient **SHALL** contain exactly one [1..1] **administrativeGenderCode**, which **SHALL** be selected from ValueSet 2.16.840.1.113883.1.11.1 *Administrative Gender (HL7 V3)* **DYNAMIC** (CONF:6394)
    b. This patient **SHALL** contain exactly one [1..1] **birthTime**
    c. This patient **MAY** contain zero or one [0..1] **ethnicGroupCode**
    d. This patient **SHOULD** contain zero or one [0..1] **maritalStatusCode**, which **SHOULD** be selected from ValueSet 2.16.840.1.113883.1.11.12212 *Marital Status* **STATIC** 1
    e. This patient **SHALL** contain exactly one [1..1] **name** (CONF:5284)
    f. This patient **MAY** contain zero or one [0..1] **raceCode**, which **MAY** be selected from ValueSet 2.16.840.1.113883.1.11.14914 *Race* **STATIC** 1
    g. This patient **MAY** contain zero or one [0..1] **religiousAffiliationCode**, which **MAY** be selected from ValueSet 2.16.840.1.113883.1.11.19185 *Religious Affiliation* **STATIC** 1
    h. This patient **MAY** contain zero or more [0..*] **guardian** (CONF:5325)

     a. Such guardians **SHOULD** contain zero or more [0..*] **addr**
     b. Such guardians **SHOULD** contain zero or one [0..1] **code**, which **SHOULD** be selected from ValueSet 2.16.840.1.113883.1.11.19563 Personal Relationship Role Type **STATIC** 1
     c. Such guardians **MAY** contain zero or more [0..*] **telecom**
     d. Such guardians **SHALL** contain zero or one [0..1] **guardianPerson** (CONF:5385)

      a. This guardianPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)
    i. This patient **MAY** contain zero or one [0..1] **birthplace** (CONF:5395)

      a. This birthplace **SHALL** contain zero or one [0..1] `place` (CONF:5396)

          a. This place **SHALL** contain zero or one [0..1] `addr` (CONF:5397)

   j. This patient **SHOULD** contain zero or one [0..1] `languageCommunication` (CONF:5406)

      a. This languageCommunication **SHALL** contain exactly one [1..1] `languageCode`, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.11526` *Language* **DYNAMIC** (CONF:5407)

      b. This languageCommunication **MAY** contain zero or one [0..1] `preferenceInd` (CONF:5414)

      c. This languageCommunication **SHALL** contain zero or one [0..1] `proficiencyLevelCode`, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.12199` *LanguageAbilityProficiency* **STATIC** (CONF:9965)

      d. This languageCommunication **SHALL** contain zero or one [0..1] `modeCode`, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.12249` *LanguageAbilityMode* **STATIC** 1 (CONF:5409)

   k. This patient **SHALL** satisfy: BirthTime precise to year

   l. This patient **SHOULD** satisfy: BirthTime precise to day

  e. This patientRole Contains zero or one [0..1] `providerOrganization`

      a. This providerOrganization **SHALL** contain at least one [1..*] `addr` (CONF:5422)

      b. This providerOrganization **SHALL** contain at least one [1..*] `id` (CONF:5417)

      c. This providerOrganization **SHALL** contain at least one [1..*] `name` (CONF:5419)

      d. This providerOrganization **SHALL** contain at least one [1..*] `telecom` (CONF:5420)

      e. This providerOrganization The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996) (CONF:9996)

- The recordTarget records the patient whose health information is described by the clinical document; it must contain at least one patientRole element.

14. MAY contain exactly one [1..1] `componentOf` (CONF:9955)

  a. This componentOf **SHALL** contain exactly one [1..1] `encompassingEncounter` (CONF:9956)

      a. This encompassingEncounter **SHALL** contain exactly one [1..1] `effectiveTime` (CONF:9958)

      b. This encompassingEncounter **SHALL** contain at least one [1..*] `id` (CONF:9959)

15. SHALL contain at least one [1..*] `author` (CONF:5444)

  a. Such authors Contains exactly one [1..1] `time`

  b. Such authors **SHALL** contain exactly one [1..1] `assignedAuthor` (CONF:5448)

      a. This assignedAuthor **SHALL** contain at least one [1..*] `addr` (CONF:5452)

      b. This assignedAuthor **SHOULD** contain zero or one [0..1] `code` (CONF:9942)

      c. This assignedAuthor **SHALL** contain at least one [1..*] `id` (CONF:5449)

      d. This assignedAuthor **SHALL** contain at least one [1..*] `telecom` (CONF:5428)

      e. This assignedAuthor Contains zero or one [0..1] `assignedPerson`

          a. This assignedPerson **SHALL** contain at least one [1..*] `name` (CONF:5470)

      f. This assignedAuthor Contains zero or one [0..1] `assignedAuthoringDevice`

          a. This assignedAuthoringDevice **SHALL** contain exactly one [1..1] `manufacturerModelName` (CONF:9936)

          b. This assignedAuthoringDevice **SHALL** contain exactly one [1..1] `softwareName` (CONF:9999)

      g. This assignedAuthor This assignedAuthor **SHALL** contain exactly one [1..1] assignedPerson or assignedAuthoringDevice

      h. This assignedAuthor The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)

16. MAY contain zero or one [0..1] `dataEnterer` (CONF:5441)

a. This dataEnterer **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:5442)

    a. This assignedEntity **SHALL** contain at least one [1..*] **addr** (CONF:5460)

    b. This assignedEntity **SHOULD** contain zero or one [0..1] **code** (CodeSystem: `2.16.840.1.113883.6.101 NUCCHealthCareProviderTaxonomy`) (CONF:9944)

    c. This assignedEntity **SHALL** contain at least one [1..*] **id** (CONF:5443)

    d. This assignedEntity **SHALL** contain at least one [1..*] **telecom** (CONF:5466)

    e. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson** (CONF:5469)

        a. This assignedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)

    f. This assignedEntity id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9943)

17. **SHALL** contain exactly one [1..1] **custodian** (iv., CONF:5519)

    a. This custodian **SHALL** contain exactly one [1..1] **assignedCustodian** (CONF:5520)

        a. This assignedCustodian **SHALL** contain zero or one [0..1] **representedCustodianOrganization** (CONF:5521)

            a. This representedCustodianOrganization **SHALL** contain at least one [1..*] **addr** (CONF:5559)

            b. This representedCustodianOrganization **SHALL** contain at least one [1..*] **id** (CONF:5522)

            c. This representedCustodianOrganization **SHALL** contain exactly one [1..1] **name** (CONF:5524)

            d. This representedCustodianOrganization **SHALL** contain exactly one [1..1] **telecom** (CONF:5525)

            e. This representedCustodianOrganization The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)

18. **MAY** contain zero or more [0..*] **informationRecipient** (CONF:5565)

    a. Such informationRecipients **SHALL** contain zero or one [0..1] **intendedRecipient** (CONF:5566)

        a. This intendedRecipient **MAY** contain zero or one [0..1] **informationRecipient** (CONF:5568)

            a. This informationRecipient **SHALL** contain at least one [1..*] **name** (CONF:5470)

        b. This intendedRecipient **MAY** contain zero or one [0..1] **receivedOrganization** (CONF:5577)

            a. This receivedOrganization **SHALL** contain zero or more [0..*] **name** (CONF:5578)

19. **SHOULD** contain zero or one [0..1] **legalAuthenticator** (CONF:5579)

    a. This legalAuthenticator **SHALL** contain exactly one [1..1] **time** (CONF:5580)

    b. This legalAuthenticator **SHALL** contain exactly one [1..1] **signatureCode/@code**="S" (CodeSystem: `2.16.840.1.113883.5.89 Participationsignature`) (CONF:5583, CONF:5584)

    c. This legalAuthenticator Contains zero or one [0..1] **assignedEntity**

        a. This assignedEntity **SHALL** contain at least one [1..*] **addr**

        b. This assignedEntity **SHOULD** contain zero or one [0..1] **code** (CodeSystem: `2.16.840.1.113883.6.101 NUCCHealthCareProviderTaxonomy`)

        c. This assignedEntity **SHALL** contain at least one [1..*] **id**

        d. This assignedEntity **SHALL** contain at least one [1..*] **telecom**

        e. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson** (CONF:5597)

            a. This assignedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)

        f. This assignedEntity The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)

20. **MAY** contain zero or more [0..*] **authenticator** (CONF:5607)

    a. Such authenticators **SHALL** contain exactly one [1..1] **time** (CONF:5608)

    b. Such authenticators **SHALL** contain exactly one [1..1] **signatureCode/@code**="s" (CodeSystem: `2.16.840.1.113883.5.89 Participationsignature`)

    c. Such authenticators **SHALL** contain zero or one [0..1] **assignedEntity** (CONF:5612)

   a. This assignedEntity **SHALL** contain at least one [1..*] **addr** (CONF:5616)
   b. This assignedEntity **MAY** contain zero or one [0..1] **code** (CONF:9951)
   c. This assignedEntity **SHALL** contain at least one [1..*] **id** (CONF:5613)
   d. This assignedEntity **SHALL** contain at least one [1..*] **telecom** (CONF:5622)
   e. This assignedEntity Contains zero or one [0..1] **assignedPerson**

      a. This assignedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)
   f. This assignedEntity The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)

