



HL7 Implementation Guide for CDA Release 2.0
Patient Authored Documents, Release 1
(1st Informative Ballot)
(US Realm & Universal Realm)

January 2013

HL7 Informative Ballot

Sponsored by:
Structure Documents Work Group

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125 OPEN ISSUES

- 126 1. A request has been made to Regenstreif through Rob Hausam to add the following
127 description to the existing LOINC code 51855-5. This request is pending.
128 a. Rob his confirming if the method can be changed to say “Patient or Patient’s
129 Agent” or if we will need to request a different LOINC code (the first sub-code
130 under the 51855-5 hierarchy) for documents where the method is Patient’s
131 Agent.
132

REQUESTED - DEFINITION/DESCRIPTION for 51855-5

Source: HL7 Structured Documents Working Group

A Patient Authored Note is generated by a patient or a patient agent acting in a non-clinical role to provide clinically relevant information to support planned or unplanned health care services.

This document gives healthcare providers, and others involved in a person’s care, information which the patient considers essential input during care delivery and coordination. This document enables patients and their agents to contribute to the continuity of care.

Because a Patient Authored Note is generated by a person acting as a non-clinician, this document may not be a complete medical summary and should be considered in context with other information routinely collected by clinicians during care delivery and coordination.

This general class of patient authored notes includes information that is interoperable with data defined for clinician-generated documents. Other more specific classes of patient authored notes may include more tightly defined content.

This document may be generated from a patient-, clinician-, or payer-controlled source system.

Intention to Build a Hierarchy of codes for Patient Authored Notes

It is envisioned that the 51855-5 code will be the most general class of Patient Authored Note documents, and that additional more specific types of Patient Authored Notes will be created in the future.

- 133
134 2. A request has been initiated through Rob Hausam to have the code “SELF” added to
135 the PersonalRelationshipRoleType value set.
136 3. A question has been posed through Rob Hausam to address how to specify a binding to
137 two value sets. Should a new combined value set be created? This affects our need to
138 join PersonalRelationshipRoleType with ResponsibleParty value sets in many places in
139 the guide.
140 a. Rob has suggested we consider creating a new value set using SNOMED CT.
141 This needs to be discussed with the team and the impact on timing needs to be
142 considered. This suggestion affects #2 and #3.
143 4. It should be noted that mechanisms to encode and manage consent are inadequate for
144 addressing expected consent management requirements. This represents current
145 standard practices, and it is outside the scope of this project to address more robust
146 consent mechanisms.
147 5. If the NUCC Health Care Provider Taxonomy (CodeSystem: 2.16.840.1.113883.6.101)
148 does not have codes for allied health professions, then an additional value set will need
149 to be added to expand any constraints referencing the NUCC Provider Taxonomy to
150 include this additional taxonomy of allied health professions.
151 6. Erratta currently reported against the Consolidated CDA General Header need to be
152 identified and the adopted resolutions need to be applied.

- 153 7. Example snippets need to be updated.
154 8. A sample Patient Authored Note document using the US Realm Header should be
155 generated.
156 9. The question came up of added a constraint on the ClinicalDocument/code to add the
157 constraint for the use of 51855-5, but relax conformance to SHOULD for the UV Realm.
158

159 1 INTRODUCTION

160 1.1 Audience

161 The audiences for this implementation guide are the architects and developers of
162 healthcare information technology (HIT) systems that exchange patient clinical data
163 and seek to use data standards that are consistent with Universal or US Realm
164 guidance. This includes those exchanges that comply to the Health Information
165 Technology for Economic and Clinical Health (HITECH) provisions of the American
166 Recovery And Reinvestment Act of 2009, the Final Rules for Stage 1 Meaningful Use,
167 and the 45 CFR Part 170 – Health Information Technology: Initial Set of Standards,
168 Implementation Specifications, and Certification Criteria for Electronic Health Record
169 Technology; Final Rule.¹

170 Business analysts and policy managers can also benefit from a basic understanding of
171 the use of Clinical Document Architecture (CDA) templates across multiple
172 implementation use cases.

173 1.2 Purpose

174 The integration of patient generated data (PGHD) into HIT is an important change to the
175 HIT ecosystem. Although patients have long been the source of information recorded in
176 the EHR, this information has been gathered orally or in paper forms, and transcribed
177 by the provider in a way that is assessed, interpreted and summarized, and the original
178 patient information may not be retained. Digital integration of PGHD provides the
179 opportunity for patients to author data in a way that is consumable within the EHR.

180 Based upon recent testimony received by the HITSC and HITPC PGHD hearing, the
181 successful inclusion of PGHD incorporates the following characteristics; information is
182 material to the patient's experience of their own condition, meaningful to the provider,
183 contextually relevant, consumable by the EHR in a familiar way and correctly attributed
184 to the patient or designee. The ONC HITSC and HITPC have further directed that
185 standards already directed in Meaningful Use (MU) should be reused, repurposed and
186 harmonized.

187 The purpose of this implementation guide is to develop a standard way within the
188 current framework of structured documents in the evolving health information
189 ecosystem to capture, record and make interoperable, patient generated information.
190 The goal is to enable patients to participate and collaborate electronically with care
191 team members.

¹ Many aspects of this guide were designed to meet the anticipated clinical document exchange requirements of Stage 3 Meaningful Use. At the time of this publication, Stage 3 Meaningful Use has not been published.

192 **1.3 Scope**

193 This implementation guide is intended to provide implementation guidance on the
194 header elements for documents authored by patients or representatives of patients
195 acting on behalf of the patient. It is modeled on the Consolidated CDA (C-CDA) header
196 with the intent of being adopted as an alternative for the header used for clinician
197 authored documents. It is expected that the C-CDA document library will be expanded
198 over time to include patient & non-clinician generated C-CDA documents, and the C-
199 CDA headers defined in this implementation will be used to guide the definition of these
200 patient generated documents.

201 The following will be 'in scope' for this implementation guide for patient authored notes
202 (PAN) and documents
203

- 204 • Guidance and best practices for definition of the CDA header elements
- 205 • A single PAN document template established to demonstrate the use of the PAN
206 header and which requires one or more section(s) defined in the Consolidated
207 CDA Implementation guide. This document templateID is
208 [2.16.840.1.113883.10.20.29.1.1](#).
- 209 • Guidance on use of the patient authored headers (Universal realm & US realm)
210 in a general Patient Authored Note documents
- 211 • A set of 'patient' Use Cases to inform the best practices defined in this
212 implementation guide
213

214 The following will not be in scope for this implementation guide

- 215 • Definition of patient generated C-CDA document types which contain specific
216 sections. Even though the vision is for a new set of non-clinician generated
217 consolidated document types, the new document types are NOT in scope for this
218 implementation guide.
219

220 Implementers of this general Patient Authored Note/document should consider utilizing
221 section and entry templates defined in the C-CDA Implementation Guide to maximize
222 data interoperability. For example, a Patient Authored Note which includes the same
223 sections as a Continuity of Care Document would be a highly interoperable document
224 because EHR systems that already exchange Consolidated CCD documents would be
225 well positioned to consume the patient generated content.

226

227 **1.4 Approach**

228 The Patient Authored Note header defines how to implement elements of the CDA
229 header for documents that are generated by the patient or a person acting as a non-
230 clinician and on behalf of the patient.

231 Like the General Header defined for C-CDA documents authored by clinicians, the
232 Patient Authored Note Header is general and can be used with classes of documents
233 where the information is authored by the patient or a person acting as a non-clinician
234 as the patient's agent. The Patient Authored Note Header may be further constrained to
235 fit narrower use cases requiring tighter constraints.

236 A universal realm implementation is defined to provide the most general
237 implementation guidance. Additionally, US realm specific guidance is provided as an
238 alternative to the current General Header defined for clinician-generated notes defined
239 in the C-CDA IG.

240 Going forward, the clinician and non-clinician header templates will be maintained in a
241 synchronized manner to ensure continued alignment over time. Based upon these
242 considerations, this document will use C-CDA structures with minimal changes to
243 reflect the inclusion of the patient as an author (and related roles). It is expected that
244 templates created to be used in Patient Authored Note documents will also be
245 consistent with the C-CDA structure.

246

247 **1.5 Organization of This Guide**

248 This guide includes a single template defining the header constraints for a patient
249 authored document. It is envisioned that the document-, section- and entry-level
250 templates associated with any type of patient generated document will be defined within
251 the C-CDA template library.

252 [Chapter 2. General Universal Realm Patient Authored Note Header Template](#). This
253 chapter defines a template for the header constraints that apply across all documents
254 generated by patients or their advocates. It is a generalized version of the US Realm
255 PAN header template.

256 [Chapter 3. General US Realm Patient Authored Note Header Template](#). This chapter
257 defines a template for the header constraints that apply across all documents generated
258 by patients or their advocates. It constrains the UV Realm PAN header template to
259 include specific codes and value sets.

260 [Appendix A](#). This appendix summarizes common use case patterns for patient authored
261 notes and provides recommendations for values of CDA header elements.

262 [Samples](#): The package will also include samples to demonstrate the use of the best
263 practices recommended in this IG

264

265 **1.10 Content of the Package**

266 The following files comprise the package:

267 **Table 1: Content of the Package**

Filename	Description	Standards Applicability
Patient_Authored_Document.docx	Implementation Guide	Normative
PGHDsample.xml	Document header	Informative

268

270 2 GENERAL, UNIVERSAL REALM, PATIENT AUTHORED 271 NOTE HEADER TEMPLATE

271 This template describes constraints that apply to the header for all Universal Realm
272 documents within the scope of this implementation guide. Header constraints specific
273 to each document type are described in the appropriate document-specific section
274 below.

275 2.1 Document Type Codes

276 CDA R2 states that LOINC is the preferred vocabulary for document type codes. The
277 document type code specifies the type of document being exchanged (e.g., History and
278 Physical). Each document template defined in the Consolidated CDA guide recommends
279 use of a single preferred `clinicalDocument/code`.

280 CDA R2 documents created by non-clinicians create a family of documents called
281 Patient Authored Notes. This type of document will be identified through the use of a
282 `clinicalDocument/code`. The LOINC document ontology includes a hierarchy of
283 Patient Authored Notes. The most general type of Patient Authored Note is denoted by
284 the LOINC code 51855-5.

285 2.2 Universal Realm Patient Authored Document Header

286 [ClinicalDocument: templateId 2.16.840.1.113883.10.20.29 (open)]

- 287 1. **SHALL** contain exactly one [1..1] `realmCode` (**NEWCONF:xxxxxx**).
- 288 a. This `realmCode` **SHOULD** be selected from HL7 ValueSet `BindingRealm`
289 [2.16.840.1.113883.1.11.20355] from codesystem `hl7Realm`
290 [2.16.840.1.113883.5.1124] **STATIC** 2010-11-11 (**NEWCONF:xxxxxx**).
- 291 2. **SHALL** contain exactly one [1..1] `typeId` (CONF:5361).
- 292 a. This `typeId` **SHALL** contain exactly one [1..1]
293 `@root="2.16.840.1.113883.1.3"` (CONF:5250).
- 294 b. This `typeId` **SHALL** contain exactly one [1..1] `@extension="POCD_HD000040"`
295 (CONF:5251).
- 296 3. **SHALL** contain exactly one [1..1] header-level `templateId` (**NEWCONF:xxxxxx**) such
297 that it
- 298 a. **SHALL** contain exactly one [1..1] `@root="2.16.840.1.113883.10.20.29"`
299 (**NEWCONF:xxxxxx**).
- 300 4. **SHALL** contain exactly one [1..1] `id` (CONF:5363).
- 301 a. This `id` **SHALL** be a globally unique identifier for the document (CONF:9991).
- 302 5. **SHALL** contain exactly one [1..1] `code` (CONF:5253).
- 303 a. This `code` **SHALL** specify the particular kind of patient generated document.
304 (**NEWCONF:xxxxxx**).
- 305 b. This `code` **SHOULD** come from the LOINC Document Ontology where Patient
306 Note (51855-5) is the root of the hierarchy. CDA R2 states that LOINC is the
307 preferred vocabulary for document type specification. The General Universal

308 Patient Authored Note template is a universal realm document, therefore it
 309 does not mandate use of LOINC; however, LOINC is still the preferred
 310 document code vocabulary. **(NEWCONF:xxxxx)**.

