

HL7 CDA® R2 Implementation Guide: C-CDA Templates for Clinical Notes R2.1 Companion Guide

Release 2 (US Realm)

Standard for Trial Use

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Appendix C: Provenance - Author Participation

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Logical Observation Identifiers Names & Codes (LOINC)	Regenstrief Institute
International Classification of Diseases (ICD) codes	World Health Organization (WHO)
NUCC Health Care Provider Taxonomy code set	American Medical Association. Please see www.nucc.org. AMA licensing contact: 312-464-5022 (AMA IP services)

Table of Contents

1 UNSPECIFIED4	
1.1 Provenance - Author Participation4	
2 TEMPLATE IDS IN THIS GUIDE9	
3 CODE SYSTEMS IN THIS GUIDE	
Table of Figures	
Figure 1: Provenance - Author Participation	8
Table of Tables	
Table 1: Provenance - Author Participation Constraints Overview	5
Table 2: Template List	9
Table 3: Template Containments	9
Table 4: Code Systems	10

1 UNSPECIFIED

1.1 Provenance - Author Participation

[author: identifier urn:oid:2.16.840.1.113883.10.20.22.5.6 (open)]

This template represents the key information to record Provenance in an Author Participation.

This Participation is appropriate at any place CDA allows an author. For example, at the CDA Header,

CDA Section, CDA Entry, or within a CDA entry (e.g. Organizer and contained Observation(s)).

This template is consistent with the C-CDA Author Participation, however, it doesn't use a formal

This template is consistent with the C-CDA Author Participation, however, it doesn't use a formal 'conforms to' relationship. All constraints for conformance are defined in this template which specializes the Author Participation (2.16.840.1.113883.10.20.22.4.119).

The assignedAuthor/id may be set equal to (a pointer to) an id on a participant elsewhere in the document (header or entries) or a new author participant can be described here.

Table 1: Provenance - Author Participation Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Value
author (identifier: urn:oid:2.16.84	40.1.11388	3.10.20.22.5	.6)		•
templateId	11	SHALL		<u>4440-6</u>	
@root	11	SHALL		4440-15	2.16.840.1.113883.10.20.22.5 .6
@extension	11	SHALL		4440-36	2019-10-01
time	11	SHALL		<u>4440-7</u>	
assignedAuthor	11	SHALL		4440-1	
id	1*	SHALL		4440-2	
id	11	SHALL		4440-20	
@nullFlavor	01	MAY		4440-21	urn:oid:2.16.840.1.113883.5.1 008 (HL7NullFlavor) = UNK
@root	11	SHALL		4440-22	2.16.840.1.113883.4.6
@extension	01	SHOULD		4440-23	
code	01	SHOULD		4440-33	
assignedPerson	01	SHOULD		4440-3	
name	1*	SHALL		4440-9	
family	11	SHALL		4440-17	
given	0*	SHOULD		4440-18	
assignedAuthoringDevice	01	MAY		4440-32	
representedOrganization	01	MAY		4440-4	
@nullFlavor	01	MAY		4440-35	
id	1*	SHALL		4440-10	
id	11	SHALL		4440-24	
@nullFlavor	01	MAY		4440-25	urn:oid:2.16.840.1.113883.5.1 008 (HL7NullFlavor) = UNK
@root	11	SHALL		4440-26	2.16.840.1.113883.4.2
@extension	01	SHOULD		4440-27	
id	11	SHALL		4440-28	
@nullFlavor	01	MAY		4440-29	urn:oid:2.16.840.1.113883.5.1 008 (HL7NullFlavor) = UNK
@root	11	SHALL		4440-30	2.16.840.1.113883.4.6
@extension	01	SHOULD		4440-31	
name	11	SHALL		4440-11	
telecom	0*	SHOULD		4440-12	

- 1. **SHALL** contain exactly one [1..1] **templateId** (CONF:4440-6) such that it
 - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.5.6" (CONF:4440-15).
 - b. **SHALL** contain exactly one [1..1] @extension="2019-10-01" (CONF:4440-36).

- 2. **SHALL** contain exactly one [1..1] time (CONF:4440-7).
- 3. **SHALL** contain exactly one [1..1] **assignedAuthor** (CONF:4440-1).
 - a. This assigned Author **SHALL** contain at least one [1..*] **id** (CONF:4440-2).
 - i. If the assignedAuthor/id is not referencing a Provenance Author described elsewhere in the document with a representedOrganization populated, this assignedAuthor **SHALL** contain exactly one [1..1] representedOrganization (CONF:4440-64).
 - b. This assignedAuthor **SHALL** contain exactly one [1..1] **id** (CONF:4440-20) such that it

If id with @root="2.16.840.1.113883.4.6" National Provider Identifier is unknown then

- i. MAY contain zero or one [0..1] @nullFlavor="UNK" Unknown (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:4440-21).
- ii. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.4.6" National Provider Identifier (CONF:4440-22).
- iii. **SHOULD** contain zero or one [0..1] @extension (CONF:4440-23).