21. **MAY** contain zero or one [0..1] **informant** (CONF:8001)

   a. This informant Contains zero or one [0..1] **assignedEntity**

      a. This assignedEntity **SHOULD** contain zero or more [0..*] **addr** (CONF:8220)
      b. This assignedEntity **SHALL** contain zero or one [0..1] **code** (CodeSystem: `2.16.840.1.113883.6.101` NUCCHealthCareProviderTaxonomy)
      c. This assignedEntity **SHOULD** contain at least one [1..*] **id** (a., CONF:9945)
      d. This assignedEntity **SHALL** contain zero or one [0..1] **assignedPerson** (CONF:8221)

         a. This assignedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)
      e. This assignedEntity The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)
   b. This informant Contains zero or one [0..1] **relatedEntity**

      a. This relatedEntity **SHOULD** contain zero or more [0..*] **addr** (CONF:8220)
      b. This relatedEntity **SHALL** contain zero or one [0..1] **relatedPerson** (CONF:8221)

         a. This relatedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)
   c. This informant **SHALL** satisfy: contain exactly one [1..1] assignedEntity OR exactly one [1..1] relatedEntity (CONF:8002)

22. **MAY** contain zero or more [0..*] **participant** (CONF:10003)

   a. Such participants **MAY** contain zero or one [0..1] **time** (CONF:10004)
   b. Such participants Such participants, if present, **SHALL** have an associatedPerson or scopingOrganization element under participant/associatedEntity.
   c. Such participants Unless otherwise specified by the document specific header constraints, when participant/ @typeCode is IND, associatedEntity/@classCode **SHALL** be selected from ValueSet INDRoleclassCodes 2.16.840.1.113883.11.20.9.33 STATIC 2011-09-30.

23. **MAY** contain zero or more [0..*] **inFulfillmentOf** (CONF:9952)

   a. Such inFulfillmentOfs **SHALL** contain exactly one [1..1] **order** (CONF:9953)

      a. This order **SHALL** contain at least one [1..*] **id** (CONF:9954)

24. **SHALL** contain exactly one [1..1] **allergiesSectionEntriesOptional**

   a. Contains exactly one [1..1] *Consol Allergies Section Entries Optional* (templateId: `2.16.840.1.113883.10.20.22.2.6`)

25. **MAY** contain zero or one [0..1] **assessmentAndPlanSection**

   a. Contains exactly one [1..1] *Consol Assessment And Plan Section* (templateId: `2.16.840.1.113883.10.20.22.2.9`)

26. **MAY** contain zero or one [0..1] **historyOfPresentIllnessSection**

   a. Contains exactly one [1..1] *Consol History Of Present Illness Section* (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.4`)

27. **MAY** contain zero or one [0..1] **physicalExamSection**

   a. Contains exactly one [1..1] *Consol Physical Exam Section* (templateId: `2.16.840.1.113883.10.20.2.10`)

28. **MAY** contain zero or one [0..1] `reasonForReferralSection`

    a. Contains exactly one [1..1] *Consol Reason For Referral Section* (templateId: 1.3.6.1.4.1.19376.1.5.3.1.3.1)

29. **SHALL** contain exactly one [1..1] `medicationsSectionEntriesOptional`

    a. Contains exactly one [1..1] *Consol Medications Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.1)

30. **SHALL** contain exactly one [1..1] `problemSectionEntriesOptional`

    a. Contains exactly one [1..1] *Consol Problem Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.5)

31. **SHALL** contain zero or one [0..1] `proceduresSectionEntriesOptional`

    a. Contains exactly one [1..1] *Consol Procedures Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.7)

32. **SHALL** contain exactly one [1..1] `resultsSectionEntriesOptional`

    a. Contains exactly one [1..1] *Consol Results Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.3)

33. **SHALL** contain exactly one [1..1] `advanceDirectivesSectionEntriesOptional`

    a. Contains exactly one [1..1] *Consol Advance Directives Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.21)

34. **MAY** contain zero or one [0..1] `encountersSectionEntriesOptional`

    a. Contains exactly one [1..1] *Consol Encounters Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.22)

35. **MAY** contain zero or one [0..1] `familyHistorySection`

    a. Contains exactly one [1..1] *Consol Family History Section* (templateId: 2.16.840.1.113883.10.20.22.2.15)

36. **MAY** contain zero or one [0..1] `functionalStatusSection`

    a. Contains exactly one [1..1] *Consol Functional Status Section* (templateId: 2.16.840.1.113883.10.20.22.2.14)

37. **MAY** contain zero or one [0..1] `immunizationsSectionEntriesOptional`

    a. Contains exactly one [1..1] *Consol Immunizations Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.2)

38. **MAY** contain zero or one [0..1] `medicalEquipmentSection`

    a. Contains exactly one [1..1] *Consol Medical Equipment Section* (templateId: 2.16.840.1.113883.10.20.22.2.23)

39. **MAY** contain zero or one [0..1] `planOfCareSection`

    a. Contains exactly one [1..1] *Consol Plan Of Care Section* (templateId: 2.16.840.1.113883.10.20.22.2.10)

40. **MAY** contain zero or one [0..1] `socialHistorySection`

    a. Contains exactly one [1..1] *Consol Social History Section* (templateId: 2.16.840.1.113883.10.20.22.2.17)

41. **MAY** contain zero or one [0..1] `vitalSignsSectionEntriesOptional`

    a. Contains exactly one [1..1] *Consol Vital Signs Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.4)

42. **MAY** contain zero or one [0..1] `chiefComplaintSection`

    a. Contains exactly one [1..1] *Consol Chief Complaint Section* (templateId: 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1)

43. **MAY** contain zero or one [0..1] `chiefComplaintAndReasonForVisitSection`

   a. Contains exactly one [1..1] *Consol Chief Complaint And Reason For Visit Section* (templateId: 2.16.840.1.113883.10.20.22.2.13)
44. **MAY** contain zero or one [0..1] `generalStatusSection`
   a. Contains exactly one [1..1] *Consol General Status Section* (templateId: 2.16.840.1.113883.10.20.2.5)
45. **MAY** contain zero or one [0..1] `historyOfPastIllnessSection`
   a. Contains exactly one [1..1] *Consol History Of Past Illness Section* (templateId: 2.16.840.1.113883.10.20.22.2.20)
46. **MAY** contain zero or one [0..1] `payersSection`
   a. Contains exactly one [1..1] *Consol Payers Section* (templateId: 2.16.840.1.113883.10.20.22.2.18)
47. **SHALL** satisfy: The US Realm Clinical Document Address datatype flavor is used by US Realm Clinical Document Header for the patient or any other person or organization mentioned within it.
48. **SHALL** satisfy: The US Realm Clinical Document Date and Time datatype flavor records date and time information. If no time zone offset is provided, you can make no assumption about time, unless you have made a local exchange agreement. This data type uses the same rules as US Realm Date and Time (DTM.US.FIELDED), but is used with the effectiveTime element.
49. **SHALL** satisfy: The US Realm Patient Name datatype flavor is a set of reusable constraints that can be used for the patient or any other person. It requires a first (given) and last (family) name. If a patient or person has only one name part (e.g., patient with first name only) place the name part in the field required by the organization. Use the appropriate nullFlavor, "Not Applicable" (NA), in the other field.