- 311 6. **SHALL** contain exactly one [1..1] **title** (CONF:5254).
 312 a. Can either be a locally defined name or the display name corresponding to
 313 clinicalDocument/code (CONF:5255).
 314 b. Title will have the words “Patient Authored Note” **(NEWCONF:xxxxx)**
 315
 316 7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:5256).
 317 8. **SHALL** contain exactly one [1..1] **confidentialityCode**, which **SHOULD** be selected
 318 from ValueSet HL7 BasicConfidentialityKind
 319 2.16.840.1.113883.1.11.16926 **STATIC** 2010-04-21 (CONF:5259).
 320 9. **SHALL** contain exactly one [1..1] **languageCode**, which **SHALL** be selected from
 321 ValueSet Language 2.16.840.1.113883.1.11.11526 **DYNAMIC** (CONF:5372).
 322 10. **MAY** contain zero or one [0..1] **setId** (CONF:5261).
 323 a. If setId is present versionNumber **SHALL** be present (CONF:6380).²
 324 11. **MAY** contain zero or one [0..1] **versionNumber** (CONF:5264).
 325 a. If versionNumber is present setId **SHALL** be present (CONF:6387).³

326 **Table 2: Basic Confidentiality Kind Value Set**

Value Set: HL7 BasicConfidentialityKind 2.16.840.1.113883.1.11.16926 STATIC 2010-04-21		
Code System(s): Confidentiality Code 2.16.840.1.113883.5.25		
Code	Code System	Print Name
N	Confidentiality Code	Normal
R	Confidentiality Code	Restricted
V	Confidentiality Code	Very Restricted

327

² From CDA Normative Web edition: 4.2.1.7 ClinicalDocument.setId - Represents an identifier that is common across all document revisions and “Document Identification, Revisions, and Addenda” under 4.2.3.1 ParentDocument

³ From CDA Normative Web edition: 4.2.1.8 ClinicalDocument.versionNumber An integer value used to version successive replacement documents

Table 3: Language Value Set (excerpt)

Value Set: Language 2.16.840.1.113883.1.11.11526 DYNAMIC		
Code System(s): Internet Society Language 2.16.840.1.113883.1.11.11526		
Description: A value set of codes defined by Internet RFC 4646 (replacing RFC 3066). Please see ISO 639 language code set maintained by Library of Congress for enumeration of language codes http://www.ietf.org/rfc/rfc4646.txt		
Code	Code System	Print Name
en	Internet Society Language	English
fr	Internet Society Language	French
ar	Internet Society Language	Arabic
en-US	Internet Society Language	English, US
es-US	Internet Society Language	Spanish, US
...		

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Figure 1: UV Realm header example

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```

<realmCode code="UV"/>
<typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040"/>
<!-- US General PAN Header Template -->
<templateId root="2.16.840.1.113883.10.20.29"/>

<!-- *** Note: The next templateId, code and title will differ depending on
what type of document is being sent. *** -->
<!-- conforms to the document specific requirements -->
<templateId root="2.16.840.1.113883.10.20.29.1.1"/>

<id extension="999" root="2.16.840.1.113883.19"/>

<!-- code should be LOINC, but could come from a different code system -->
<code codeSystem="2.16.840.1.113883.6.1"
      codeSystemName="LOINC" code="51855-5"
      displayName="Patient Authored Note"/>

<title>Patient Authored Note: My Health Summary</title>

<effectiveTime value="20121126145000-0500"/>

<confidentialityCode code="N" codeSystem="2.16.840.1.113883.5.25"/>

<languageCode code="en-US"/>

<setId extension="20121126145000" root="2.16.840.1.113883.19"/>
<versionNumber value="1"/>

```

360

361

Figure 2: effectiveTime with time zone example

362
363
364
365

```

<!-- the syntax is "YYYYMMDDHHMMSS.UUUU[+|-ZZzz]" where digits can be omitted
the right side to express less precision. -->
<effectiveTime value="20121126145000-0500"/>
<!-- November 26, 2012, 2:50PM, 5 hours behind UTC -->

```

366

367 2.2.1 RecordTarget

368
369
370

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

371

12. **SHALL** contain at least one [1..1] recordTarget (**NEWCONF:xxxxx**).

372
373

a. Such recordTargets **SHALL** contain exactly one [1..1] patientRole (CONF:5267).

374
375

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

376

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

377
378

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

379 2.2.1.1 Patient

380
381

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

382
383

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

384
385

2. This patient **SHALL** contain exactly one [1..1] administrativeGenderCode. (**NEWCONF:xxxxx**).

386
387

3. This patient **SHALL** contain exactly one [1..1] birthTime (CONF:5298).

388
389

a. **SHALL** be precise to year (CONF:5299).

b. **SHOULD** be precise to day (CONF:5300).

390 2.2.1.2 Guardian

391
392

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

393
394

a. A guardian, if present, **SHOULD** contain zero or one [0..1] code (**NEWCONF:xxxxx**)

395
396

b. The id **SHOULD** utilize the combined @root and @extension attributes to record the person's identity in a secure, trusted, and unique way. (**NEWCONF:xxxxx**).

397
398

c. A guardian, if present, **SHOULD** contain zero or more [0..*] addr (CONF:5359).

399
400

- 401 d. A guardian, if present, **MAY** contain zero or more [0..*]
402 **telecom** (CONF:5382).
- 403 e. A guardian, if present, **SHALL** contain exactly one [1..1]
404 **guardianPerson** (CONF:5385).
- 405 i. This guardianPerson **SHALL** contain at least one
406 [1..*] **name** (CONF:5386).

407 2.2.1.3 Birthplace

- 408 5. This patient **MAY** contain zero or one [0..1] **birthplace**
409 (CONF:5395).
- 410 a. The birthplace, if present, **SHALL** contain exactly one
411 [1..1] **place** (CONF:5396).

412 2.2.1.4 LanguageCommunication

- 413 6. This patient **SHOULD** contain zero or more [0..*]
414 **languageCommunication** (CONF:5406).
- 415 a. The languageCommunication, if present, **SHALL** contain
416 exactly one [1..1] **languageCode**, which **MAY** be
417 selected from ValueSet Language
418 2.16.840.1.113883.1.11.11526 **DYNAMIC**
419 (**NEWCONF:xxxxx**).
- 420 b. The languageCommunication, if present, **MAY** contain
421 zero or one [0..1] **modeCode**, which **MAY** be selected
422 from ValueSet HL7 LanguageAbilityMode
423 2.16.840.1.113883.1.11.12249 **DYNAMIC**
424 (**NEWCONF:xxxxx**).
- 425 c. The languageCommunication, if present, **MAY** contain
426 zero or one [0..1] **proficiencyLevelCode**, which **MAY**
427 be selected from ValueSet
428 LanguageAbilityProficiency
429 2.16.840.1.113883.1.11.12199 **DYNAMIC**
430 (**NEWCONF:xxxxx**).
- 431 d. The languageCommunication, if present, **MAY** contain
432 zero or one [0..1] **preferenceInd** to indicate a
433 preference for communication about care delivery and
434 treatments to be translated into this language
435 (**NEWCONF:xxxxx**).
- 436 i. If more than one languageCommunication is
437 present, only one languageCommunication
438 element **SHALL** a **preferenceInd** with a value
439 of 1 (**NEWCONF:xxxxx**).
- 440
- 441

442 2.2.1.5 ProviderOrganization

443 If present this organization represents the person’s preferred/nominated provider
 444 organization.

- 445 v. This patientRole **MAY** contain zero or one [0..1]
 446 **providerOrganization** (CONF:5416).
- 447 1. The providerOrganization, if present, **SHALL** contain at least
 448 one [1..*] **id** (CONF:5417).
 - 449 2. The providerOrganization, if present, **SHALL** contain at least
 450 one [1..*] **name** (CONF:5419).
 - 451 3. The providerOrganization, if present, **SHALL** contain at least
 452 one [1..*] **telecom** (CONF:5420).
 - 453 4. The providerOrganization, if present, **SHALL** contain at least
 454 one [1..*] **addr** (CONF:5422).
 - 455 a. The content of the country code used in the addr
 456 SHALL be from CountryValueSet
 457 (2.16.840.1.113883.3.88.12.80.63) DYNAMIC
 458 (NEWCONF:xxxxx).

459 2.2.1.6 RecordTarget Value Sets

460 **Table 4: Country Value Set (excerpt)**

Value Set: CountryValueSet 2.16.840.1.113883.3.88.12.80.63 DYNAMIC		
Code System(s): ISO 3166-1 Country Codes: 1.0.3166.1		
Description: A value set of codes for the representation of names of countries, territories and areas of geographical interest. Note: This table provides the ISO 3166-1 code elements available in the alpha-2 code of ISO's country code standard http://www.iso.org/iso/country_codes/iso_3166_code_lists.htm		
Code	Code System	Print Name
AW	ISO 3166-1 Country Codes	Aruba
IL	ISO 3166-1 Country Codes	Israel
KZ	ISO 3166-1 Country Codes	Kazakhstan
US	ISO 3166-1 Country Codes	United States
...		

461
 462

463 2.2.1.7 RecordTarget Example

464

Figure 3: UV Realm recordTarget example

465

```
466 <recordTarget>
467   <patientRole>
468     <!-- Internal id using HL7 example OID. -->
469     <id extension="999.1" root="2.16.840.1.113883.19"/>
470
471     <!-- Fake Social Security Number using the actual SSN OID. -->
472     <id extension="444-33-3333" root="2.16.840.1.113883.4.1"/>
473
474     <!-- Identifier based on the person's Direct Address which is a secure
475          and trusted mechanism for identifying
476          a person discretely. The toot of the id is the OID of the HISP
477          Assigning Authority for the Direct Address-->
478     <id extension="adameveryman@direct.sampleHISP.com"
479          root="2.16.123.123.12345.1234"/>
480
481     <addr use="HP">
482       <!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->
483       <streetAddressLine>2222 Home Street</streetAddressLine>
484       <city>Boston</city>
485       <state>MA</state>
486       <postalCode>02368</postalCode>
487       <!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->
488       <country>US</country>
489     </addr>
490     <!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->
491     <telecom value="tel:(555)555-2004" use="HP"/>
492     <!-- A secure e-mail address appropriate for healthcare communications-->
493     <telecom value="mailto:adameveryman@direct.sampleHISP.com" use="H"/>
494     <patient>
495       <name use="L">
496         <!-- L is "Legal" from HL7 EntityNameUse 2.16.840.1.113883.5.45 -->
497         <prefix>Mr.</prefix>
498         <given>Adam</given>
499         <given>A.</given>
500         <given qualifier="CL">Ace</given>
501         <family>Everyman</family>
502       </name>
503       <administrativeGenderCode code="M"
504         codeSystem="2.16.840.1.113883.5.1" displayName="Male"/>
505       <birthTime value="19551125"/>
506
507       <birthplace>
508         <place>
509           <addr>
510             <city>Pointe-Claire</city>
511             <state>QC</state>
512             <postalCode>H9R 1E4</postalCode>
513             <country>CAN</country>
514           </addr>
515         </place>
516       </birthplace>
```