When the author is a person who is not acting in the role of a clinician, this code encodes the personal or legal relationship between author and the patient.

- c. This assigned Author **should** contain zero or one [0..1] **code** (CONF:4440-33).
 - i. If the content is provider authored, the code **SHOULD** be selected from ValueSet Healthcare Provider Taxonomy urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:4440-56).
 - ii. If the author is a person who is not acting in the role of a clinician, the code **SHOULD** be selected from ValueSet Personal And Legal Relationship Role Type urn:oid:2.16.840.1.113883.11.20.12.1 DYNAMIC (CONF:4440-57).
- d. This assignedAuthor **SHOULD** contain zero or one [0..1] **assignedPerson** (CONF:4440-3).
 - i. The assignedPerson, if present, **SHALL** contain at least one [1..*] **name** (CONF:4440-9).
 - 1. Such names **SHALL** contain exactly one [1..1] **family** (CONF:4440-17).
 - 2. Such names **SHOULD** contain zero or more [0..*] **given** (CONF:4440-18).
- e. This assignedAuthor MAY contain zero or one [0..1] assignedAuthoringDevice (CONF:4440-32).

If the assignedAuthor/id is not referencing a Provenance Author described elsewhere in the document with a representedOrganization populated, this assignedAuthor SHALL contain exactly one [1..1] representedOrganization (See - CONF:4440-64).

f. This assignedAuthor **MAY** contain zero or one [0..1] **representedOrganization** (CONF:4440-4).

A nullFlavor of "NA" is allowed If the assignedAuthor is not a clinician

i. The representedOrganization, if present, **MAY** contain zero or one [0..1] @nullFlavor (CONF:4440-35).

- ii. The representedOrganization, if present, **SHALL** contain at least one [1..*] **id** (CONF:4440-10).
- iii. The representedOrganization, if present, **SHALL** contain exactly one [1..1] **id** (CONF:4440-24) such that it

If id with @root="2.16.840.1.113883.4.2" Tax ID Number is unknown then

- 1. MAY contain zero or one [0..1] @nullFlavor="UNK" Unknown (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:4440-25).
- 2. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.4.2" Tax ID Number (CONF:4440-26).
- 3. **SHOULD** contain zero or one [0..1] @extension (CONF:4440-27).
- iv. The representedOrganization, if present, **SHALL** contain exactly one [1..1] **id** (CONF:4440-28) such that it

If id with @root="2.16.840.1.113883.4.6" National Provider Identifier is unknown then

- 1. MAY contain zero or one [0..1] @nullFlavor="UNK" Unknown (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:4440-29).
- 2. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.4.6" National Provider Identifier (CONF:4440-30).
- 3. **SHOULD** contain zero or one [0..1] @extension (CONF:4440-31).
- v. The representedOrganization, if present, **SHALL** contain exactly one [1..1] **name** (CONF:4440-11).
- vi. The representedOrganization, if present, **SHOULD** contain zero or more [0..*] **telecom** (CONF:4440-12).

Figure 1: Provenance - Author Participation

```
<author>
   <!-- Provenance - Author Participation -->
   <templateId root="2.16.840.1.113883.10.20.22.5.6" extension="2019-10-01"/>
   <time value="201308011235-0800"/>
   <assignedAuthor>
       <!-- NPI of Author (example) -->
       <id root="2.16.840.1.113883.4.6" extension="1234567"/>
       <assignedPerson>
           <name>
               <given>Nurse</given>
               <family>Nightingale</family>
               <suffix>RN</suffix>
           </name>
       </assignedPerson>
       <representedOrganization>
           <!-- Tax Identifier of Organization is Unknown -->
           <id root="2.16.840.1.113883.5.1008" nullFlavor="UNK"/>
           <!-- NPI of Organization -->
           <id root="2.16.840.1.113883.4.6" extension="1104145838"/>
           <name>Good Health Hospital
           <telecom value="tel:+1(555)867-5309"/>
       </representedOrganization>
   </assignedAuthor>
</author>
```

2 TEMPLATE IDS IN THIS GUIDE

Table 2: Template List

Template Title	Template Type	templateId
Provenance - Author Participation	unspecified	urn:oid:2.16.840.1.113883.10.20.2 2.5.6

Table 3: Template Containments

Template Title	Template Type	templateId
Provenance - Author Participation	unspecified	urn:oid:2.16.840.1.113883.10.20.2 2.5.6

3 CODE SYSTEMS IN THIS GUIDE

Table 4: Code Systems

Name	OID
Healthcare Provider Taxonomy (HIPAA)	urn:oid:2.16.840.1.113883.6.101
HL7NullFlavor	urn:oid:2.16.840.1.113883.5.1008
HL7RoleCode	urn:oid:2.16.840.1.113883.5.111
ProvenanceParticipantType	urn:oid:2.16.840.1.113883.4.642.4.1131