Consultation Request example

Consultation Summary

[ClinicalDocument: templateId 2.16.840.1.113883.3.1275.1.1.3.1]

1. **SHALL** conform to *Consol General Header Constraints* template (templateId: 2.16.840.1.113883.10.20.22.1.1)
2. **SHALL** contain exactly one [1..1] `realmCode/@code`="US" (CONF:5249)
3. **SHALL** contain exactly one [1..1] `typeId` (CONF:5361)
4. **SHALL** contain exactly one [1..1] `id` (CONF:5363)
5. **SHALL** contain exactly one [1..1] `code` (CONF:5253)
6. **SHALL** contain exactly one [1..1] `title` (CONF:5254)
7. **SHALL** contain exactly one [1..1] `effectiveTime` (CONF:5256)
8. **SHALL** contain exactly one [1..1] `confidentialityCode`, which **SHALL** be selected from ValueSet 2.16.840.1.113883.1.11.16926 *BasicConfidentialityKind* **STATIC** (CONF:5259)
9. **SHALL** contain exactly one [1..1] `languageCode`, which **SHALL** be selected from ValueSet 2.16.840.1.113883.1.11.11526 *Language* **DYNAMIC** (CONF:5372)
10. **MAY** contain zero or one [0..1] `setId` (CONF:5261)
11. **MAY** contain zero or one [0..1] `versionNumber` (CONF:5264)
12. Contains exactly one [1..1] `component`, where its type is *Component2*
13. **SHALL** contain at least one [1..*] `recordTarget` (CONF:5266)

   The recordTarget records the patient whose health information is described by the clinical document; it must contain at least one patientRole element.
   a. Such recordTargets **SHALL** contain exactly one [1..1] `patientRole` (CONF:5268)
      a. This patientRole **SHALL** contain at least one [1..*] `addr` (CONF:5271)
      b. This patientRole **SHALL** contain at least one [1..*] `id` (CONF:5268)
      c. This patientRole **SHALL** contain at least one [1..*] `telecom` (CONF:5280)
      d. This patientRole **SHALL** contain exactly one [1..1] `patient` (CONF:5283)

a. This patient **SHALL** contain exactly one [1..1] **administrativeGenderCode**, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.1` *Administrative Gender (HL7 V3)* **DYNAMIC** (CONF:6394)

b. This patient **SHALL** contain exactly one [1..1] **birthTime**

c. This patient **MAY** contain zero or one [0..1] **ethnicGroupCode**

d. This patient **SHOULD** contain zero or one [0..1] **maritalStatusCode**, which **SHOULD** be selected from ValueSet `2.16.840.1.113883.1.11.12212` *Marital Status* **STATIC** 1

e. This patient **SHALL** contain exactly one [1..1] **name** (CONF:5284)

f. This patient **MAY** contain zero or one [0..1] **raceCode**, which **MAY** be selected from ValueSet `2.16.840.1.113883.1.11.14914` *Race* **STATIC** 1

g. This patient **MAY** contain zero or one [0..1] **religiousAffiliationCode**, which **MAY** be selected from ValueSet `2.16.840.1.113883.1.11.19185` *Religious Affiliation* **STATIC** 1

h. This patient **MAY** contain zero or more [0..*] **guardian** (CONF:5325)

   a. Such guardians **SHOULD** contain zero or more [0..*] **addr**

   b. Such guardians **SHOULD** contain zero or one [0..1] **code**, which **SHOULD** be selected from ValueSet `2.16.840.1.113883.1.11.19563` Personal Relationship Role Type **STATIC** 1

   c. Such guardians **MAY** contain zero or more [0..*] **telecom**

   d. Such guardians **SHALL** contain zero or one [0..1] **guardianPerson** (CONF:5385)

      a. This guardianPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)

i. This patient **MAY** contain zero or one [0..1] **birthplace** (CONF:5395)

   a. This birthplace **SHALL** contain zero or one [0..1] **place** (CONF:5396)

      a. This place **SHALL** contain zero or one [0..1] **addr** (CONF:5397)

j. This patient **SHOULD** contain zero or one [0..1] **languageCommunication** (CONF:5406)

   a. This languageCommunication **SHALL** contain exactly one [1..1] **languageCode**, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.11526` *Language* **DYNAMIC** (CONF:5407)

   b. This languageCommunication **MAY** contain zero or one [0..1] **preferenceInd** (CONF:5414)

   c. This languageCommunication **SHALL** contain zero or one [0..1] **proficiencyLevelCode**, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.12199` *LanguageAbilityProficiency* **STATIC** (CONF:9965)

   d. This languageCommunication **SHALL** contain zero or one [0..1] **modeCode**, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.12249` *LanguageAbilityMode* **STATIC** 1 (CONF:5409)

k. This patient **SHALL** satisfy: BirthTime precise to year

l. This patient **SHOULD** satisfy: BirthTime precise to day

e. This patientRole Contains zero or one [0..1] **providerOrganization**

   a. This providerOrganization **SHALL** contain at least one [1..*] **addr** (CONF:5422)

   b. This providerOrganization **SHALL** contain at least one [1..*] **id** (CONF:5417)

   c. This providerOrganization **SHALL** contain at least one [1..*] **name** (CONF:5419)

   d. This providerOrganization **SHALL** contain at least one [1..*] **telecom** (CONF:5420)

   e. This providerOrganization The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996) (CONF:9996)

- The recordTarget records the patient whose health information is described by the clinical document; it must contain at least one patientRole element.

14. **MAY** contain exactly one [1..1] **componentOf** (CONF:9955)

   a. This componentOf **SHALL** contain exactly one [1..1] **encompassingEncounter** (CONF:9956)

    a. This encompassingEncounter **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:9958)

    b. This encompassingEncounter **SHALL** contain at least one [1..*] **id** (CONF:9959)

15. **SHALL** contain at least one [1..*] **author** (CONF:5444)

    a. Such authors Contains exactly one [1..1] **time**

    b. Such authors **SHALL** contain exactly one [1..1] **assignedAuthor** (CONF:5448)

        a. This assignedAuthor **SHALL** contain at least one [1..*] **addr** (CONF:5452)

        b. This assignedAuthor **SHOULD** contain zero or one [0..1] **code** (CONF:9942)

        c. This assignedAuthor **SHALL** contain at least one [1..*] **id** (CONF:5449)

        d. This assignedAuthor **SHALL** contain at least one [1..*] **telecom** (CONF:5428)

        e. This assignedAuthor Contains zero or one [0..1] **assignedPerson**

            a. This assignedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)

        f. This assignedAuthor Contains zero or one [0..1] **assignedAuthoringDevice**

            a. This assignedAuthoringDevice **SHALL** contain exactly one [1..1] **manufacturerModelName** (CONF:9936)

            b. This assignedAuthoringDevice **SHALL** contain exactly one [1..1] **softwareName** (CONF:9999)

        g. This assignedAuthor This assignedAuthor **SHALL** contain exactly one [1..1] assignedPerson or assignedAuthoringDevice

        h. This assignedAuthor The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)

16. **MAY** contain zero or one [0..1] **dataEnterer** (CONF:5441)

    a. This dataEnterer **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:5442)

        a. This assignedEntity **SHALL** contain at least one [1..*] **addr** (CONF:5460)

        b. This assignedEntity **SHOULD** contain zero or one [0..1] **code** (CodeSystem: 2.16.840.1.113883.6.101 NUCCHealthCareProviderTaxonomy) (CONF:9944)

        c. This assignedEntity **SHALL** contain at least one [1..*] **id** (CONF:5443)

        d. This assignedEntity **SHALL** contain at least one [1..*] **telecom** (CONF:5466)

        e. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson** (CONF:5469)

            a. This assignedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)

        f. This assignedEntity id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9943)

17. **SHALL** contain exactly one [1..1] **custodian** (iv., CONF:5519)

    a. This custodian **SHALL** contain exactly one [1..1] **assignedCustodian** (CONF:5520)

        a. This assignedCustodian **SHALL** contain zero or one [0..1] **representedCustodianOrganization** (CONF:5521)

            a. This representedCustodianOrganization **SHALL** contain at least one [1..*] **addr** (CONF:5559)

            b. This representedCustodianOrganization **SHALL** contain at least one [1..*] **id** (CONF:5522)

            c. This representedCustodianOrganization **SHALL** contain exactly one [1..1] **name** (CONF:5524)

            d. This representedCustodianOrganization **SHALL** contain exactly one [1..1] **telecom** (CONF:5525)

            e. This representedCustodianOrganization The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)

18. **MAY** contain zero or more [0..*] **informationRecipient** (CONF:5565)

    a. Such informationRecipients **SHALL** contain zero or one [0..1] **intendedRecipient** (CONF:5566)

        a. This intendedRecipient **MAY** contain zero or one [0..1] **informationRecipient** (CONF:5568)

            a. This informationRecipient **SHALL** contain at least one [1..*] **name** (CONF:5470)

        b. This intendedRecipient **MAY** contain zero or one [0..1] **receivedOrganization** (CONF:5577)

      a. This receivedOrganization **SHALL** contain zero or more [0..*] **name** (CONF:5578)

19. **SHOULD** contain zero or one [0..1] **legalAuthenticator** (CONF:5579)

    a. This legalAuthenticator **SHALL** contain exactly one [1..1] **time** (CONF:5580)

    b. This legalAuthenticator **SHALL** contain exactly one [1..1] **signatureCode/@code**="S" (CodeSystem: 2.16.840.1.113883.5.89 Participationsignature) (CONF:5583, CONF:5584)

    c. This legalAuthenticator Contains zero or one [0..1] **assignedEntity**

        a. This assignedEntity **SHALL** contain at least one [1..*] **addr**

        b. This assignedEntity **SHOULD** contain zero or one [0..1] **code** (CodeSystem: 2.16.840.1.113883.6.101 NUCCHealthCareProviderTaxonomy)

        c. This assignedEntity **SHALL** contain at least one [1..*] **id**

        d. This assignedEntity **SHALL** contain at least one [1..*] **telecom**

        e. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson** (CONF:5597)

            a. This assignedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)

        f. This assignedEntity The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)