```

517     <languageCommunication>
518         <languageCode code="fr-CN"/>
519         <modeCode code="RWR" displayName="Recieve Written"
520             codeSystem="2.16.840.1.113883.5.60"
521             codeSystemName="LanguageAbilityMode"/>
522         <preferenceInd value="true"/>
523     </languageCommunication>
524 </patient>
525 <providerOrganization>
526 <!-- This is the patient's perferred provider organization. -->
527 <!-- Internal id -->
528 <id extension="999.2" root="2.16.840.1.113883.19"/>
529 <!-- NPI for the organization -->
530 <id extension="1234567890" root="2.16.840.1.113883.4.6"/>
531 <name>Good Health Internal Medicine</name>
532 <telecom use="WP" value="tel:(781)555-1212"/>
533 <addr>
534     <streetAddressLine>100 Health Drive</streetAddressLine>
535     <city>Boston</city>
536     <state>MA</state>
537     <postalCode>02368</postalCode>
538     <country>USA</country>
539 </addr>
540 </providerOrganization>
541 </patientRole>
542 </recordTarget>

```

543

544 2.2.2 Author

545 The author element represents the creator of the clinical document. The author may
546 be a device, or a person. The person is the patient or the patient's advocate.

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

548 a. Such authors **SHALL** contain exactly one [1..1] **time** (CONF:5445).

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

551 i. This assignedAuthor **SHALL** contain exactly one [1..1] **id** (CONF:5449)
552 such that it

553 1. The id **SHOULD** utilize the combined **@root** and **@extension**
554 attributes to record the person's or the device's identity in a
555 secure, trusted, and unique way. (**NEWCONF:xxxxx**).

556 ii. When the author is a person, this assignedAuthor **SHALL** contain one
557 [1..1] **code** (**NEWCONF:xxxxx**).

558 1. The code, **SHALL** contain exactly one [1..1] **@code**, which
559 **SHOULD** be selected from the
560 PersonalRelationshipRoleType value set PLUS
561 ResponsibleParty PLUS (**NEWCONF:xxxxx**)

562

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

- 565 iv. This assignedAuthor **SHALL** contain at least one [1..*] **telecom**
566 (CONF:5428).
- 567 v. There **SHALL** be exactly one assignedAuthor/assignedPerson or
568 exactly one assignedAuthor/assignedAuthoringDevice (CONF:16790).
- 569 vi. This assignedAuthor **SHOULD** contain zero or one [0..1]
570 **assignedPerson** (CONF:5430).
- 571 1. The assignedPerson, if present, **SHALL** contain at least one
572 [1..*] **name** (CONF:16789).
- 573 vii. This assignedAuthor **SHOULD** contain zero or one [0..1]
574 **assignedAuthoringDevice** (CONF:16783).
- 575 1. The assignedAuthoringDevice, if present, **SHALL** contain
576 exactly one [1..1] **manufacturerModelName** (CONF:16784).
- 577 2. The assignedAuthoringDevice, if present, **SHALL** contain
578 exactly one [1..1] **softwareName** (CONF:16785).

579 **Figure 4: Person author example**

```

580 <author>
581   <time value="20121126145000-0500"/>
582   <assignedAuthor>
583     <!-- Internal id using HL7 example OID. -->
584     <id extension="999.1" root="2.16.840.1.113883.19"/>
585     <!-- The PAN IG includes conformance constraints on the code element.
586           This author/assignedAuthor/code/@code must be a code from one of
587           two value sets:
588           PersonalRelationshipRoleType or ResponsibleParty. Both of these
589           value sets include codes from the HL7 RoleCode Code System.
590     -->
591     <code code="SELF" displayName="Self"
592           codeSystem="2.16.840.1.113883.5.111"
593           codeSystemName="HL7 Role code"/>
594     <addr use="HP">
595       <!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->
596       <streetAddressLine>2222 Home Street</streetAddressLine>
597       <city>Boston</city>
598       <state>MA</state>
599       <postalCode>02368</postalCode>
600       <!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->
601       <country>US</country>
602     </addr>
603     <!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->
604     <telecom value="tel:(555)555-2004" use="HP"/>
605     <assignedPerson>
606       <name>
607         <given>Adam</given>
608         <family>Everyman</family>
609       </name>
610     </assignedPerson>
611   </assignedAuthor>
612 </author>

```

613

614

Figure 5: Device author example

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```

<author>
  <time value="20121126145000-0500"/>
  <assignedAuthor>
    <id extension="777.11" root="2.16.840.1.113883.19"/>
    <addr nullFlavor="NA"/>
    <telecom nullFlavor="NA"/>
    <assignedAuthoringDevice>
      <manufacturerModelName>ACME PHR</manufacturerModelName>
      <softwareName>MyPHR v1.0</softwareName>
    </assignedAuthoringDevice>
    <representedOrganization>
      <id extension="999" root="1.2.3.4.5.6.7.8.9.12345"/>
      <name>ACME PHR Solutions, Inc.</name>
      <telecom use="WP" value="tel:123-123-12345"/>
      <addr>
        <streetAddressLine>4 Future Way</streetAddressLine>
        <city>Provenance</city>
        <state>RI</state>
        <postalCode>02919</postalCode>
      </addr>
    </representedOrganization>
  </assignedAuthor>
</author>

```

638

639 2.2.3 DataEnterer

640 The dataEnterer element represents the person who transferred the content, written
641 or dictated by someone else, into the clinical document. The guiding rule of thumb is
642 that an author provides the content found within the header or body of the document,
643 subject to their own interpretation, and the dataEnterer adds that information to the
644 electronic system. In other words, a dataEnterer transfers information from one
645 source to another (e.g., transcription from paper form to electronic system).

- 646 14. **MAY** contain zero or one [0..1] dataEnterer (CONF:5441).
- 647 a. The dataEnterer, if present, **SHALL** contain exactly one [1..1]
 - 648 **assignedEntity** (CONF:5442).
 - 649 i. This assignedEntity **SHALL** contain at least one [1..*] **id** (CONF:5443).
 - 650 ii. This assignedEntity **SHALL** contain at least one [1..*] **addr**
 - 651 (CONF:5460).
 - 652 iii. This assignedEntity **SHALL** contain at least one [1..*] **telecom**
 - 653 (CONF:5466).
 - 654 iv. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson**
 - 655 (CONF:5469).
 - 656 1. This assignedPerson **SHALL** contain at least one [1..*] **name**
 - 657 (CONF:5470).
 - 658 v. This assignedEntity **MAY** contain zero or one [0..1] **code** to encode the
 - 659 relationship of the person to the recordTarget (**NEWCONF:xxxxx**).

660

Figure 6: dataEnterer example

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682

```

<dataEnterer>
  <assignedEntity>
    <!-- Internal id using HL7 example OID. -->
    <id extension="999.1" root="2.16.840.1.113883.19"/>
    <addr use="HP">
      <!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->
      <streetAddressLine>2222 Home Street</streetAddressLine>
      <city>Boston</city>
      <state>MA</state>
      <postalCode>02368</postalCode>
      <!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->
      <country>US</country>
    </addr>
    <!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->
    <telecom value="tel:(555)555-2004" use="HP"/>
    <assignedPerson>
      <name>
        <given>Adam</given><family>Everyman</family>
      </name>
    </assignedPerson>
  </assignedEntity>
</dataEnterer>

```

683

684 2.2.4 Informant

685 The informant element describes the source of the information in a medical document.
686 Assigned health care providers may be a source of information when a document is
687 created. (e.g., a nurse's aide who provides information about a recent significant health
688 care event that occurred within an acute care facility.) In these cases, the
689 assignedEntity element is used.

690 When the informant is a personal relation, that informant is represented in the
691 relatedEntity element. The code element of the relatedEntity describes the
692 relationship between the informant and the patient. The relationship between the
693 informant and the patient needs to be described to help the receiver of the clinical
694 document understand the information in the document.

- 695 15. **MAY** contain zero or more [0..*] **informant** (CONF:8001).
 - 696 a. **SHALL** contain exactly one [1..1] assignedEntity OR exactly one [1..1]
697 relatedEntity (CONF:8002).
 - 698 i. **SHOULD** contain at least one [1..*] **addr** (CONF:8220).
 - 699 ii. **SHALL** contain exactly one [1..1] assignedPerson OR exactly one [1..1]
700 relatedPerson (CONF:8221).
 - 701 1. **SHALL** contain at least one [1..*] **name** (CONF:8222).
 - 702 iii. This assignedEntity **MAY** contain zero or one [0..1] code
703 **(NEWCONF:xxxx)**.
 - 704 iv. **SHOULD** contain zero or more [0..*] **id** (CONF:9945).

705

Figure 7: Informant with assignedEntity example

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719
720
721
722
723
724
725
726
727

```

<informant>
  <assignedEntity>
    <!-- Internal id using HL7 example OID. -->
    <id extension="999.1" root="2.16.840.1.113883.19"/>
    <addr use="HP">
      <!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->
      <streetAddressLine>2222 Home Street</streetAddressLine>
      <city>Boston</city>
      <state>MA</state>
      <postalCode>02368</postalCode>
      <!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->
      <country>US</country>
    </addr>
    <!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->
    <telecom value="tel:(555)555-2004" use="HP"/>
    <assignedPerson>
      <name>
        <given>Adam</given><family>Everyman</family>
      </name>
    </assignedPerson>
  </assignedEntity>
</informant>

```

728

729 2.2.5 Custodian

730 The custodian element represents the organization that is in charge of maintaining the
 731 document. The custodian is the steward that is entrusted with the care of the
 732 document. Every CDA document has exactly one custodian. The custodian participation
 733 satisfies the CDA definition of Stewardship. Because CDA is an exchange standard and
 734 may not represent the original form of the authenticated document (e.g., CDA could
 735 include scanned copy of original), the custodian represents the steward of the original
 736 source document. The custodian may be the document originator, a health information
 737 exchange, or other responsible party.

- 738 16. **SHALL** contain exactly one [1..1] **custodian** (CONF:5519).
- 739 a. This custodian **SHALL** contain exactly one [1..1] **assignedCustodian**
 740 (CONF:5520).
- 741 i. This assignedCustodian **SHALL** contain exactly one [1..1]
 742 **representedCustodianOrganization** which may be the person
 743 when the document is not maintained by an organization.
 744 **(NEWCONF:xxxxx)**.
- 745 1. This representedCustodianOrganization **SHALL** contain at least
 746 one [1..*] **id** (CONF:5522).
 - 747 2. This representedCustodianOrganization **SHALL** contain exactly
 748 one [1..1] **name** (CONF:5524).
 - 749 3. This representedCustodianOrganization **SHALL** contain exactly
 750 one [1..1] **telecom** (CONF:5525).

- 751 a. This telecom **SHOULD** contain exactly one [1..1]
 752 @use (NEWCONF:xxxxx).
 753 4. This representedCustodianOrganization **SHALL** contain at least
 754 one [1..*] addr (CONF:5559).

755 **Figure 8: Custodian examples**

```

756 <custodian>
757   <assignedCustodian>
758     <representedCustodianOrganization>
759       <!-- Internal id -->
760       <id extension="999.3" root="2.16.840.1.113883.19"/>
761       <name>MyPersonalHealthRecord.Com</name>
762       <telecom value="tel:(555)555-1212" use="WP"/>
763       <addr use="WP">
764         <streetAddressLine>123 Boylston Street</streetAddressLine>
765         <city>Blue Hill</city>
766         <state>MA</state>
767         <postalCode>02368</postalCode>
768         <country>USA</country>
769       </addr>
770     </representedCustodianOrganization>
771   </assignedCustodian>
772 </custodian>
773
774
775 <custodian>
776   <assignedCustodian>
777     <representedCustodianOrganization>
778       <!-- This example assumes that Ned is using a Desktop PHR application.
779         There is no larger system, just the application that Ned runs on
780         his desktop.
781       -->
782       <!-- Internal id -->
783       <id extension="999.8" root="2.16.840.1.113883.19"/>
784       <name>Ned Nuclear</name>
785       <telecom value="tel:(555)555-5001" use="WP"/>
786       <addr use="HP">
787         <!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->
788         <streetAddressLine>6666 Home Street</streetAddressLine>
789         <city>Boston</city>
790         <state>MA</state>
791         <postalCode>02368</postalCode>
792         <country>US</country>
793         <!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->
794       </addr>
795     </representedCustodianOrganization>
796   </assignedCustodian>
797 </custodian>

```

798

799 2.2.6 InformationRecipient

800 The informationRecipient element records the intended recipient of the information
 801 at the time the document is created. For example, in cases where the intended recipient

802 of the document is the patient's health chart, set the `receivedOrganization` to be the
803 scoping organization for that chart.

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

805 a. The `informationRecipient`, if present, **SHALL** contain exactly one [1..1]
806 `intendedRecipient` (CONF:5566).

807 i. This `intendedRecipient` **SHOULD** contain atleast one [1..*] id
808 **(NEWCONF:xxxxx)**.

