Implementation Guide for CDA Release 2 CDA IG Consolidation

Working Group Draft

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

2 Implementation Guide for CDA Release 2 Introduction		
MDHT Publication		

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Acknowledgments

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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 *Component*2
- 13. SHALL contain at least one [1..*] recordTarget (CONF:5266), such that
 - 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), such that
- **15. SHALL** contain at least one [1..*] **author** (CONF:5444), such that
- **16. MAY** contain zero or one [0..1] **dataEnterer** (CONF:5441), such that
- 17. SHALL contain exactly one [1..1] custodian (iv., CONF:5519), such that
- 18. MAY contain zero or more [0..*] informationRecipient (CONF:5565), such that
- **19. SHOULD** contain zero or one [0..1] **legalAuthenticator** (CONF:5579), such that
- **20. MAY** contain zero or more [0..*] **authenticator** (CONF:5607), such that
- **21. MAY** contain zero or one [0..1] **informant** (CONF:8001), such that
- 22. MAY contain zero or more [0..*] supportParticipant (CONF:10003), such that
- 23. MAY contain zero or more [0..*] inFulfillmentOf (CONF:9952), such that
- **24.** Contains exactly one [1..1] **component**, such that
 - **a.** Contains exactly one [1..1] *Consol Allergies Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.6)
- **25.** Contains zero or one [0..1] **component**, such that
 - **a.** Contains exactly one [1..1] *Consol Assessment And Plan Section* (templateId: 2.16.840.1.113883.10.20.22.2.9)
- **26.** Contains zero or one [0..1] **component**, such that
 - **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.** Contains zero or one [0..1] **component**, such that
 - **a.** Contains exactly one [1..1] *Consol Physical Exam Section* (templateId: 2.16.840.1.113883.10.20.2.10)
- **28.** Contains zero or one [0..1] **component**, such that
 - **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.** Contains exactly one [1..1] **component**, such that
 - **a.** Contains exactly one [1..1] *Consol Medications Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.1)

```
30. Contains exactly one [1..1] component, such that
   a. Contains exactly one [1..1] Consol Problem Section Entries Optional (templateId:
      2.16.840.1.113883.10.20.22.2.5)
31. Contains zero or one [0..1] component, such that
   a. Contains exactly one [1..1] Consol Procedures Section Entries Optional (templateId:
      2.16.840.1.113883.10.20.22.2.7)
32. Contains exactly one [1..1] component, such that
   a. Contains exactly one [1..1] Consol Results Section Entries Optional (templateId:
      2.16.840.1.113883.10.20.22.2.3)
33. Contains exactly one [1..1] component, such that
   a. Contains exactly one [1..1] Consol Advance Directives Section Entries Optional (templateId:
      2.16.840.1.113883.10.20.22.2.21)
34. Contains zero or one [0..1] component, such that
   a. Contains exactly one [1..1] Consol Encounters Section Entries Optional (templateId:
      2.16.840.1.113883.10.20.22.2.22)
35. Contains zero or one [0..1] component, such that
   a. Contains exactly one [1..1] Consol Family History Section (templateId:
      2.16.840.1.113883.10.20.22.2.15)
36. Contains zero or one [0..1] component, such that
   a. Contains exactly one [1..1] Consol Functional Status Section (templateId:
      2.16.840.1.113883.10.20.22.2.14)
37. Contains zero or one [0..1] component, such that
   a. Contains exactly one [1..1] Consol Immunizations Section Entries Optional (templateId:
      2.16.840.1.113883.10.20.22.2.2)
38. Contains zero or one [0..1] component, such that
   a. Contains exactly one [1..1] Consol Medical Equipment Section (templateId:
      2.16.840.1.113883.10.20.22.2.23)
39. Contains zero or one [0..1] component, such that
   a. Contains exactly one [1..1] Consol Plan Of Care Section (templateId:
      2.16.840.1.113883.10.20.22.2.10)
40. Contains zero or one [0..1] component, such that
   a. Contains exactly one [1..1] Consol Social History Section (templateId:
      2.16.840.1.113883.10.20.22.2.17)
41. Contains zero or one [0..1] component, such that
   a. Contains exactly one [1..1] Consol Vital Signs Section Entries Optional (templateId:
      2.16.840.1.113883.10.20.22.2.4)
42. Contains zero or one [0..1] component, such that
   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. Contains zero or one [0..1] component, such that
   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. Contains zero or one [0..1] component, such that
   a. Contains exactly one [1..1] Consol General Status Section (templateId:
```