20. **MAY** contain zero or more [0..*] **authenticator** (CONF:5607)

    a. Such authenticators **SHALL** contain exactly one [1..1] **time** (CONF:5608)

    b. Such authenticators **SHALL** contain exactly one [1..1] **signatureCode/@code**="s" (CodeSystem: 2.16.840.1.113883.5.89 Participationsignature)

    c. Such authenticators **SHALL** contain zero or one [0..1] **assignedEntity** (CONF:5612)

        a. This assignedEntity **SHALL** contain at least one [1..*] **addr** (CONF:5616)

        b. This assignedEntity **MAY** contain zero or one [0..1] **code** (CONF:9951)

        c. This assignedEntity **SHALL** contain at least one [1..*] **id** (CONF:5613)

        d. This assignedEntity **SHALL** contain at least one [1..*] **telecom** (CONF:5622)

        e. This assignedEntity Contains zero or one [0..1] **assignedPerson**

            a. This assignedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)

        f. This assignedEntity The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)

21. **MAY** contain zero or one [0..1] **informant** (CONF:8001)

    a. This informant Contains zero or one [0..1] **assignedEntity**

        a. This assignedEntity **SHOULD** contain zero or more [0..*] **addr** (CONF:8220)

        b. This assignedEntity **SHALL** contain zero or one [0..1] **code** (CodeSystem: 2.16.840.1.113883.6.101 NUCCHealthCareProviderTaxonomy)

        c. This assignedEntity **SHOULD** contain at least one [1..*] **id** (a., CONF:9945)

        d. This assignedEntity **SHALL** contain zero or one [0..1] **assignedPerson** (CONF:8221)

            a. This assignedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)

        e. This assignedEntity The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)

    b. This informant Contains zero or one [0..1] **relatedEntity**

        a. This relatedEntity **SHOULD** contain zero or more [0..*] **addr** (CONF:8220)

        b. This relatedEntity **SHALL** contain zero or one [0..1] **relatedPerson** (CONF:8221)

            a. This relatedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)

    c. This informant **SHALL** satisfy: contain exactly one [1..1] assignedEntity OR exactly one [1..1] relatedEntity (CONF:8002)

22. **MAY** contain zero or more [0..*] **participant** (CONF:10003)

    a. Such participants **MAY** contain zero or one [0..1] **time** (CONF:10004)

    b. Such participants Such participants, if present, **SHALL** have an associatedPerson or scopingOrganization element under participant/associatedEntity.

    c. Such participants Unless otherwise specified by the document specific header constraints, when participant/@typeCode is IND, associatedEntity/@classCode **SHALL** be selected from ValueSet INDRoleclassCodes 2.16.840.1.113883.11.20.9.33 STATIC 2011-09-30.

23. **MAY** contain zero or more [0..*] **inFulfillmentOf** (CONF:9952)

    a. Such inFulfillmentOfs **SHALL** contain exactly one [1..1] **order** (CONF:9953)

        a. This order **SHALL** contain at least one [1..*] **id** (CONF:9954)

24. **SHALL** contain exactly one [1..1] **allergiesSectionEntriesOptional**

    a. Contains exactly one [1..1] *Consol Allergies Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.6)

25. **SHALL** contain exactly one [1..1] **medicationsSectionEntriesOptional**

    a. Contains exactly one [1..1] *Consol Medications Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.1)

26. **SHALL** contain exactly one [1..1] **problemSectionEntriesOptional**

    a. Contains exactly one [1..1] *Consol Problem Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.5)

27. **SHALL** contain exactly one [1..1] **resultsSectionEntriesOptional**

    a. Contains exactly one [1..1] *Consol Results Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.3)

28. **MAY** contain zero or one [0..1] **advanceDirectivesSectionEntriesOptional**

    a. Contains exactly one [1..1] *Consol Advance Directives Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.21)

29. **MAY** contain zero or one [0..1] **encountersSectionEntriesOptional**

    a. Contains exactly one [1..1] *Consol Encounters Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.22)

30. **MAY** contain zero or one [0..1] **familyHistorySection**

    a. Contains exactly one [1..1] *Consol Family History Section* (templateId: 2.16.840.1.113883.10.20.22.2.15)

31. **MAY** contain zero or one [0..1] **functionalStatusSection**

    a. Contains exactly one [1..1] *Consol Functional Status Section* (templateId: 2.16.840.1.113883.10.20.22.2.14)

32. **MAY** contain zero or one [0..1] **immunizationsSectionEntriesOptional**

    a. Contains exactly one [1..1] *Consol Immunizations Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.2)

33. **SHALL** contain zero or one [0..1] **proceduresSectionEntriesOptional**

    a. Contains exactly one [1..1] *Consol Procedures Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.7)

34. **MAY** contain zero or one [0..1] **medicalEquipmentSection**

    a. Contains exactly one [1..1] *Consol Medical Equipment Section* (templateId: 2.16.840.1.113883.10.20.22.2.23)

35. **MAY** contain zero or one [0..1] **payersSection**

    a. Contains exactly one [1..1] *Consol Payers Section* (templateId: 2.16.840.1.113883.10.20.22.2.18)

36. **MAY** contain zero or one [0..1] **planOfCareSection**

    a. Contains exactly one [1..1] *Consol Plan Of Care Section* (templateId: 2.16.840.1.113883.10.20.22.2.10)

37. **MAY** contain zero or one [0..1] **socialHistorySection**

    a. Contains exactly one [1..1] *Consol Social History Section* (templateId: `2.16.840.1.113883.10.20.22.2.17`)

38. **MAY** contain zero or one [0..1] **`vitalSignsSectionEntriesOptional`**

    a. Contains exactly one [1..1] *Consol Vital Signs Section Entries Optional* (templateId: `2.16.840.1.113883.10.20.22.2.4`)

39. **SHALL** satisfy: The US Realm Clinical Document Address datatype flavor is used by US Realm Clinical Document Header for the patient or any other person or organization mentioned within it.

40. **SHALL** satisfy: The US Realm Clinical Document Date and Time datatype flavor records date and time information. If no time zone offset is provided, you can make no assumption about time, unless you have made a local exchange agreement. This data type uses the same rules as US Realm Date and Time (DTM.US.FIELDED), but is used with the effectiveTime element.

41. **SHALL** satisfy: The US Realm Patient Name datatype flavor is a set of reusable constraints that can be used for the patient or any other person. It requires a first (given) and last (family) name. If a patient or person has only one name part (e.g., patient with first name only) place the name part in the field required by the organization. Use the appropriate nullFlavor, "Not Applicable" (NA), in the other field.

Consultation Summary example

Discharge Instructions

[ClinicalDocument: templateId `2.16.840.1.113883.3.1275.1.1.2.1`]

1. **SHALL** conform to *Consol General Header Constraints* template (templateId: `2.16.840.1.113883.10.20.22.1.1`)
2. **SHALL** contain exactly one [1..1] **`realmCode/@code`**=`"US"` (CONF:5249)
3. **SHALL** contain exactly one [1..1] **`typeId`** (CONF:5361)
4. **SHALL** contain exactly one [1..1] **`id`** (CONF:5363)
5. **SHALL** contain exactly one [1..1] **`code`** (CONF:5253)
6. **SHALL** contain exactly one [1..1] **`title`** (CONF:5254)
7. **SHALL** contain exactly one [1..1] **`effectiveTime`** (CONF:5256)
8. **SHALL** contain exactly one [1..1] **`confidentialityCode`**, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.16926` *BasicConfidentialityKind* **STATIC** (CONF:5259)
9. **SHALL** contain exactly one [1..1] **`languageCode`**, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.11526` *Language* **DYNAMIC** (CONF:5372)
10. **MAY** contain zero or one [0..1] **`setId`** (CONF:5261)
11. **MAY** contain zero or one [0..1] **`versionNumber`** (CONF:5264)
12. Contains exactly one [1..1] **`component`**, where its type is *Component2*
13. **SHALL** contain at least one [1..*] **`recordTarget`** (CONF:5266)

The recordTarget records the patient whose health information is described by the clinical document; it must contain at least one patientRole element.