809 ii. This `intendedRecipient` **MAY** contain zero or one [0..1]
810 `informationRecipient` (CONF:5567).

811 1. The `informationRecipient`, if present, **SHALL** contain at least
812 one [1..*] `name` (CONF:5568).

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

815 1. The `receivedOrganization`, if present, **SHALL** contain exactly
816 one [1..1] `name` ([CONF:5578](#)).

Figure 9: informationRecipient example

```

818 <!-- The document is intended for multiple recipients,
819      Adam himself and his PCP physician.
820 -->
821
822 <informationRecipient>
823   <intendedRecipient>
824     <!-- Internal id using HL7 example OID. -->
825     <id extension="999.1" root="2.16.840.1.113883.19"/>
826     <!-- Identifier based on the person's Direct Address which is a secure
827           and trusted mechanism for identifying a person discretely.
828           The root of the id is the OID of the HISP Assigning Authority
829           for the Direct Address-->
830     <id extension="adameveryman@direct.sampleHISP.com"
831           root="2.16.123.123.12345.1234"/>
832   <informationRecipient>
833     <name>
834       <given>Adam</given><family>Everyman</family>
835     </name>
836   </informationRecipient>
837   <receivedOrganization>
838     <!-- Internal id -->
839     <id extension="999.3" root="2.16.840.1.113883.19"/>
840     <name>MyPersonalHealthRecord.Com</name>
841   </receivedOrganization>
842 </intendedRecipient>
843 </informationRecipient>
844
845 <informationRecipient>
846   <intendedRecipient>
847     <!-- Internal id using HL7 example OID. -->
848     <id extension="999.4" root="2.16.840.1.113883.19"/>
849     <!-- The physician's NPI number -->
850     <id extension="1122334455" root="2.16.840.1.113883.4.6"/>
851     <!-- The physician's Direct Address -->
852     <!-- Identifier based on the person's Direct Address which is a secure
853           and trusted mechanism for identifying a person discretely.
854           The root of the id is the OID of the HISP Assigning Authority for
855           the Direct Address-->
856     <id extension="DrP@direct.sampleHISP2.com" root="2.16.123.123.12345.4321"/>
857     <telecom use="WP" value="tel:(781)555-1212"/>
858     <telecom use="WP" value="mailto:DrP@direct.sampleHISP2.com"/>
859   <informationRecipient>
860     <name>
861       <prefix>Dr.</prefix>
862       <given>Patricia</given>
863       <family>Primary</family>
864     </name>
865   </informationRecipient>
866   <receivedOrganization>
867     <!-- Internal id -->
868     <id extension="999.2" root="2.16.840.1.113883.19"/>
869     <!-- NPI for the organization -->
870     <id extension="1234567890" root="2.16.840.1.113883.4.6"/>
871     <name>Good Health Internal Medicine</name>
872     <telecom use="WP" value="tel:(781)555-1212"/>

```

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882

883

```
<addr>
  <streetAddressLine>100 Health Drive</streetAddressLine>
  <city>Boston</city>
  <state>MA</state>
  <postalCode>02368</postalCode>
  <country>USA</country>
</addr>
</receivedOrganization>
</intendedRecipient>
</informationRecipient>
```

884 2.2.7 LegalAuthenticator

885 In a patient authored document, the legalAuthenticator identifies the single person
886 legally responsible for the document and must be present if the document has been
887 legally authenticated. (Note that per the following section, there may also be one or
888 more document authenticators.)

889 Based on local practice, patient authored documents may be provided without legal
890 authentication. This implies that a patient authored document that does not contain
891 this element has not been legally authenticated.

892 The act of legal authentication requires a certain privilege be granted to the legal
893 authenticator depending upon local policy. All patient documents have the potential for
894 legal authentication, given the appropriate legal authority.

895 Local policies **MAY** choose to delegate the function of legal authentication to a device or
896 system that generates the document. In these cases, the legal authenticator is the
897 person accepting responsibility for the document, not the generating device or system.

898 Note that the legal authenticator, if present, must be a person.

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

- 900 a. The legalAuthenticator, if present, **SHALL** contain exactly one [1..1] time
901 (CONF:5580).
- 902 b. The legalAuthenticator, if present, **SHALL** contain exactly one [1..1]
903 signatureCode (CONF:5583).
 - 904 i. This signatureCode **SHALL** contain exactly one [1..1] @code="S"
905 (CodeSystem: Participationsignature
906 2.16.840.1.113883.5.89) (CONF:5584).
- 907 c. The legalAuthenticator, if present, **SHALL** contain exactly one [1..1]
908 assignedEntity (CONF:5585).
 - 909 i. This assignedEntity **SHALL** contain at least one [1..*] id (CONF:5586).
 - 910 ii. This assignedEntity **MAY** contain zero or one [0..1] code
911 (**NEWCONF:xxxxx**)
 - 912 iii. This assignedEntity **SHALL** contain at least one [1..*] addr
913 (CONF:5589).
 - 914 iv. This assignedEntity **SHALL** contain at least one [1..*] telecom
915 (CONF:5595).

- 916 v. This assignedEntity **SHALL** contain exactly one [1..1] assignedPerson
 917 (CONF:5597).
 918 1. This assignedPerson **SHALL** contain at least one [1..*] name
 919 (CONF:5598).

920 **Figure 10: legalAuthenticator example**

```

921 <legalAuthenticator>
922   <time value="20121126145000-0500"/>
923   <signatureCode code="S"/>
924   <assignedEntity>
925     <!-- Internal id using HL7 example OID. -->
926     <id extension="999.1" root="2.16.840.1.113883.19"/>
927     <addr use="HP">
928       <!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->
929       <streetAddressLine>2222 Home Street</streetAddressLine>
930       <city>Boston</city>
931       <state>MA</state>
932       <postalCode>02368</postalCode>
933       <!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->
934       <country>US</country>
935     </addr>
936     <!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->
937     <telecom value="tel:(555)555-2004" use="HP"/>
938     <assignedPerson>
939       <name>
940         <given>Adam</given><family>Everyman</family>
941       </name>
942     </assignedPerson>
943   </assignedEntity>
944 </legalAuthenticator>

```

945

946 2.2.8 Authenticator

947 The authenticator identifies a participant or participants who attested to the accuracy
 948 of the information in the document.

- 949 19. **MAY** contain zero or more [0..*] authenticator (CONF:5607).
- 950 a. The authenticator, if present, **SHALL** contain exactly one [1..1] **time**
 951 (CONF:5608).
 - 952 b. The authenticator, if present, **SHALL** contain exactly one [1..1]
 953 **signatureCode** (CONF:5610).
 - 954 i. This signatureCode **SHALL** contain exactly one [1..1] @code="S"
 955 (CodeSystem: Participationsignature
 956 2.16.840.1.113883.5.89) (CONF:5611).
 - 957 c. The authenticator, if present, **SHALL** contain exactly one [1..1]
 958 **assignedEntity** (CONF:5612).
 - 959 i. This assignedEntity **SHALL** contain at least one [1..*] **id** (CONF:5613).
 - 960 ii. This assignedEntity **MAY** contain zero or one [0..1] **code**
 961 (CONF:16825).

- 962 iii. This assignedEntity **SHALL** contain at least one [1..*] **addr**
- 963 (CONF:5616).
- 964 iv. This assignedEntity **SHALL** contain at least one [1..*] **telecom**
- 965 (CONF:5622).
- 966 1. Such telecoms **SHOULD** contain exactly one [1..1] **@use**
- 967 **(NEWCONF:xxxxx)**
- 968 v. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson**
- 969 (CONF:5624).
- 970 1. This assignedPerson **SHALL** contain at least one [1..*] **name**
- 971 (CONF:5625).

972 **Figure 11: Authenticator example**

```

973 <authenticator>
974   <time value="20121126145000-0500"/>
975   <signatureCode code="S"/>
976   <assignedEntity>
977     <!-- Internal id using HL7 example OID. -->
978     <id extension="999.1" root="2.16.840.1.113883.19"/>
979     <addr use="HP">
980       <!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->
981       <streetAddressLine>2222 Home Street</streetAddressLine>
982       <city>Boston</city>
983       <state>MA</state>
984       <postalCode>02368</postalCode>
985       <!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->
986       <country>US</country>
987     </addr>
988     <!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->
989     <telecom value="tel:(555)555-2004" use="HP"/>
990     <assignedPerson>
991       <name>
992         <given>Adam</given><family>Everyman</family>
993       </name>
994     </assignedPerson>
995   </assignedEntity>
996 </authenticator>

```

997

998 **2.2.9 Participant (Support)**

999 The participant element identifies other supporting participants, including parents,
1000 relatives, caregivers, insurance policyholders, guarantors, and other participants
1001 related in some way to the patient.

1002 A supporting person or organization is an individual or an organization with a
1003 relationship to the patient. A supporting person who is playing multiple roles would be
1004 recorded in multiple participants (e.g., emergency contact and next-of-kin)

1005 20. **MAY** contain zero or more [0..*] **participant** (CONF:10003).

- 1006 a. The participant, if present, **MAY** contain zero or one [0..1] **time**
- 1007 (CONF:10004).

- 1008 b. Such participants, if present, **SHALL** have an associatedPerson or
1009 scopingOrganization element under participant/associatedEntity
1010 (CONF:10006).
1011 c. Unless otherwise specified by the document specific header constraints,
1012 when participant/@typeCode is IND, associatedEntity/@classCode **SHALL** be
1013 selected from ValueSet 2.16.840.1.113883.11.20.9.33 INDRoleclassCodes
1014 **STATIC** 2011-09-30 (CONF:10007).

1015

Table 5: IND Role classCode Value Set

Value Set: INDRoleclassCodes 2.16.840.1.113883.11.20.9.33 STATIC 2011-09-30		
Code System(s): RoleClass 2.16.840.1.113883.5.110		
Code	Code System	Print Name
PRS	RoleClass	personal relationship
NOK	RoleClass	next of kin
CAREGIVER	RoleClass	caregiver
AGNT	RoleClass	agent
GUAR	RoleClass	guarantor
ECON	RoleClass	emergency contact

1016

1017

Figure 12: Participant example for a supporting person

1018
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1038
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1041

```

<participant typeCode='IND'>
  <time xsi:type="IVL_TS">
    <low value="19551125"/>
    <high value="20121126"/>
  </time>
  <associatedEntity classCode='NOK'>
    <code code='MTH' codeSystem='2.16.840.1.113883.5.111' />
    <addr>
      <streetAddressLine>17 Daws Rd.</streetAddressLine>
      <city>Blue Bell</city>
      <state>MA</state>
      <postalCode>02368</postalCode>
      <country>US</country>
    </addr>
    <telecom value='tel:(555)555-2006' use='WP' />
    <associatedPerson>
      <name>
        <prefix>Mrs.</prefix>
        <given>Martha</given>
        <family>Mum</family>
      </name>
    </associatedPerson>
  </associatedEntity>
</participant>

```

1042

1043 2.2.10 InFulfillmentOf

1044 The inFulfillmentOf element represents orders that are fulfilled by this document.

1045 21. **MAY** contain zero or more [0..*] inFulfillmentOf (CONF:9952).

1046 a. The inFulfillmentOf, if present, **SHALL** contain exactly one [1..1] order
1047 (CONF:9953).

1048 i. This order **SHALL** contain at least one [1..*] id (CONF:9954)

1049 1. Such ids **MAY** represent a scheduled appointment or service
1050 event in a practice management system (NEWCONF:xxxxxx).

1051 2.2.11 DocumentationOf/serviceEvent

1052 The main activity being described by a Patient Authored Note is the person's health
1053 care, health practices and relevant health history over a period of time. This is shown
1054 by setting the value of
1055 ClinicalDocument/documentationOf/serviceEvent/@classCode to "PCPR" (care
1056 provision). The ClinicalDocument/documentationOf/serviceEvent/effectiveTime
1057 indicates the span of time documented in the note. Additional data from outside this
1058 duration may also be included if it is relevant to care documented during the covered
1059 time range (e.g. A document covering this year may include information about a
1060 condition resolved several years ago which requires annual screening).