2.16.840.1.113883.10.20.2.5) **45.** Contains zero or one [0..1] **component**, such that

- **a.** Contains exactly one [1..1] *Consol History Of Past Illness Section* (templateId: 2.16.840.1.113883.10.20.22.2.20)
- **46.** Contains zero or one [0..1] **component**, such that
 - a. Contains exactly one [1..1] Consol Payers Section (templateId: 2.16.840.1.113883.10.20.22.2.18)

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), such that
 - 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), such that
- **15. SHALL** contain at least one [1..*] **author** (CONF:5444), such that
- 16. MAY contain zero or one [0..1] dataEnterer (CONF:5441), such that
- 17. SHALL contain exactly one [1..1] custodian (iv., CONF:5519), such that
- **18. MAY** contain zero or more [0..*] **informationRecipient** (CONF:5565), such that
- 19. SHOULD contain zero or one [0..1] legalAuthenticator (CONF:5579), such that
- **20. MAY** contain zero or more [0..*] **authenticator** (CONF:5607), such that
- **21. MAY** contain zero or one [0..1] **informant** (CONF:8001), such that
- 22. MAY contain zero or more [0..*] supportParticipant (CONF:10003), such that
- 23. MAY contain zero or more [0..*] inFulfillmentOf (CONF:9952), such that
- **24.** Contains exactly one [1..1] **component**, such that
 - **a.** Contains exactly one [1..1] *Consol Allergies Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.6)
- **25.** Contains exactly one [1..1] **component**, such that
 - **a.** Contains exactly one [1..1] *Consol Medications Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.1)
- **26.** Contains exactly one [1..1] **component**, such that
 - **a.** Contains exactly one [1..1] *Consol Problem Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.5)

- **36.** Contains zero or one [0..1] **component**, such that
 - **a.** Contains exactly one [1..1] *Consol Plan Of Care Section* (templateId:

2.16.840.1.113883.10.20.22.2.10)

- **37.** Contains zero or one [0..1] **component**, such that
 - **a.** Contains exactly one [1..1] *Consol Social History Section* (templateId: 2.16.840.1.113883.10.20.22.2.17)
- **38.** Contains zero or one [0..1] **component**, such that
 - **a.** Contains exactly one [1..1] Consol Vital Signs Section Entries Optional (templateId: 2.16.840.1.113883.10.20.22.2.4)

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)
- 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), such that
 - 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), such that
- **15. SHALL** contain at least one [1..*] **author** (CONF:5444), such that
- **16. MAY** contain zero or one [0..1] **dataEnterer** (CONF:5441), such that
- 17. SHALL contain exactly one [1..1] custodian (iv., CONF:5519), such that
- 18. MAY contain zero or more [0..*] informationRecipient (CONF:5565), such that
- 19. SHOULD contain zero or one [0..1] legalAuthenticator (CONF:5579), such that
- **20. MAY** contain zero or more [0..*] **authenticator** (CONF:5607), such that
- **21. MAY** contain zero or one [0..1] **informant** (CONF:8001), such that
- 22. MAY contain zero or more [0..*] supportParticipant (CONF:10003), such that
- 23. MAY contain zero or more [0..*] inFulfillmentOf (CONF:9952), such that
- **24.** Contains exactly one [1..1] **component**, such that
 - **a.** Contains exactly one [1..1] *Consol Plan Of Care Section* (templateId: 2.16.840.1.113883.10.20.22.2.10)
- **25.** Contains exactly one [1..1] **component**, such that
 - **a.** Contains exactly one [1..1] *Consol Allergies Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.6)
- **26.** Contains exactly one [1..1] **component**, such that
 - **a.** Contains exactly one [1..1] *Consol Problem Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.5)
- **27.** Contains exactly one [1..1] **component**, such that
 - **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.** Contains exactly one [1..1] **component**, such that
 - **a.** Contains exactly one [1..1] *Consol Advance Directives Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.21)
- **29.** Contains exactly one [1..1] **component**, such that
 - **a.** Contains exactly one [1..1] *Consol Immunizations Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.2)
- **30.** Contains exactly one [1..1] **component**, such that
 - **a.** Contains exactly one [1..1] *Consol Medical Equipment Section* (templateId:
 - 2.16.840.1.113883.10.20.22.2.23)
- **31.** Contains exactly one [1..1] **component**, such that
 - **a.** Contains exactly one [1..1] *Consol Advance Directives Section Entries Optional* (templateId: 2.16.840.1.113883.10.20.22.2.21)