    a. Such recordTargets **SHALL** contain exactly one [1..1] **`patientRole`** (CONF:5268)

        a. This patientRole **SHALL** contain at least one [1..*] **`addr`** (CONF:5271)

        b. This patientRole **SHALL** contain at least one [1..*] **`id`** (CONF:5268)

        c. This patientRole **SHALL** contain at least one [1..*] **`telecom`** (CONF:5280)

        d. This patientRole **SHALL** contain exactly one [1..1] **`patient`** (CONF:5283)

            a. This patient **SHALL** contain exactly one [1..1] **`administrativeGenderCode`**, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.1` *Administrative Gender (HL7 V3)* **DYNAMIC** (CONF:6394)

            b. This patient **SHALL** contain exactly one [1..1] **`birthTime`**

            c. This patient **MAY** contain zero or one [0..1] **`ethnicGroupCode`**

      d. This patient **SHOULD** contain zero or one [0..1] `maritalStatusCode`, which **SHOULD** be selected from ValueSet `2.16.840.1.113883.1.11.12212` *Marital Status* **STATIC** 1

      e. This patient **SHALL** contain exactly one [1..1] `name` (CONF:5284)

      f. This patient **MAY** contain zero or one [0..1] `raceCode`, which **MAY** be selected from ValueSet `2.16.840.1.113883.1.11.14914` *Race* **STATIC** 1

      g. This patient **MAY** contain zero or one [0..1] `religiousAffiliationCode`, which **MAY** be selected from ValueSet `2.16.840.1.113883.1.11.19185` *Religious Affiliation* **STATIC** 1

      h. This patient **MAY** contain zero or more [0..*] `guardian` (CONF:5325)

          a. Such guardians **SHOULD** contain zero or more [0..*] `addr`

          b. Such guardians **SHOULD** contain zero or one [0..1] `code`, which **SHOULD** be selected from ValueSet `2.16.840.1.113883.1.11.19563` Personal Relationship Role Type **STATIC** 1

          c. Such guardians **MAY** contain zero or more [0..*] `telecom`

          d. Such guardians **SHALL** contain zero or one [0..1] `guardianPerson` (CONF:5385)

              a. This guardianPerson **SHALL** contain at least one [1..*] `name` (CONF:5470)

      i. This patient **MAY** contain zero or one [0..1] `birthplace` (CONF:5395)

          a. This birthplace **SHALL** contain zero or one [0..1] `place` (CONF:5396)

              a. This place **SHALL** contain zero or one [0..1] `addr` (CONF:5397)

      j. This patient **SHOULD** contain zero or one [0..1] `languageCommunication` (CONF:5406)

          a. This languageCommunication **SHALL** contain exactly one [1..1] `languageCode`, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.11526` *Language* **DYNAMIC** (CONF:5407)

          b. This languageCommunication **MAY** contain zero or one [0..1] `preferenceInd` (CONF:5414)

          c. This languageCommunication **SHALL** contain zero or one [0..1] `proficiencyLevelCode`, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.12199` *LanguageAbilityProficiency* **STATIC** (CONF:9965)

          d. This languageCommunication **SHALL** contain zero or one [0..1] `modeCode`, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.12249` *LanguageAbilityMode* **STATIC** 1 (CONF:5409)

      k. This patient **SHALL** satisfy: BirthTime precise to year

      l. This patient **SHOULD** satisfy: BirthTime precise to day

   e. This patientRole Contains zero or one [0..1] `providerOrganization`

      a. This providerOrganization **SHALL** contain at least one [1..*] `addr` (CONF:5422)

      b. This providerOrganization **SHALL** contain at least one [1..*] `id` (CONF:5417)

      c. This providerOrganization **SHALL** contain at least one [1..*] `name` (CONF:5419)

      d. This providerOrganization **SHALL** contain at least one [1..*] `telecom` (CONF:5420)

      e. This providerOrganization The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996) (CONF:9996)

- The recordTarget records the patient whose health information is described by the clinical document; it must contain at least one patientRole element.

14. **MAY** contain exactly one [1..1] `componentOf` (CONF:9955)

   a. This componentOf **SHALL** contain exactly one [1..1] `encompassingEncounter` (CONF:9956)

      a. This encompassingEncounter **SHALL** contain exactly one [1..1] `effectiveTime` (CONF:9958)

      b. This encompassingEncounter **SHALL** contain at least one [1..*] `id` (CONF:9959)

15. **SHALL** contain at least one [1..*] `author` (CONF:5444)

   a. Such authors Contains exactly one [1..1] `time`

  b. Such authors **SHALL** contain exactly one [1..1] `assignedAuthor` (CONF:5448)

   a. This assignedAuthor **SHALL** contain at least one [1..*] `addr` (CONF:5452)

   b. This assignedAuthor **SHOULD** contain zero or one [0..1] `code` (CONF:9942)

   c. This assignedAuthor **SHALL** contain at least one [1..*] `id` (CONF:5449)

   d. This assignedAuthor **SHALL** contain at least one [1..*] `telecom` (CONF:5428)

   e. This assignedAuthor Contains zero or one [0..1] `assignedPerson`

    a. This assignedPerson **SHALL** contain at least one [1..*] `name` (CONF:5470)

   f. This assignedAuthor Contains zero or one [0..1] `assignedAuthoringDevice`

    a. This assignedAuthoringDevice **SHALL** contain exactly one [1..1] `manufacturerModelName` (CONF:9936)

    b. This assignedAuthoringDevice **SHALL** contain exactly one [1..1] `softwareName` (CONF:9999)

   g. This assignedAuthor This assignedAuthor **SHALL** contain exactly one [1..1] assignedPerson or assignedAuthoringDevice

   h. This assignedAuthor The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)

16. **MAY** contain zero or one [0..1] `dataEnterer` (CONF:5441)

  a. This dataEnterer **SHALL** contain exactly one [1..1] `assignedEntity` (CONF:5442)

   a. This assignedEntity **SHALL** contain at least one [1..*] `addr` (CONF:5460)

   b. This assignedEntity **SHOULD** contain zero or one [0..1] `code` (CodeSystem: `2.16.840.1.113883.6.101` NUCCHealthCareProviderTaxonomy) (CONF:9944)

   c. This assignedEntity **SHALL** contain at least one [1..*] `id` (CONF:5443)

   d. This assignedEntity **SHALL** contain at least one [1..*] `telecom` (CONF:5466)

   e. This assignedEntity **SHALL** contain exactly one [1..1] `assignedPerson` (CONF:5469)

    a. This assignedPerson **SHALL** contain at least one [1..*] `name` (CONF:5470)

   f. This assignedEntity id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9943)

17. **SHALL** contain exactly one [1..1] `custodian` (iv., CONF:5519)

  a. This custodian **SHALL** contain exactly one [1..1] `assignedCustodian` (CONF:5520)

   a. This assignedCustodian **SHALL** contain zero or one [0..1] `representedCustodianOrganization` (CONF:5521)

    a. This representedCustodianOrganization **SHALL** contain at least one [1..*] `addr` (CONF:5559)

    b. This representedCustodianOrganization **SHALL** contain at least one [1..*] `id` (CONF:5522)

    c. This representedCustodianOrganization **SHALL** contain exactly one [1..1] `name` (CONF:5524)

    d. This representedCustodianOrganization **SHALL** contain exactly one [1..1] `telecom` (CONF:5525)

    e. This representedCustodianOrganization The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)

18. **MAY** contain zero or more [0..*] `informationRecipient` (CONF:5565)

  a. Such informationRecipients **SHALL** contain zero or one [0..1] `intendedRecipient` (CONF:5566)

   a. This intendedRecipient **MAY** contain zero or one [0..1] `informationRecipient` (CONF:5568)

    a. This informationRecipient **SHALL** contain at least one [1..*] `name` (CONF:5470)

   b. This intendedRecipient **MAY** contain zero or one [0..1] `receivedOrganization` (CONF:5577)

    a. This receivedOrganization **SHALL** contain zero or more [0..*] `name` (CONF:5578)

19. **SHOULD** contain zero or one [0..1] `legalAuthenticator` (CONF:5579)

  a. This legalAuthenticator **SHALL** contain exactly one [1..1] `time` (CONF:5580)

    b. This legalAuthenticator **SHALL** contain exactly one [1..1] **signatureCode/@code**="S" (CodeSystem: 2.16.840.1.113883.5.89 Participationsignature) (CONF:5583, CONF:5584)

    c. This legalAuthenticator Contains zero or one [0..1] **assignedEntity**

        a. This assignedEntity **SHALL** contain at least one [1..*] **addr**

        b. This assignedEntity **SHOULD** contain zero or one [0..1] **code** (CodeSystem: 2.16.840.1.113883.6.101 NUCCHealthCareProviderTaxonomy)

        c. This assignedEntity **SHALL** contain at least one [1..*] **id**

        d. This assignedEntity **SHALL** contain at least one [1..*] **telecom**

        e. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson** (CONF:5597)

            a. This assignedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)

        f. This assignedEntity The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)