1061 **NOTE:** Implementations originating a Patient Authored Note should take care to
1062 indicate the time span being documented. For example:

- 1063 • When a patient fills out a form providing relevant health history prior to an
1064 initial visit to a new doctor, the span of time being documented might be from
1065 birth to the present.
- 1066 • When a patient is authoring a note to support an annual examination, it might
1067 cover just the prior year.
- 1068 • When a patient is going for a sick visit, the time span of the note may cover only
1069 a few days.

1070 1. **SHALL** contain exactly one [1..1] documentationOf (CONF:8452).

1071 a. This documentationOf **SHALL** contain exactly one [1..1] serviceEvent
1072 (CONF:8480).

1073 i. This serviceEvent **SHALL** contain exactly one [1..1]

1074 @classCode="PCPR" Provision of Care indicating the person's health
1075 care, health practices and relevant health history (CodeSystem:
1076 HL7ActClass 2.16.840.1.113883.5.6) (CONF:8453).

1077 ii. This serviceEvent **MAY** contain one [1..1] code (NEWCONF:xxxxxx).

1078 1. The code, **SHOULD** contain exactly one [1..1] @code, which
1079 **SHOULD** be selected from a value set established by the
1080 document-level template for a specific type of Patient
1081 Authored Note. (NEWCONF:xxxxxx)

1082 iii. This serviceEvent **SHALL** contain exactly one [1..1] effectiveTime
1083 (CONF:8481).

1084 1. This effectiveTime **SHALL** contain exactly one [1..1] low
1085 (CONF:8454).

- 1086 2. This effectiveTime **SHALL** contain exactly one [1..1] high
1087 (CONF:8455).
- 1088 iv. This serviceEvent **SHOULD** contain zero or more [0..*] performer
1089 (CONF:8482).
- 1090 1. serviceEvent/performer represents the healthcare
1091 providers, allied health professionals or other individuals
1092 involved in the current or pertinent historical care of the
1093 patient during the time span covered by the document
1094 (**NEWCONF:xxxxx**).
- 1095 2. Such performers **SHALL** contain exactly one [1..1]
1096 @typeCode="PRF" Participation physical performer
1097 (CodeSystem: HL7ParticipationType
1098 2.16.840.1.113883.5.90) (CONF:8458).
- 1099 3. Such performers **MAY** contain exactly one [1..1]
1100 functionCode="PCP" when indicating the performer was the
1101 primary care physician (CodeSystem:
1102 HL7ParticipationType 2.16.840.1.113883.5.90)
1103 (**NewCONF:xxxxx**)
- 1104 4. Such performers **MAY** contain zero or more [0..1]
1105 assignedEntity (CONF:8459).
- 1106 a. This assignedEntity **SHALL** contain at least one [1..*] id
1107 (CONF:8460).
- 1108 b. This assignedEntity **MAY** contain zero or one [0..1]
1109 code (CONF:8461).

1110

Figure 13: DocumentationOf example

```
1111 <documentationOf typeCode="DOC">
1112   <serviceEvent classCode="PCPR">
1113     <effectiveTime>
1114       <low value="19551125"/>
1115       <high value="20121126145000"/>
1116     </effectiveTime>
1117
1118     <performer typeCode="PRF">
1119       <functionCode code="PCP" displayName="Primary Care Provider"
1120         codeSystem="2.16.840.1.113883.5.88"
1121         codeSystemName="Participation Function">
1122         <originalText>Primary Care Provider (PCP)</originalText>
1123       </functionCode>
1124       <time>
1125         <low value="201101"/>
1126       </time>
1127       <assignedEntity>
1128         <!-- Internal id using HL7 example OID. -->
1129         <id extension="999.4" root="2.16.840.1.113883.19"/>
1130         <!-- The physician's NPI number -->
1131         <id extension="1122334455" root="2.16.840.1.113883.4.6"/>
1132         <!-- Type of Physician -->
1133         <code code="207R00000X" displayName="Internal Medicine"
1134           codeSystemName="NUCC Health Care Provider Taxonomy"
1135           codeSystem="2.16.840.1.113883.6.101"/>
1136         <addr>
1137           <streetAddressLine>100 Health Drive</streetAddressLine>
1138           <city>Boston</city>
1139           <state>MA</state>
1140           <postalCode>02368</postalCode>
1141           <country>USA</country>
1142         </addr>
1143         <telecom use="WP" value="tel:(781)555-1212"/>
1144         <assignedPerson>
1145           <name>
1146             <prefix>Dr.</prefix>
1147             <given>Patricia</given>
1148             <family>Primary</family>
1149           </name>
1150         </assignedPerson>
1151         <representedOrganization>
1152           <!-- Internal id -->
1153           <id extension="999.2" root="2.16.840.1.113883.19"/>
1154           <name>Good Health Internal Medicine</name>
1155           <telecom use="WP" value="tel:(781)555-1212"/>
1156           <addr>
1157             <streetAddressLine>100 Health Drive</streetAddressLine>
1158             <city>Boston</city>
1159             <state>MA</state>
1160             <postalCode>02368</postalCode>
1161             <country>USA</country>
1162           </addr>
1163         </representedOrganization>
1164       </assignedEntity>
1165     </performer>
```

```

1166 <performer typeCode="PRF">
1167   <functionCode code="PCP" displayName="Primary Care Provider"
1168     codeSystem="2.16.840.1.113883.5.88"
1169     codeSystemName="Participation Function">
1170     <originalText>Primary Care Provider (PCP)</originalText>
1171   </functionCode>
1172   <time>
1173     <low value="1971"/>
1174     <high value="201101"/>
1175   </time>
1176   <assignedEntity>
1177     <!-- Internal id using HL7 example OID. -->
1178     <id extension="999.4" root="2.16.840.1.113883.19"/>
1179     <!-- The physician's NPI number -->
1180     <id extension="1122334466" root="2.16.840.1.113883.4.6"/>
1181     <!-- Type of Physician -->
1182     <code code="207Q00000X" displayName="Family Medicine"
1183       codeSystemName="NUCC Health Care Provider Taxonomy"
1184       codeSystem="2.16.840.1.113883.6.101">
1185       <originalText>General Practitioner</originalText>
1186     </code>
1187     <addr>
1188       <streetAddressLine>103 Rue Champlain</streetAddressLine>
1189       <city>Roxboro</city>
1190       <state>QC</state>
1191       <postalCode>H8Y 3S6</postalCode>
1192       <country>CAN</country>
1193     </addr>
1194     <telecom use="WP" value="tel:514-555-1212"/>
1195     <assignedPerson>
1196       <name>
1197         <prefix>Dr.</prefix>
1198         <given>Fay</given>
1199         <family>Family</family>
1200       </name>
1201     </assignedPerson>
1202     <representedOrganization>
1203       <!-- Internal id -->
1204       <id extension="999.5" root="2.16.840.1.113883.19"/>
1205       <name>Roxboro Family Practice</name>
1206       <telecom use="WP" value="tel:514-555-1212"/>
1207       <addr>
1208         <streetAddressLine>103 Rue Champlain</streetAddressLine>
1209         <city>Roxboro</city>
1210         <state>QC</state>
1211         <postalCode>H8Y 3S6</postalCode>
1212         <country>CAN</country>
1213       </addr>
1214     </representedOrganization>
1215   </assignedEntity>
1216 </performer>
1217
1218 <performer typeCode="PRF">
1219   <functionCode code="PCP" displayName="Primary Care Provider"
1220     codeSystem="2.16.840.1.113883.5.88"
1221     codeSystemName="Participation Function">
1222     <originalText>Primary Care Provider (PCP)</originalText>

```

```

1223 </functionCode>
1224 <time>
1225   <low value="19551125"/>
1226   <high value="1971"/>
1227 </time>
1228 <assignedEntity>
1229   <!-- Internal id using HL7 example OID. -->
1230   <id extension="999.6" root="2.16.840.1.113883.19"/>
1231   <!-- The physician's NPI number -->
1232   <id extension="1122334477" root="2.16.840.1.113883.4.6"/>
1233   <!-- Type of Physician -->
1234   <code code="208000000X" displayName="Pediatrics"
1235     codeSystemName="NUCC Health Care Provider Taxonomy"
1236     codeSystem="2.16.840.1.113883.6.101">
1237     <originalText>Pediatrician</originalText>
1238   </code>
1239   <addr>
1240     <streetAddressLine>10 Rue De Seville</streetAddressLine>
1241     <city>Pointe-Claire</city>
1242     <state>QC</state>
1243     <postalCode>H9R 1E9</postalCode>
1244     <country>CAB</country>
1245   </addr>
1246   <telecom use="WP" value="tel:514-333-1234"/>
1247   <assignedPerson>
1248     <name>
1249       <prefix>Dr.</prefix>
1250       <given>Karen</given>
1251       <family>Kidder</family>
1252     </name>
1253   </assignedPerson>
1254   <representedOrganization>
1255     <!-- Internal id -->
1256     <id extension="999.7" root="2.16.840.1.113883.19"/>
1257     <name>Pointe-Claire Pediatrics</name>
1258     <telecom use="WP" value="tel:514-333-1234"/>
1259     <addr>
1260       <streetAddressLine>10 Rue De Seville</streetAddressLine>
1261       <city>Pointe-Claire</city>
1262       <state>QC</state>
1263       <postalCode>H9R 1E9</postalCode>
1264       <country>CAN</country>
1265     </addr>
1266   </representedOrganization>
1267 </assignedEntity>
1268 </performer>
1269 </serviceEvent>
1270 </documentationOf>

```

1271

1272 2.2.12 Authorization/consent

1273 The header can record information about the patient's consent.

1274 The type of consent (e.g., a consent to perform the related `serviceEvent`) is conveyed in
1275 consent/code. Consents in the header have been finalized (consent/statusCode must

1276 equal Completed) and should be on file. This specification does not address how Privacy
1277 Consent' is represented, but does not preclude the inclusion of 'Privacy Consent'.

- 1278 22. **MAY** contain zero or more [0..*] **authorization** (CONF:16792) such that it
1279 a. **SHALL** contain exactly one [1..1] **consent** (CONF:16793).
- 1280 i. This consent **MAY** contain zero or more [0..*] **id** (CONF:16794).
 - 1281 ii. This consent **MAY** contain zero or one [0..1] **code** (CONF:16795).
 - 1282 1. The type of consent (e.g., a consent to perform the related
1283 serviceEvent) is conveyed in consent/code (CONF:16796).
 - 1284 iii. This consent **SHALL** contain exactly one [1..1] **statusCode**
1285 (CONF:16797).
 - 1286 1. This statusCode **SHALL** contain exactly one [1..1]
1287 **@code="completed"** Completed (CodeSystem: HL7ActClass
1288 2.16.840.1.113883.5.6) (CONF:16798).

1289 **Figure 14: Procedure note consent example**

```
1290 <authorization typeCode="AUTH">  
1291   <consent classCode="CONS" moodCode="EVN">  
1292     <id root="629deb70-5306-11df-9879-0800200c9a66" />  
1293     <code codeSystem=" 2.16.840.1.113883.6.1" codeSystemName="LOINC"  
1294       code="64293-4" displayName="Procedure consent"/>  
1295     <statusCode code="completed"/>  
1296   </consent>  
1297 </authorization>
```

1298

1299 2.2.13 ComponentOf

1300 The `componentOf` element contains the encompassing encounter for this document.
1301 The encompassing encounter represents the setting of the clinical encounter during
1302 which the document act(s) or ServiceEvent occurred.

1303 In order to represent providers associated with a specific encounter, they are recorded
1304 within the `encompassingEncounter` as participants.

1305 In a CCD the `encompassingEncounter` may be used when documenting a specific
1306 encounter and its participants. All relevant encounters in a CCD may be listed in the
1307 encounters section.

- 1308 23. **MAY** contain zero or one [0..1] **componentOf** (CONF:9955).
- 1309 a. The `componentOf`, if present, **SHALL** contain exactly one [1..1]
1310 **encompassingEncounter** (CONF:9956).
 - 1311 i. This `encompassingEncounter` **SHALL** contain at least one [1..*] **id**
1312 (CONF:9959).
 - 1313 ii. This `encompassingEncounter` **SHALL** contain exactly one [1..1]
1314 **effectiveTime** (CONF:9958).