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), such that
     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), such that
15. SHALL contain at least one [1..*] author (CONF:5444), such that
16. MAY contain zero or one [0..1] dataEnterer (CONF:5441), such that
17. SHALL contain exactly one [1..1] custodian (iv., CONF:5519), such that
18. MAY contain zero or more [0..*] informationRecipient (CONF:5565), such that
19. SHOULD contain zero or one [0..1] legalAuthenticator (CONF:5579), such that
20. MAY contain zero or more [0..*] authenticator (CONF:5607), such that
21. MAY contain zero or one [0..1] informant (CONF:8001), such that
22. MAY contain zero or more [0..*] supportParticipant (CONF:10003), such that
23. MAY contain zero or more [0..*] inFulfillmentOf (CONF:9952), such that
24. Contains exactly one [1..1] component, such that
   a. Contains exactly one [1..1] Consol Allergies Section Entries Optional (templateId:
      2.16.840.1.113883.10.20.22.2.6)
25. Contains exactly one [1..1] component, such that
   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. Contains exactly one [1..1] component, such that
   a. Contains exactly one [1..1] Consol Hospital Discharge Diagnosis Section (templateId:
      2.16.840.1.113883.10.20.22.2.24)
27. Contains exactly one [1..1] component, such that
   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. Contains exactly one [1..1] component, such that
```

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

2.16.840.1.113883.10.20.22.2.10)

```
29. Contains exactly one [1..1] component, such that
   a. Contains exactly one [1..1] Consol Problem Section Entries Optional (templateId:
      2.16.840.1.113883.10.20.22.2.5)
30. Contains zero or one [0..1] component, such that
   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. Contains zero or one [0..1] component, such that
   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. Contains zero or one [0..1] component, such that
   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. Contains zero or one [0..1] component, such that
   a. Contains exactly one [1..1] Consol Family History Section (templateId:
      2.16.840.1.113883.10.20.22.2.15)
34. Contains zero or one [0..1] component, such that
   a. Contains exactly one [1..1] Consol Functional Status Section (templateId:
      2.16.840.1.113883.10.20.22.2.14)
35. Contains zero or one [0..1] component, such that
   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. Contains zero or one [0..1] component, such that
   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. Contains zero or one [0..1] component, such that
   a. Contains exactly one [1..1] Consol Hospital Discharge Studies Summary Section (templateId:
      2.16.840.1.113883.10.20.22.2.16)
38. Contains zero or one [0..1] component, such that
   a. Contains exactly one [1..1] Consol Procedures Section Entries Optional (templateId:
      2.16.840.1.113883.10.20.22.2.7)
39. Contains zero or one [0..1] component, such that
   a. Contains exactly one [1..1] Consol Reason For Visit Section (templateId:
      2.16.840.1.113883.10.20.22.2.12)
40. Contains zero or one [0..1] component, such that
   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. Contains zero or one [0..1] component, such that
   a. Contains exactly one [1..1] Consol Social History Section (templateId:
      2.16.840.1.113883.10.20.22.2.17)
42. Contains zero or one [0..1] component, such that
   a. Contains exactly one [1..1] Consol Vital Signs Section Entries Optional (templateId:
      2.16.840.1.113883.10.20.22.2.4)
43. Contains zero or one [0..1] component, such that
   a. Contains exactly one [1..1] Consol Immunizations Section Entries Optional (templateId:
```

2.16.840.1.113883.10.20.22.2.2)

Discharge Summary example

2

SECTION TEMPLATES

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.

4

OTHER CLASSES

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

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.
- HL7 Implementation Guide for CDA Release 2 Quality Reporting Document Architecture (QRDA) Draft Standard for Trial Use March 2009. Available at: *Quality Reporting Document Architecture (QRDA)*
- 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.
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