20. **MAY** contain zero or more [0..*] **authenticator** (CONF:5607)

    a. Such authenticators **SHALL** contain exactly one [1..1] **time** (CONF:5608)

    b. Such authenticators **SHALL** contain exactly one [1..1] **signatureCode/@code**="s" (CodeSystem: 2.16.840.1.113883.5.89 Participationsignature)

    c. Such authenticators **SHALL** contain zero or one [0..1] **assignedEntity** (CONF:5612)

        a. This assignedEntity **SHALL** contain at least one [1..*] **addr** (CONF:5616)

        b. This assignedEntity **MAY** contain zero or one [0..1] **code** (CONF:9951)

        c. This assignedEntity **SHALL** contain at least one [1..*] **id** (CONF:5613)

        d. This assignedEntity **SHALL** contain at least one [1..*] **telecom** (CONF:5622)

        e. This assignedEntity Contains zero or one [0..1] **assignedPerson**

            a. This assignedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)

        f. This assignedEntity The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)

21. **MAY** contain zero or one [0..1] **informant** (CONF:8001)

    a. This informant Contains zero or one [0..1] **assignedEntity**

        a. This assignedEntity **SHOULD** contain zero or more [0..*] **addr** (CONF:8220)

        b. This assignedEntity **SHALL** contain zero or one [0..1] **code** (CodeSystem: 2.16.840.1.113883.6.101 NUCCHealthCareProviderTaxonomy)

        c. This assignedEntity **SHOULD** contain at least one [1..*] **id** (a., CONF:9945)

        d. This assignedEntity **SHALL** contain zero or one [0..1] **assignedPerson** (CONF:8221)

            a. This assignedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)

        e. This assignedEntity The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)

    b. This informant Contains zero or one [0..1] **relatedEntity**

        a. This relatedEntity **SHOULD** contain zero or more [0..*] **addr** (CONF:8220)

        b. This relatedEntity **SHALL** contain zero or one [0..1] **relatedPerson** (CONF:8221)

            a. This relatedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)

    c. This informant **SHALL** satisfy: contain exactly one [1..1] assignedEntity OR exactly one [1..1] relatedEntity (CONF:8002)

22. **MAY** contain zero or more [0..*] **participant** (CONF:10003)

    a. Such participants **MAY** contain zero or one [0..1] **time** (CONF:10004)

    b. Such participants Such participants, if present, **SHALL** have an associatedPerson or scopingOrganization element under participant/associatedEntity.

    c. Such participants Unless otherwise specified by the document specific header constraints, when participant/ @typeCode is IND, associatedEntity/@classCode **SHALL** be selected from ValueSet INDRoleclassCodes 2.16.840.1.113883.11.20.9.33 STATIC 2011-09-30.

23. **MAY** contain zero or more [0..*] `inFulfillmentOf` (CONF:9952)
    a. Such inFulfillmentOfs **SHALL** contain exactly one [1..1] `order` (CONF:9953)
        a. This order **SHALL** contain at least one [1..*] `id` (CONF:9954)

24. **SHALL** contain exactly one [1..1] `planOfCareSection`
    a. Contains exactly one [1..1] *Consol Plan Of Care Section* (templateId: `2.16.840.1.113883.10.20.22.2.10`)

25. **SHALL** contain exactly one [1..1] `allergiesSectionEntriesOptional`
    a. Contains exactly one [1..1] *Consol Allergies Section Entries Optional* (templateId: `2.16.840.1.113883.10.20.22.2.6`)

26. **SHALL** contain exactly one [1..1] `problemSectionEntriesOptional`
    a. Contains exactly one [1..1] *Consol Problem Section Entries Optional* (templateId: `2.16.840.1.113883.10.20.22.2.5`)

27. **SHALL** contain exactly one [1..1] `hospitalDischargeMedicationsSectionEntriesOptional`
    a. Contains exactly one [1..1] *Consol Hospital Discharge Medications Section Entries Optional* (templateId: `2.16.840.1.113883.10.20.22.2.11`)

28. **SHALL** contain exactly one [1..1] `advanceDirectivesSectionEntriesOptional`
    a. Contains exactly one [1..1] *Consol Advance Directives Section Entries Optional* (templateId: `2.16.840.1.113883.10.20.22.2.21`)

29. **SHALL** contain exactly one [1..1] `immunizationsSectionEntriesOptional`
    a. Contains exactly one [1..1] *Consol Immunizations Section Entries Optional* (templateId: `2.16.840.1.113883.10.20.22.2.2`)

30. **SHALL** contain exactly one [1..1] `medicalEquipmentSection`
    a. Contains exactly one [1..1] *Consol Medical Equipment Section* (templateId: `2.16.840.1.113883.10.20.22.2.23`)

31. **SHALL** contain exactly one [1..1] `advanceDirectivesSectionEntriesOptional2`
    a. Contains exactly one [1..1] *Consol Advance Directives Section Entries Optional* (templateId: `2.16.840.1.113883.10.20.22.2.21`)

32. **SHALL** satisfy: The US Realm Clinical Document Address datatype flavor is used by US Realm Clinical Document Header for the patient or any other person or organization mentioned within it.

33. **SHALL** satisfy: The US Realm Clinical Document Date and Time datatype flavor records date and time information. If no time zone offset is provided, you can make no assumption about time, unless you have made a local exchange agreement. This data type uses the same rules as US Realm Date and Time (DTM.US.FIELDED), but is used with the effectiveTime element.

34. **SHALL** satisfy: The US Realm Patient Name datatype flavor is a set of reusable constraints that can be used for the patient or any other person. It requires a first (given) and last (family) name. If a patient or person has only one name part (e.g., patient with first name only) place the name part in the field required by the organization. Use the appropriate nullFlavor, "Not Applicable" (NA), in the other field.

Discharge Instructions example

Discharge Summary

[ClinicalDocument: templateId `2.16.840.1.113883.3.1275.1.1.1.1`]

1. **SHALL** conform to *Consol General Header Constraints* template (templateId: `2.16.840.1.113883.10.20.22.1.1`)

2. **SHALL** contain exactly one [1..1] **realmCode/@code**=`"US"` (CONF:5249)
3. **SHALL** contain exactly one [1..1] **typeId** (CONF:5361)
4. **SHALL** contain exactly one [1..1] **id** (CONF:5363)
5. **SHALL** contain exactly one [1..1] **code** (CONF:5253)
6. **SHALL** contain exactly one [1..1] **title** (CONF:5254)
7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:5256)
8. **SHALL** contain exactly one [1..1] **confidentialityCode**, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.16926` *BasicConfidentialityKind* **STATIC** (CONF:5259)
9. **SHALL** contain exactly one [1..1] **languageCode**, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.11526` *Language* **DYNAMIC** (CONF:5372)
10. **MAY** contain zero or one [0..1] **setId** (CONF:5261)
11. **MAY** contain zero or one [0..1] **versionNumber** (CONF:5264)
12. Contains exactly one [1..1] **component**, where its type is *Component2*
13. **SHALL** contain at least one [1..*] **recordTarget** (CONF:5266)

   The recordTarget records the patient whose health information is described by the clinical document; it must contain at least one patientRole element.

   a. Such recordTargets **SHALL** contain exactly one [1..1] **patientRole** (CONF:5268)

      a. This patientRole **SHALL** contain at least one [1..*] **addr** (CONF:5271)
      b. This patientRole **SHALL** contain at least one [1..*] **id** (CONF:5268)
      c. This patientRole **SHALL** contain at least one [1..*] **telecom** (CONF:5280)
      d. This patientRole **SHALL** contain exactly one [1..1] **patient** (CONF:5283)

         a. This patient **SHALL** contain exactly one [1..1] **administrativeGenderCode**, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.1` *Administrative Gender (HL7 V3)* **DYNAMIC** (CONF:6394)
         b. This patient **SHALL** contain exactly one [1..1] **birthTime**
         c. This patient **MAY** contain zero or one [0..1] **ethnicGroupCode**
         d. This patient **SHOULD** contain zero or one [0..1] **maritalStatusCode**, which **SHOULD** be selected from ValueSet `2.16.840.1.113883.1.11.12212` *Marital Status* **STATIC** 1
         e. This patient **SHALL** contain exactly one [1..1] **name** (CONF:5284)
         f. This patient **MAY** contain zero or one [0..1] **raceCode**, which **MAY** be selected from ValueSet `2.16.840.1.113883.1.11.14914` *Race* **STATIC** 1
         g. This patient **MAY** contain zero or one [0..1] **religiousAffiliationCode**, which **MAY** be selected from ValueSet `2.16.840.1.113883.1.11.19185` *Religious Affiliation* **STATIC** 1
         h. This patient **MAY** contain zero or more [0..*] **guardian** (CONF:5325)

            a. Such guardians **SHOULD** contain zero or more [0..*] **addr**
            b. Such guardians **SHOULD** contain zero or one [0..1] **code**, which **SHOULD** be selected from ValueSet `2.16.840.1.113883.1.11.19563` Personal Relationship Role Type **STATIC** 1
            c. Such guardians **MAY** contain zero or more [0..*] **telecom**
            d. Such guardians **SHALL** contain zero or one [0..1] **guardianPerson** (CONF:5385)