1315 **2.3 Rendering Header Information for Human Presentation**

1316 Metadata carried in the header of a Patient Authored Note may not match information
1317 available in an electronic medical records (EMRs) or other sources external to the
1318 document. Information provided by the individual may be more accurate and up to date
1319 than information in the EMR, or it may be missing some of the most recent data
1320 available in the EMR. Therefore, it is a requirement to render information which
1321 represents differences between the document header information and the information
1322 stored in the EMR. When there are differences, information should be rendered directly
1323 from the document as well as the EMR so that potential changes can be made and
1324 errors can be caught. An example of this would be a doctor using an EMR that already
1325 contains the patient's name, date of birth, current address, and phone number. When a
1326 CDA document is rendered within that EMR, if the address and phone number in the
1327 patient authored note does not match those pieces of information in the EMR, the EMR
1328 may need to be updated.

1329 Good practice would recommend that the following be present whenever the document
1330 is viewed:

- 1331 • Document title and document dates
- 1332 • Header information which does not match information stored in the EMR
- 1333 • Service and encounter types, and date ranges as appropriate
- 1334 • Names of all persons along with their roles, participations, participation date
1335 ranges, identifiers, address, and telecommunications information
- 1336 • Names of selected organizations along with their roles, participations,
1337 participation date ranges, identifiers, address, and telecommunications
1338 information
- 1339 • Date of birth for recordTarget

1340

1342 3 GENERAL US REALM PATIENT AUTHORED NOTE HEADER 1343 TEMPLATE

1344 This template describes constraints that apply to the header for all US Realm
1345 documents within the scope of this implementation guide. Header constraints specific
1346 to each document type are described in the appropriate document-specific section
1347 below.

1348 3.1 Document Type Codes

1349 CDA R2 states that LOINC is the preferred vocabulary for document type codes. The
1350 document type code specifies the type of document being exchanged (e.g., History and
1351 Physical). Each document template defined in the Consolidated CDA guide recommends
1352 use of a single preferred `clinicalDocument/code`.

1353 CDA R2 documents created by non-clinicians create a family of documents called
1354 Patient Authored Notes. This type of document will be identified through the use of a
1355 `clinicalDocument/code`. The LOINC document ontology includes a hierarchy of
1356 Patient Authored Notes. The most general type of Patient Authored Note is denoted by
1357 the LOINC code 51855-5.

1358 3.2 US Realm Patient Authored Note Document Header

1359 [ClinicalDocument: templateId 2.16.840.1.113883.10.20.29.1 (open)]

1360
1361 The US Realm Patient Authored Note document header template must conform to the Universal
1362 Realm Patient Authored Note document header template.

- 1363
- 1364 24. **SHALL** contain exactly one [1..1] `realmCode="US"` (CONF:16791).
 - 1365 25. **SHALL** contain exactly one [1..1] `typeId` (CONF:5361).
 - 1366 a. This `typeId` **SHALL** contain exactly one [1..1]
 - 1367 `@root="2.16.840.1.113883.1.3"` (CONF:5250).
 - 1368 b. This `typeId` **SHALL** contain exactly one [1..1] `@extension="POCD_HD000040"`
 - 1369 (CONF:5251).
 - 1370 26. **SHALL** contain exactly one [1..1] header-level `templateId (NEWCONF:xxxxx)` such
 - 1371 that it
 - 1372 a. **SHALL** contain exactly one [1..1] `@root="2.16.840.1.113883.10.20.29.1"`
 - 1373 `(NEWCONF:xxxxx)`.
 - 1374 27. **SHALL** contain exactly one [1..1] `id` (CONF:5363).
 - 1375 a. This `id` **SHALL** be a globally unique identifier for the document (CONF:9991).
 - 1376 28. **SHALL** contain exactly one [1..1] `code` (CONF:5253).
 - 1377 a. This `code` **SHALL** specify the particular kind of patient authored note
 - 1378 document. **(NEWCONF:xxxxx)**.
 - 1379 b. This `code` **SHALL** come from the LOINC Document Ontology where Patient
 - 1380 Note (51855-5) is the root of the hierarchy. **(NEWCONF:xxxxx)**.

- 1381 29. **SHALL** contain exactly one [1..1] **title** (CONF:5254).
- 1382 a. Can either be a locally defined name or the display name corresponding to
- 1383 clinicalDocument/code ([CONF:5255](#)).
- 1384 b. Title will have the words “Patient Authored Note” (**NEWCONF:xxxxxx**)
- 1385 30. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:5256).
- 1386 a. The content **SHALL** be a conformant [US Realm Date and Time](#)
- 1387 [\(DTM.US.FIELDDED\)](#) (2.16.840.1.113883.10.20.22.5.4) (CONF:16865).
- 1388 31. **SHALL** contain exactly one [1..1] **confidentialityCode**, which **SHOULD** be selected
- 1389 from ValueSet HL7 BasicConfidentialityKind
- 1390 2.16.840.1.113883.1.11.16926 **STATIC** 2010-04-21 (CONF:5259).
- 1391 32. **SHALL** contain exactly one [1..1] **languageCode**, which **SHALL** be selected from
- 1392 ValueSet Language 2.16.840.1.113883.1.11.11526 **DYNAMIC** (CONF:5372).
- 1393 33. **MAY** contain zero or one [0..1] **setId** (CONF:5261).
- 1394 a. If setId is present versionNumber **SHALL** be present (CONF:6380).⁴
- 1395 34. **MAY** contain zero or one [0..1] **versionNumber** (CONF:5264).
- 1396 a. If versionNumber is present setId **SHALL** be present (CONF:6387).⁵

1397 **Table 6: Basic Confidentiality Kind Value Set**

Value Set: HL7 BasicConfidentialityKind 2.16.840.1.113883.1.11.16926 STATIC 2010-04-21		
Code System(s): Confidentiality Code 2.16.840.1.113883.5.25		
Code	Code System	Print Name
N	Confidentiality Code	Normal
R	Confidentiality Code	Restricted
V	Confidentiality Code	Very Restricted

1398

⁴ From CDA Normative Web edition: 4.2.1.7 ClinicalDocument.setId - Represents an identifier that is common across all document revisions and “Document Identification, Revisions, and Addenda” under 4.2.3.1 ParentDocument

⁵ From CDA Normative Web edition: 4.2.1.8 ClinicalDocument.versionNumber An integer value used to version successive replacement documents

1399

Table 7: Language Value Set (excerpt)

Value Set: Language 2.16.840.1.113883.1.11.11526 DYNAMIC		
Code System(s): Internet Society Language 2.16.840.1.113883.1.11.11526		
Description: A value set of codes defined by Internet RFC 4646 (replacing RFC 3066). Please see ISO 639 language code set maintained by Library of Congress for enumeration of language codes http://www.ietf.org/rfc/rfc4646.txt		
Code	Code System	Print Name
en	Internet Society Language	english
fr	Internet Society Language	french
ar	Internet Society Language	arabic
en-US	Internet Society Language	English, US
es-US	Internet Society Language	Spanish, US
...		

1400

1401

Table X: LOINC DOCUMENT ONTOLOGY FOR PATIENT AUTHORED NOTES

Code System(s): LOINC 2.16.840.1.113883.6.1		
Code	Code System	Print Name
51855-5	LOINC	Patient Note

1402

1403

1404

Note: this is the most general type of Patient Authored Note. It is envisioned that additional more specific types of Patient Authored Notes will be defined in the future and the additional document codes will be managed as a hierarchy.

1405

Figure 15: US Realm header example

1406

```
<realmCode code="US"/>
<typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040"/>
<!-- US General PAN Header Template -->
<templateId root="2.16.840.1.113883.10.20.29.1"/>

<!-- *** Note: The next templateId, code and title will differ depending on
what type of document is being sent. *** -->
<!-- conforms to the document specific requirements -->
<templateId root="2.16.840.1.113883.10.20.29.1.1"/>

<id extension="999" root="2.16.840.1.113883.19"/>

<code codeSystem="2.16.840.1.113883.6.1"
      codeSystemName="LOINC" code="51855-5"
      displayName="Patient Authored Note"/>

<title>Patient Authored Note: My Health Summary</title>

<effectiveTime value="20121126145000-0500"/>

<confidentialityCode code="N" codeSystem="2.16.840.1.113883.5.25"/>

<languageCode code="en-US"/>

<setId extension="20121126145000" root="2.16.840.1.113883.19"/>
<versionNumber value="1"/>
```

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Figure 16: effectiveTime with time zone example

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```
<!-- the syntax is "YYYYMMDDHHMMSS.UUUU[+|-ZZzz]" where digits can be omitted
the right side to express less precision. -->
<effectiveTime value="20121126145000-0500"/>
<!-- November 26, 2012, 2:50PM, 5 hours behind UTC -->
```

1437

1438

1439

1440

1441 3.2.1 RecordTarget

1442

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

1443

1444

1445

35. **SHALL** contain only one [1..1] recordTarget (**NEWCONF:xxxxx**).

1446

a. Such recordTargets **SHALL** contain exactly one [1..1] patientRole (**CONF:5267**).

1447

1448

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

1449

1. Each id **SHOULD** utilize the combined @root and @extension attributes to record a patient's identity in a secure, trusted, and unique way. (**NEWCONF:xxxxx**).

1450

1451

- 1452 ii. This patientRole **SHALL** contain at least one [1..*] **addr** (CONF:5271).
 1453 1. The content of **addr** **SHALL** be a conformant [US Realm Address](#)
 1454 ([AD.US.FIELDDED](#)) (2.16.840.1.113883.10.20.22.5.2)
 1455 (CONF:10412).
 1456 iii. This patientRole **SHALL** contain at least one [1..*] **telecom**
 1457 (CONF:5280).
 1458 1. Such telecoms **SHOULD** contain exactly one [1..1] **@use**, which
 1459 **SHALL** be selected from ValueSet [Telecom Use \(US Realm](#)
 1460 [Header\)](#) [2.16.840.1.113883.11.20.9.20 DYNAMIC](#)
 1461 ([CONF:5375](#)).

1462 3.2.1.1 Patient

- 1463 iv. This patientRole **SHALL** contain exactly one [1..1] **patient**
 1464 (CONF:5283).
 1465 1. This patient **SHALL** contain exactly one [1..1] **name**
 1466 (CONF:5284).
 1467 a. The content of **name** **SHALL** be a conformant [US Realm](#)
 1468 [Patient Name \(PTN.US.FIELDDED\)](#)
 1469 (2.16.840.1.113883.10.20.22.5.1) (CONF:10411).
 1470 2. This patient **SHALL** contain exactly one [1..1]
 1471 **administrativeGenderCode**, which **SHALL** be selected from
 1472 ValueSet Administrative Gender (HL7 V3)
 1473 2.16.840.1.113883.1.11.1 **DYNAMIC** (CONF:6394).
 1474 3. This patient **SHALL** contain exactly one [1..1] **birthTime**
 1475 (CONF:5298).
 1476 a. **SHALL** be precise to year (CONF:5299).
 1477 b. **SHOULD** be precise to day (CONF:5300).
 1478 4. This patient **SHOULD** contain zero or one [0..1]
 1479 **maritalStatusCode**, which **SHALL** be selected from ValueSet
 1480 HL7 MaritalStatus 2.16.840.1.113883.1.11.12212
 1481 **DYNAMIC** (CONF:5303).
 1482 5. This patient **MAY** contain zero or one [0..1]
 1483 **religiousAffiliationCode**, which **SHALL** be selected from
 1484 ValueSet HL7 Religious Affiliation
 1485 2.16.840.1.113883.1.11.19185 **DYNAMIC** (CONF:5317).
 1486 6. This patient **MAY** contain zero or one [0..1] **raceCode**, which
 1487 **SHALL** be selected from ValueSet Race
 1488 2.16.840.1.113883.1.11.14914 **DYNAMIC** (CONF:5322).
 1489 7. This patient **MAY** contain zero or more [0..*] **sdct:raceCode**,
 1490 where the **@code** **SHALL** be selected from ValueSet Race
 1491 2.16.840.1.113883.1.11.14914 **DYNAMIC** (CONF:7263).
 1492 8. This patient **MAY** contain zero or one [0..1] **ethnicGroupCode**,
 1493 which **SHALL** be selected from ValueSet Ethnicity Value
 1494 2.16.840.1.114222.4.11.837 **DYNAMIC** (CONF:5323).

1495 3.2.1.2 Guardian

- 1496 9. This patient **MAY** contain zero or more [0..*] **guardian**
1497 (CONF:5325).
- 1498 a. The guardian, if present, **SHOULD** contain zero or one
1499 [0..1] **code**, which **SHALL** be selected from ValueSet
1500 PersonalRelationshipRoleType plus
1501 ResponsibleParty value set (**NEWCONF:xxxxx**).
 - 1502 b. The id **SHOULD** utilize the combined **@root** and
1503 **@extension** attributes to record the person's identity
1504 in a secure, trusted, and unique way.
1505 (**NEWCONF:xxxxx**).
 - 1506 c. The guardian, if present, **SHOULD** contain zero or more
1507 [0..*] **addr** (CONF:5359).
 - 1508 i. The content of **addr** **SHALL** be a conformant [US](#)
1509 [Realm Address \(AD.US.FIELDDED\)](#)
1510 (2.16.840.1.113883.10.20.22.5.2)
1511 (CONF:10413).
 - 1512 d. The guardian, if present, **MAY** contain zero or more
1513 [0..*] **telecom** (CONF:5382).
 - 1514 i. The telecom, if present, **SHOULD** contain exactly
1515 one [1..1] **@use**, which **SHALL** be selected from
1516 ValueSet [Telecom Use \(US Realm Header\)](#)
1517 [2.16.840.1.113883.11.20.9.20 DYNAMIC](#)
1518 (CONF:7993).
 - 1519 e. The guardian, if present, **SHALL** contain exactly one
1520 [1..1] **guardianPerson** (CONF:5385).
 - 1521 i. This guardianPerson **SHALL** contain at least one
1522 [1..*] **name** (CONF:5386).
 - 1523 1. The content of **name** **SHALL** be a
1524 conformant [US Realm Person Name](#)
1525 [\(PN.US.FIELDDED\)](#)
1526 (2.16.840.1.113883.10.20.22.5.1.1)
1527 (CONF:10414).

1528 3.2.1.3 Birthplace

- 1529 10. This patient **MAY** contain zero or one [0..1] **birthplace**
1530 (CONF:5395).
- 1531 a. The birthplace, if present, **SHALL** contain exactly one
1532 [1..1] **place** (CONF:5396).
 - 1533 i. This place **SHALL** contain exactly one [1..1] **addr**
1534 (CONF:5397).
 - 1535 1. This **addr** **SHOULD** contain zero or one [0..1]
1536 **country**, where the **@code** **SHALL** be selected
1537 from ValueSet CountryValueSet

1538 2.16.840.1.113883.3.88.12.80.63 **DYNAMIC**
 1539 (CONF:5404).
 1540 2. This addr **MAY** contain zero or one [0..1]
 1541 **postalCode**, where the **@code SHALL** be
 1542 selected from ValueSet PostalCodeValueSet
 1543 2.16.840.1.113883.3.88.12.80.2 **DYNAMIC**
 1544 (CONF:5403).
 1545 3. This addr **SHALL** contain exactly one [1..1] state,
 1546 which **SHALL** be selected from ValueSet
 1547 2.16.840.1.113883.3.88.12.80.1 StateValueSet
 1548 **DYNAMIC** (CONF:5402).

1549 3.2.1.4 LanguageCommunication

1550 11.This patient **SHOULD** contain zero or more [0..*]
 1551 **languageCommunication** (CONF:5406).
 1552 a. The languageCommunication, if present, **SHALL** contain
 1553 exactly one [1..1] **languageCode**, which **SHALL** be
 1554 selected from ValueSet Language
 1555 2.16.840.1.113883.1.11.11526 **DYNAMIC**
 1556 (CONF:5407).
 1557 b. The languageCommunication, if present, **MAY** contain
 1558 zero or one [0..1] **modeCode**, which **SHALL** be selected
 1559 from ValueSet HL7 LanguageAbilityMode
 1560 2.16.840.1.113883.1.11.12249 **DYNAMIC**
 1561 (CONF:5409).
 1562 c. The languageCommunication, if present, **SHOULD**
 1563 contain zero or one [0..1] **proficiencyLevelCode**,
 1564 which **SHALL** be selected from ValueSet
 1565 LanguageAbilityProficiency
 1566 2.16.840.1.113883.1.11.12199 **DYNAMIC**
 1567 (CONF:9965).
 1568 d. The languageCommunication, if present, **MAY** contain
 1569 zero or one [0..1] **preferenceInd** to indicate a
 1570 preference for communication about care delivery and
 1571 treatments to be translated into this language
 1572 **(NEWCONF:xxxxx)**.
 1573 i. If more than one languageCommunication is
 1574 present, only one languageCommunication
 1575 element **SHALL** a **preferenceInd** with a value
 1576 of 1 **(NEWCONF:xxxxx)**.
 1577

1578 3.2.1.5 ProviderOrganization

1579 If present this organization represents the person's primary care provider organization.

- 1580 v. This patientRole **MAY** contain zero or one [0..1]
 1581 **providerOrganization** (CONF:5416).
 1582 1. The providerOrganization, if present, **SHALL** contain at least
 1583 one [1..*] **id** (CONF:5417).
 1584 a. Such ids **SHOULD** contain zero or one [0..1]
 1585 **@root**="2.16.840.1.113883.4.6" National Provider
 1586 Identifier (CONF:16820).
 1587 2. The providerOrganization, if present, **SHALL** contain at least
 1588 one [1..*] **name** (CONF:5419).
 1589 3. The providerOrganization, if present, **SHALL** contain at least
 1590 one [1..*] **telecom** (CONF:5420).
 1591 a. Such telecoms **SHOULD** contain exactly one [1..1] **@use**,
 1592 which **SHALL** be selected from ValueSet [Telecom Use](#)
 1593 ([US Realm Header](#))
 1594 [2.16.840.1.113883.11.20.9.20 DYNAMIC](#)
 1595 (CONF:7994).
 1596 4. The providerOrganization, if present, **SHALL** contain at least
 1597 one [1..*] **addr** (CONF:5422).
 1598 a. The content of addr **SHALL** be a conformant [US Realm](#)
 1599 [Address \(AD.US.FIELDDED\)](#)
 1600 (2.16.840.1.113883.10.20.22.5.2) (CONF:10415).

1601 3.2.1.6 RecordTarget Value Sets

1602 **Table 8: Telecom Use (US Realm Header) Value Set**

Value Set: Telecom Use (US Realm Header) 2.16.840.1.113883.11.20.9.20 DYNAMIC		
Code System(s): AddressUse 2.16.840.1.113883.5.1119		
Code	Code System	Print Name
HP	AddressUse	primary home
WP	AddressUse	work place
MC	AddressUse	mobile contact
HV	AddressUse	vacation home

1603

1604 **Table 9: Administrative Gender (HL7) Value Set**

Value Set: Administrative Gender (HL7 V3) 2.16.840.1.113883.1.11.1 DYNAMIC		
Code System(s): AdministrativeGender 2.16.840.1.113883.5.1		
Code	Code System	Print Name
F	AdministrativeGender	Female
M	AdministrativeGender	Male
UN	AdministrativeGender	Undifferentiated

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Table 10: Marital Status Value Set

Value Set: HL7 Marital Status 2.16.840.1.113883.1.11.12212 DYNAMIC		
Code System(s): MaritalStatus 2.16.840.1.113883.5.2		
Code	Code System	Print Name
A	MaritalStatus	Annulled
D	MaritalStatus	Divorced
I	MaritalStatus	Interlocutory
L	MaritalStatus	Legally Separated
M	MaritalStatus	Married
P	MaritalStatus	Polygamous
S	MaritalStatus	Never Married
T	MaritalStatus	Domestic partner
W	MaritalStatus	Widowed

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Table 11: Religious Affiliation Value Set (excerpt)

Value Set: HL7 Religious Affiliation 2.16.840.1.113883.1.11.19185 DYNAMIC		
Code System(s): ReligiousAffiliation 2.16.840.1.113883.5.1076		
Description:	A value set of codes that reflect spiritual faith affiliation http://www.hl7.org/memonly/downloads/v3edition.cfm#V32008	
Code	Code System	Print Name
1026	ReligiousAffiliation	Judaism
1020	ReligiousAffiliation	Hinduism
1041	ReligiousAffiliation	Roman Catholic Church
...		

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Table 12: Race Value Set (excerpt)

Value Set: Race 2.16.840.1.113883.1.11.14914 DYNAMIC		
Code System(s): Race and Ethnicity - CDC 2.16.840.1.113883.6.238		
Description: A Value Set of codes for Classifying data based upon race. Race is always reported at the discretion of the person for whom this attribute is reported, and reporting must be completed according to Federal guidelines for race reporting. Any code descending from the Race concept (1000-9) in that terminology may be used in the exchange http://phinvads.cdc.gov/vads/ViewCodeSystemConcept.action?oid=2.16.840.1.113883.6.238&code=1000-9		
Code	Code System	Print Name
1002-5	Race and Ethnicity- CDC	American Indian or Alaska Native
2028-9	Race and Ethnicity- CDC	Asian
2054-5	Race and Ethnicity- CDC	Black or African American
2076-8	Race and Ethnicity- CDC	Native Hawaiian or Other Pacific Islander
2106-3	Race and Ethnicity- CDC	White
...		

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Table 13: Ethnicity Value Set

Value Set: Ethnicity Value Set 2.16.840.1.114222.4.11.837 DYNAMIC		
Code System(s): Race and Ethnicity - CDC 2.16.840.1.113883.6.238		
Code	Code System	Print Name
2135-2	Race and Ethnicity Code Sets	Hispanic or Latino
2186-5	Race and Ethnicity Code Sets	Not Hispanic or Latino

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Table 14: Personal Relationship Role Type Value Set (excerpt)

Value Set: Personal Relationship Role Type 2.16.840.1.113883.1.11.19563 DYNAMIC		
Code System(s): RoleCode 2.16.840.1.113883.5.111		
Description: A Personal Relationship records the role of a person in relation to another person. This value set is to be used when recording the relationships between different people who are not necessarily related by family ties, but also includes family relationships. http://www.hl7.org/memonly/downloads/v3edition.cfm#V32008		
Code	Code System	Print Name
HUSB	RoleCode	husband
WIFE	RoleCode	wife
FRND	RoleCode	friend
SISINLAW	RoleCode	sister-in-law
...		

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1616

Table X: Responsible Party Value Set (excerpt)

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Table 15: State Value Set (excerpt)

Value Set: StateValueSet 2.16.840.1.113883.3.88.12.80.1 DYNAMIC		
Code System(s): FIPS 5-2 (State) 2.16.840.1.113883.6.92		
Description: Codes for the Identification of the States, the District of Columbia and the Outlying Areas of the United States, and Associated Areas Publication # 5-2, May, 1987 http://www.itl.nist.gov/fipspubs/fip5-2.htm		
Code	Code System	Print Name
AL	FIPS 5-2 (State Alpha Codes)	Alabama
AK	FIPS 5-2 (State Alpha Codes)	Alaska
AZ	FIPS 5-2 (State Alpha Codes)	Arizona
AR	FIPS 5-2 (State Alpha Codes)	Arkansas
...		

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Table 16: Postal Code Value Set (excerpt)

Value Set: PostalCodeValueSet 2.16.840.1.113883.3.88.12.80.2 DYNAMIC		
Code System(s): US Postal Codes 2.16.840.1.113883.6.231		
Description: A value set of codes postal (ZIP) Code of an address in the United States. http://zip4.usps.com/zip4/welcome.jsp		
Code	Code System	Print Name
19009	US Postal Codes	Bryn Athyn, PA
92869-1736	US Postal Codes	Orange, CA
32830-8413	US Postal Codes	Lake Buena Vista, FL
...		

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Table 17: Country Value Set (excerpt)

Value Set: CountryValueSet 2.16.840.1.113883.3.88.12.80.63 DYNAMIC		
Code System(s): ISO 3166-1 Country Codes: 1.0.3166.1		
Description: A value set of codes for the representation of names of countries, territories and areas of geographical interest. Note: This table provides the ISO 3166-1 code elements available in the alpha-2 code of ISO's country code standard http://www.iso.org/iso/country_codes/iso_3166_code_lists.htm		
Code	Code System	Print Name
AW	ISO 3166-1 Country Codes	Aruba
IL	ISO 3166-1 Country Codes	Israel
KZ	ISO 3166-1 Country Codes	Kazakhstan
US	ISO 3166-1 Country Codes	United States
...		

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1624

Table 18: Language Ability Value Set

Value Set: HL7 LanguageAbilityMode 2.16.840.1.113883.1.11.12249 DYNAMIC		
Code System(s): LanguageAbilityMode 2.16.840.1.113883.5.60		
Description: A value representing the method of expression of the language.		
Code	Code System	Print Name
ESGN	LanguageAbilityMode	Expressed signed
ESP	LanguageAbilityMode	Expressed spoken
EWR	LanguageAbilityMode	Expressed written
RSGN	LanguageAbilityMode	Received signed
RSP	LanguageAbilityMode	Received spoken
RWR	LanguageAbilityMode	Received written

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Table 19: Language Ability Proficiency Value Set

Value Set: LanguageAbilityProficiency 2.16.840.1.113883.1.11.12199 DYNAMIC		
Code System(s): LanguageAbilityProficiency 2.16.840.1.113883.5.61		
Description: A value representing the level of proficiency in a language.		
Code	Code System	Print Name
E	LanguageAbilityProficiency	Excellent
F	LanguageAbilityProficiency	Fair
G	LanguageAbilityProficiency	Good
P	LanguageAbilityProficiency	Poor

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1628 3.2.1.7 RecordTarget Example

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Figure 17: US Realm recordTarget example

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```

<recordTarget>
  <patientRole>
    <!-- Internal id using HL7 example OID. -->
    <id extension="999.1" root="2.16.840.1.113883.19"/>

    <!-- Fake Social Security Number using the actual SSN OID. -->
    <id extension="444-33-3333" root="2.16.840.1.113883.4.1"/>

    <!-- Identifier based on the person's Direct Address which is a secure
         and trusted mechanism for identifying
         a person discretely. The toot of the id is the OID of the HISP
         Assigning Authority for the Direct Address-->
    <id extension="adameveryman@direct.sampleHISP.com"
        root="2.16.123.123.12345.1234"/>

    <addr use="HP">
      <!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->
      <streetAddressLine>2222 Home Street</streetAddressLine>
      <city>Boston</city>
      <state>MA</state>
      <postalCode>02368</postalCode>
      <!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->
      <country>US</country>
    </addr>
    <!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->
    <telecom value="tel:(555)555-2004" use="HP"/>
    <!-- A secure e-mail address appropriate for healthcare communications-->
    <telecom value="mailto:adameveryman@direct.sampleHISP.com" use="H"/>
  <patient>
    <name use="L">
      <!-- L is "Legal" from HL7 EntityNameUse 2.16.840.1.113883.5.45 -->
      <prefix>Mr.</prefix>
      <given>Adam</given>
      <given>A.</given>
      <given qualifier="CL">Ace</given>
      <family>Everyman</family>
    </name>
    <administrativeGenderCode code="M"
      codeSystem="2.16.840.1.113883.5.1" displayName="Male"/>
    <birthTime value="19551125"/>
    <maritalStatusCode code="M" displayName="Married"
      codeSystem="2.16.840.1.113883.5.2"
      codeSystemName="MaritalStatusCode"/>
    <religiousAffiliationCode code="1013"
      displayName="Christian (non-Catholic, non-specific)"
      codeSystemName="HL7 Religious Affiliation"
      codeSystem="2.16.840.1.113883.1.11.19185"/>
    <raceCode code="2106-3" displayName="White"
      codeSystem="2.16.840.1.113883.6.238"
      codeSystemName="Race & Ethnicity - CDC"/>
    <ethnicGroupCode code="2186-5" displayName="Not Hispanic or Latino"
      codeSystem="2.16.840.1.113883.6.238"
      codeSystemName="Race & Ethnicity - CDC"/>
  </patient>