               a. This guardianPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)
         i. This patient **MAY** contain zero or one [0..1] **birthplace** (CONF:5395)

            a. This birthplace **SHALL** contain zero or one [0..1] **place** (CONF:5396)

               a. This place **SHALL** contain zero or one [0..1] **addr** (CONF:5397)
         j. This patient **SHOULD** contain zero or one [0..1] **languageCommunication** (CONF:5406)

            a. This languageCommunication **SHALL** contain exactly one [1..1] **languageCode**, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.11526` *Language* **DYNAMIC** (CONF:5407)

      b. This languageCommunication **MAY** contain zero or one [0..1] `preferenceInd` (CONF:5414)

      c. This languageCommunication **SHALL** contain zero or one [0..1] `proficiencyLevelCode`, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.12199` *LanguageAbilityProficiency* **STATIC** (CONF:9965)

      d. This languageCommunication **SHALL** contain zero or one [0..1] `modeCode`, which **SHALL** be selected from ValueSet `2.16.840.1.113883.1.11.12249` *LanguageAbilityMode* **STATIC** 1 (CONF:5409)

    k. This patient **SHALL** satisfy: BirthTime precise to year

    l. This patient **SHOULD** satisfy: BirthTime precise to day

  e. This patientRole Contains zero or one [0..1] `providerOrganization`

      a. This providerOrganization **SHALL** contain at least one [1..*] `addr` (CONF:5422)

      b. This providerOrganization **SHALL** contain at least one [1..*] `id` (CONF:5417)

      c. This providerOrganization **SHALL** contain at least one [1..*] `name` (CONF:5419)

      d. This providerOrganization **SHALL** contain at least one [1..*] `telecom` (CONF:5420)

      e. This providerOrganization The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996) (CONF:9996)

- The recordTarget records the patient whose health information is described by the clinical document; it must contain at least one patientRole element.

14. **MAY** contain exactly one [1..1] `componentOf` (CONF:9955)

  a. This componentOf **SHALL** contain exactly one [1..1] `encompassingEncounter` (CONF:9956)

    a. This encompassingEncounter **SHALL** contain exactly one [1..1] `effectiveTime` (CONF:9958)

    b. This encompassingEncounter **SHALL** contain at least one [1..*] `id` (CONF:9959)

15. **SHALL** contain at least one [1..*] `author` (CONF:5444)

  a. Such authors Contains exactly one [1..1] `time`

  b. Such authors **SHALL** contain exactly one [1..1] `assignedAuthor` (CONF:5448)

    a. This assignedAuthor **SHALL** contain at least one [1..*] `addr` (CONF:5452)

    b. This assignedAuthor **SHOULD** contain zero or one [0..1] `code` (CONF:9942)

    c. This assignedAuthor **SHALL** contain at least one [1..*] `id` (CONF:5449)

    d. This assignedAuthor **SHALL** contain at least one [1..*] `telecom` (CONF:5428)

    e. This assignedAuthor Contains zero or one [0..1] `assignedPerson`

      a. This assignedPerson **SHALL** contain at least one [1..*] `name` (CONF:5470)

    f. This assignedAuthor Contains zero or one [0..1] `assignedAuthoringDevice`

      a. This assignedAuthoringDevice **SHALL** contain exactly one [1..1] `manufacturerModelName` (CONF:9936)

      b. This assignedAuthoringDevice **SHALL** contain exactly one [1..1] `softwareName` (CONF:9999)

    g. This assignedAuthor This assignedAuthor **SHALL** contain exactly one [1..1] assignedPerson or assignedAuthoringDevice

    h. This assignedAuthor The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)

16. **MAY** contain zero or one [0..1] `dataEnterer` (CONF:5441)

  a. This dataEnterer **SHALL** contain exactly one [1..1] `assignedEntity` (CONF:5442)

    a. This assignedEntity **SHALL** contain at least one [1..*] `addr` (CONF:5460)

    b. This assignedEntity **SHOULD** contain zero or one [0..1] `code` (CodeSystem: `2.16.840.1.113883.6.101 NUCCHealthCareProviderTaxonomy`) (CONF:9944)

    c. This assignedEntity **SHALL** contain at least one [1..*] `id` (CONF:5443)

    d. This assignedEntity **SHALL** contain at least one [1..*] `telecom` (CONF:5466)

    e. This assignedEntity **SHALL** contain exactly one [1..1] `assignedPerson` (CONF:5469)

       a. This assignedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)

       f. This assignedEntity id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9943)

17. **SHALL** contain exactly one [1..1] **custodian** (iv., CONF:5519)

    a. This custodian **SHALL** contain exactly one [1..1] **assignedCustodian** (CONF:5520)

       a. This assignedCustodian **SHALL** contain zero or one [0..1] **representedCustodianOrganization** (CONF:5521)

          a. This representedCustodianOrganization **SHALL** contain at least one [1..*] **addr** (CONF:5559)

          b. This representedCustodianOrganization **SHALL** contain at least one [1..*] **id** (CONF:5522)

          c. This representedCustodianOrganization **SHALL** contain exactly one [1..1] **name** (CONF:5524)

          d. This representedCustodianOrganization **SHALL** contain exactly one [1..1] **telecom** (CONF:5525)

          e. This representedCustodianOrganization The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)

18. **MAY** contain zero or more [0..*] **informationRecipient** (CONF:5565)

    a. Such informationRecipients **SHALL** contain zero or one [0..1] **intendedRecipient** (CONF:5566)

       a. This intendedRecipient **MAY** contain zero or one [0..1] **informationRecipient** (CONF:5568)

          a. This informationRecipient **SHALL** contain at least one [1..*] **name** (CONF:5470)

       b. This intendedRecipient **MAY** contain zero or one [0..1] **receivedOrganization** (CONF:5577)

          a. This receivedOrganization **SHALL** contain zero or more [0..*] **name** (CONF:5578)

19. **SHOULD** contain zero or one [0..1] **legalAuthenticator** (CONF:5579)

    a. This legalAuthenticator **SHALL** contain exactly one [1..1] **time** (CONF:5580)

    b. This legalAuthenticator **SHALL** contain exactly one [1..1] **signatureCode/@code**="S" (CodeSystem: 2.16.840.1.113883.5.89 Participationsignature) (CONF:5583, CONF:5584)

    c. This legalAuthenticator Contains zero or one [0..1] **assignedEntity**

       a. This assignedEntity **SHALL** contain at least one [1..*] **addr**

       b. This assignedEntity **SHOULD** contain zero or one [0..1] **code** (CodeSystem: 2.16.840.1.113883.6.101 NUCCHealthCareProviderTaxonomy)

       c. This assignedEntity **SHALL** contain at least one [1..*] **id**

       d. This assignedEntity **SHALL** contain at least one [1..*] **telecom**

       e. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson** (CONF:5597)

          a. This assignedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)

       f. This assignedEntity The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)

20. **MAY** contain zero or more [0..*] **authenticator** (CONF:5607)

    a. Such authenticators **SHALL** contain exactly one [1..1] **time** (CONF:5608)

    b. Such authenticators **SHALL** contain exactly one [1..1] **signatureCode/@code**="s" (CodeSystem: 2.16.840.1.113883.5.89 Participationsignature)

    c. Such authenticators **SHALL** contain zero or one [0..1] **assignedEntity** (CONF:5612)

       a. This assignedEntity **SHALL** contain at least one [1..*] **addr** (CONF:5616)

       b. This assignedEntity **MAY** contain zero or one [0..1] **code** (CONF:9951)

       c. This assignedEntity **SHALL** contain at least one [1..*] **id** (CONF:5613)

       d. This assignedEntity **SHALL** contain at least one [1..*] **telecom** (CONF:5622)

       e. This assignedEntity Contains zero or one [0..1] **assignedPerson**

          a. This assignedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)

  f. This assignedEntity The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)

21. **MAY** contain zero or one [0..1] **informant** (CONF:8001)
 a. This informant Contains zero or one [0..1] **assignedEntity**
  a. This assignedEntity **SHOULD** contain zero or more [0..*] **addr** (CONF:8220)
  b. This assignedEntity **SHALL** contain zero or one [0..1] **code** (CodeSystem: `2.16.840.1.113883.6.101 NUCCHealthCareProviderTaxonomy`)
  c. This assignedEntity **SHOULD** contain at least one [1..*] **id** (a., CONF:9945)
  d. This assignedEntity **SHALL** contain zero or one [0..1] **assignedPerson** (CONF:8221)
   a. This assignedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)
  e. This assignedEntity The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996)
 b. This informant Contains zero or one [0..1] **relatedEntity**
  a. This relatedEntity **SHOULD** contain zero or more [0..*] **addr** (CONF:8220)
  b. This relatedEntity **SHALL** contain zero or one [0..1] **relatedPerson** (CONF:8221)
   a. This relatedPerson **SHALL** contain at least one [1..*] **name** (CONF:5470)
 c. This informant **SHALL** satisfy: contain exactly one [1..1] assignedEntity OR exactly one [1..1] relatedEntity (CONF:8002)

22. **MAY** contain zero or more [0..*] **participant** (CONF:10003)
 a. Such participants **MAY** contain zero or one [0..1] **time** (CONF:10004)
 b. Such participants Such participants, if present, **SHALL** have an associatedPerson or scopingOrganization element under participant/associatedEntity.
 c. Such participants Unless otherwise specified by the document specific header constraints, when participant/@typeCode is IND, associatedEntity/@classCode **SHALL** be selected from ValueSet INDRoleclassCodes 2.16.840.1.113883.11.20.9.33 STATIC 2011-09-30.

23. **MAY** contain zero or more [0..*] **inFulfillmentOf** (CONF:9952)
 a. Such inFulfillmentOfs **SHALL** contain exactly one [1..1] **order** (CONF:9953)
  a. This order **SHALL** contain at least one [1..*] **id** (CONF:9954)

24. **SHALL** contain exactly one [1..1] **allergiesSectionEntriesOptional**
 a. Contains exactly one [1..1] *Consol Allergies Section Entries Optional* (templateId: `2.16.840.1.113883.10.20.22.2.6`)

25. **SHALL** contain exactly one [1..1] **hospitalCourseSection**
 a. Contains exactly one [1..1] *Consol Hospital Course Section* (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.5`)

26. **SHALL** contain exactly one [1..1] **hospitalDischargeDiagnosisSection**
 a. Contains exactly one [1..1] *Consol Hospital Discharge Diagnosis Section* (templateId: `2.16.840.1.113883.10.20.22.2.24`)

27. **SHALL** contain exactly one [1..1] **hospitalDischargeMedicationsSectionEntriesOptional**
 a. Contains exactly one [1..1] *Consol Hospital Discharge Medications Section Entries Optional* (templateId: `2.16.840.1.113883.10.20.22.2.11`)

28. **SHALL** contain exactly one [1..1] **planOfCareSection**
 a. Contains exactly one [1..1] *Consol Plan Of Care Section* (templateId: `2.16.840.1.113883.10.20.22.2.10`)

29. **SHALL** contain exactly one [1..1] **problemSectionEntriesOptional**
 a. Contains exactly one [1..1] *Consol Problem Section Entries Optional* (templateId: `2.16.840.1.113883.10.20.22.2.5`)

30. **MAY** contain zero or one [0..1] **chiefComplaintSection**

      a. Contains exactly one [1..1] *Consol Chief Complaint Section* (templateId: 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1)

31. **MAY** contain zero or one [0..1] `chiefComplaintAndReasonForVisitSection`

      a. Contains exactly one [1..1] *Consol Chief Complaint And Reason For Visit Section* (templateId: 2.16.840.1.113883.10.20.22.2.13)

32. **MAY** contain zero or one [0..1] `dischargeDietSection`

      a. Contains exactly one [1..1] *Consol Discharge Diet Section* (templateId: 1.3.6.1.4.1.19376.1.5.3.1.3.33)

33. **MAY** contain zero or one [0..1] `familyHistorySection`

      a. Contains exactly one [1..1] *Consol Family History Section* (templateId: 2.16.840.1.113883.10.20.22.2.15)

34. **MAY** contain zero or one [0..1] `functionalStatusSection`

      a. Contains exactly one [1..1] *Consol Functional Status Section* (templateId: 2.16.840.1.113883.10.20.22.2.14)

35. **MAY** contain zero or one [0..1] `historyOfPresentIllnessSection`

      a. Contains exactly one [1..1] *Consol History Of Present Illness Section* (templateId: 1.3.6.1.4.1.19376.1.5.3.1.3.4)

36. **MAY** contain zero or one [0..1] `hospitalDischargePhysicalSection`

      a. Contains exactly one [1..1] *Consol Hospital Discharge Physical Section* (templateId: 1.3.6.1.4.1.19376.1.5.3.1.3.26)

37. **MAY** contain zero or one [0..1] `hospitalDischargeStudiesSummarySection`

      a. Contains exactly one [1..1] *Consol Hospital Discharge Studies Summary Section* (templateId: 2.16.840.1.113883.10.20.22.2.16)

38. **MAY** contain zero or one [0..1] `proceduresSectionEntriesOptional`

      a. Contains exactly one [1..1] *Consol Procedures Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.7)

39. **MAY** contain zero or one [0..1] `reasonForVisitSection`

      a. Contains exactly one [1..1] *Consol Reason For Visit Section* (templateId: 2.16.840.1.113883.10.20.22.2.12)

40. **MAY** contain zero or one [0..1] `reviewOfSystemsSection`

      a. Contains exactly one [1..1] *Consol Review Of Systems Section* (templateId: 1.3.6.1.4.1.19376.1.5.3.1.3.18)

41. **MAY** contain zero or one [0..1] `socialHistorySection`

      a. Contains exactly one [1..1] *Consol Social History Section* (templateId: 2.16.840.1.113883.10.20.22.2.17)

42. **MAY** contain zero or one [0..1] `vitalSignsSectionEntriesOptional`

      a. Contains exactly one [1..1] *Consol Vital Signs Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.4)

43. **MAY** contain zero or one [0..1] `immunizationsSectionEntriesOptional`

      a. Contains exactly one [1..1] *Consol Immunizations Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.2)

44. **SHALL** satisfy: The US Realm Clinical Document Address datatype flavor is used by US Realm Clinical Document Header for the patient or any other person or organization mentioned within it.

45. **SHALL** satisfy: The US Realm Clinical Document Date and Time datatype flavor records date and time information. If no time zone offset is provided, you can make no assumption about time, unless you have made a local exchange agreement. This data type uses the same rules as US Realm Date and Time (DTM.US.FIELDED), but is used with the effectiveTime element.

46. **SHALL** satisfy: The US Realm Patient Name datatype flavor is a set of reusable constraints that can be used for the patient or any other person. It requires a first (given) and last (family) name. If a patient or person has only one name part (e.g., patient with first name only) place the name part in the field required by the organization. Use the appropriate nullFlavor, "Not Applicable" (NA), in the other field.
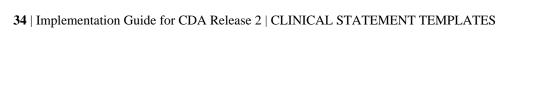
Discharge Summary example

Chapter

2

SECTION TEMPLATES

Chapter
3

CLINICAL STATEMENT TEMPLATES

This section of the Implementation Guide details the clinical statement entries referenced in the document section templates. The clinical statement entry templates are arranged alphabetically.

Chapter

4

OTHER CLASSES

This section of the Implementation Guide describes other classes that are not CDA Clinical Documents, Sections, or Clinical Statements.

Chapter

5

VALUE SETS

The following tables summarize the value sets used in this Implementation Guide.

REFERENCES

- HL7 Implementation Guide: CDA Release 2 – Continuity of Care Document (CCD) A CDA implementation of ASTM E2369-05 Standard Specification for Continuity of Care Record© (CCR) April 01, 2007 available through *HL7* .
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- HL7 Implementation Guide for CDA Release 2 CDA for Public Health Case Reports (PHCR) Informative Standard October 2009. Available through *HL7* .
- HL7 Implementation Guide for CDA Release 2: NHSN Healthcare Associated Infection (HAI) Reports, Release 2 Draft Standard for Trial Use January 2009 Available at: *NHSN Healthcare Associated Infection (HAI) Reports*
- Dolin RH, Alschuler L, Boyer S, Beebe C, Behlen FM, Biron PV, Shabo A, (Editors). HL7 Clinical Document Architecture, Release 2.0. ANSI-approved HL7 Standard; May 2005. Ann Arbor, Mich.: Health Level Seven, Inc. Available through *HL7* or if an HL7 member with the following link: *CDA Release 2 Normative Web Edition.*
- *LOINC®* : Logical Observation Identifiers Names and Codes, Regenstrief Institute.
- *SNOMED CT®* : SNOMED Clinical Terms SNOMED International Organization.
- Extensible Markup Language, *www.w3.org/XML* .
- Dolin RH, Alschuler L, Boyer S, Beebe C, Behlen FM, Biron PV, Shabo A., HL7 Clinical Document Architecture, Release 2. J Am Med Inform Assoc. 2006;13:30-39. Available at: *http://www.jamia.org/cgi/reprint/13/1/30* .
- Using SNOMED CT in HL7 Version 3; Implementation Guide, Release 1.5. Available through *HL7* or if an HL7 member with the following link: *Using SNOMED CT in HL7 Version 3*