```

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```
<birthplace>
  <place>
    <addr>
      <city>Pointe-Claire</city>
      <state>QC</state>
      <postalCode>H9R 1E4</postalCode>
      <country>CAN</country>
    </addr>
  </place>
</birthplace>
<languageCommunication>
  <languageCode code="fr-CN"/>
  <modeCode code="RWR" displayName="Recieve Written"
    codeSystem="2.16.840.1.113883.5.60"
    codeSystemName="LanguageAbilityMode"/>
  <preferenceInd value="true"/>
</languageCommunication>
</patient>
<providerOrganization>
  <!-- This is the patient's preferred provider organization. -->
  <!-- Internal id -->
  <id extension="999.2" root="2.16.840.1.113883.19"/>
  <!-- NPI for the organization -->
  <id extension="1234567890" root="2.16.840.1.113883.4.6"/>
  <name>Good Health Internal Medicine</name>
  <telecom use="WP" value="tel:(781)555-1212"/>
  <addr>
    <streetAddressLine>100 Health Drive</streetAddressLine>
    <city>Boston</city>
    <state>MA</state>
    <postalCode>02368</postalCode>
    <country>USA</country>
  </addr>
</providerOrganization>
</patientRole>
</recordTarget>
```

1720

1721 3.2.2 Author

1722
1723

The author element represents the creator of the clinical document. The author may be a device, or a person. The person is the patient or the patient's advocate.

1724

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

1725

a. Such authors **SHALL** contain exactly one [1..1] **time** (CONF:5445).

1726

i. The content **SHALL** be a conformant [US Realm Date and Time](#)

1727

([DTM.US.FIELDDED](#)) (2.16.840.1.113883.10.20.22.5.4) (CONF:16866).

1728

b. Such authors **SHALL** contain exactly one [1..1] **assignedAuthor**

1729

(CONF:5448).

1730

i. This assignedAuthor **SHALL** contain exactly one [1..1] **id** (CONF:5449)

1731

such that it

- 1732 1. The id **SHOULD** utilize the combined @root and @extension
 1733 attributes to record the person's or the device's identity in a
 1734 secure, trusted, and unique way. (**NEWCONF:xxxxxx**).
- 1735 ii. When the author is a person, this assignedAuthor **SHALL** contain one
 1736 [1..1] code (**NEWCONF:xxxxxx**).
- 1737 1. The code, **SHALL** contain exactly one [1..1] @code, which
 1738 **SHOULD** be selected from the
 1739 PersonalRelationshipRoleType value set plus
 1740 ResponsibleParty (**NEWCONF:xxxxxx**)
- 1741
- 1742 iii. This assignedAuthor **SHALL** contain at least one [1..*] addr
 1743 (CONF:5452).
- 1744 1. The content **SHALL** be a conformant [US Realm Address](#)
 1745 ([AD.US.FIELDDED](#)) (2.16.840.1.113883.10.20.22.5.2)
 1746 (CONF:16871).
- 1747 iv. This assignedAuthor **SHALL** contain at least one [1..*] telecom
 1748 (CONF:5428).
- 1749 1. Such telecoms **SHOULD** contain exactly one [1..1] @use, which
 1750 **SHALL** be selected from ValueSet [Telecom Use \(US Realm](#)
 1751 [Header\) 2.16.840.1.113883.11.20.9.20 DYNAMIC](#)
 1752 (CONF:7995).
- 1753 v. There **SHALL** be exactly one assignedAuthor/assignedPerson or
 1754 exactly one assignedAuthor/assignedAuthoringDevice (CONF:16790).
- 1755 vi. This assignedAuthor **SHOULD** contain zero or one [0..1]
 1756 assignedPerson (CONF:5430).
- 1757 1. The assignedPerson, if present, **SHALL** contain at least one
 1758 [1..*] name (CONF:16789).
- 1759 a. The content **SHALL** be a conformant [US Realm Person](#)
 1760 [Name \(PN.US.FIELDDED\)](#)
 1761 (2.16.840.1.113883.10.20.22.5.1.1) (CONF:16872).
- 1762 vii. This assignedAuthor **SHOULD** contain zero or one [0..1]
 1763 assignedAuthoringDevice (CONF:16783).
- 1764 1. The assignedAuthoringDevice, if present, **SHALL** contain
 1765 exactly one [1..1] manufacturerModelName (CONF:16784).
- 1766 2. The assignedAuthoringDevice, if present, **SHALL** contain
 1767 exactly one [1..1] softwareName (CONF:16785).

1768

Figure 18: Person author example

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```
<author>
  <time value="20121126145000-0500"/>
  <assignedAuthor>
    <!-- Internal id using HL7 example OID. -->
    <id extension="999.1" root="2.16.840.1.113883.19"/>
    <!-- The PAN IG includes conformance constraints on the code element.
         This author/assignedAuthor/code/@code must be a code from one of
         two value sets:
         PersonalRelationshipRoleType or ResponsibleParty. Both of these
         value sets include codes from the HL7 RoleCode Code System.
    -->
    <code code="SELF" displayName="Self"
          codeSystem="2.16.840.1.113883.5.111"
          codeSystemName="HL7 Role code"/>
    <addr use="HP">
      <!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->
      <streetAddressLine>2222 Home Street</streetAddressLine>
      <city>Boston</city>
      <state>MA</state>
      <postalCode>02368</postalCode>
      <!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->
      <country>US</country>
    </addr>
    <!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->
    <telecom value="tel:(555)555-2004" use="HP"/>
    <assignedPerson>
      <name>
        <given>Adam</given>
        <family>Everyman</family>
      </name>
    </assignedPerson>
  </assignedAuthor>
</author>
```

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Figure 19: Device author example

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```

<author>
  <time value="20121126145000-0500"/>
  <assignedAuthor>
    <id extension="777.11" root="2.16.840.1.113883.19"/>
    <addr nullFlavor="NA"/>
    <telecom nullFlavor="NA"/>
    <assignedAuthoringDevice>
      <manufacturerModelName>ACME PHR</manufacturerModelName>
      <softwareName>MyPHR v1.0</softwareName>
    </assignedAuthoringDevice>
    <representedOrganization>
      <id extension="999" root="1.2.3.4.5.6.7.8.9.12345"/>
      <name>ACME PHR Solutions, Inc.</name>
      <telecom use="WP" value="tel:123-123-12345"/>
      <addr>
        <streetAddressLine>4 Future Way</streetAddressLine>
        <city>Provenance</city>
        <state>RI</state>
        <postalCode>02919</postalCode>
      </addr>
    </representedOrganization>
  </assignedAuthor>
</author>

```

1827

1828 3.2.3 DataEnterer

1829 The dataEnterer element represents the person who transferred the content, written
1830 or dictated by someone else, into the clinical document. The guiding rule of thumb is
1831 that an author provides the content found within the header or body of the document,
1832 subject to their own interpretation, and the dataEnterer adds that information to the
1833 electronic system. In other words, a dataEnterer transfers information from one
1834 source to another (e.g., transcription from paper form to electronic system).

1835 37. **MAY** contain zero or one [0..1] dataEnterer (CONF:5441).

1836 a. The dataEnterer, if present, **SHALL** contain exactly one [1..1]
1837 assignedEntity (CONF:5442).

1838 i. This assignedEntity **SHALL** contain at least one [1..*] id (CONF:5443).

1839 1. Each id **SHOULD** utilize the combined @root and @extension
1840 attributes to record a patient's identity in a secure, trusted,
1841 and unique way. **(NEWCONF:xxxxx)**.

1842 ii. This assignedEntity **SHALL** contain at least one [1..*] addr
1843 (CONF:5460).

1844 1. The content of addr **SHALL** be a conformant [US Realm Address](#)
1845 [\(AD.US.FIELDDED\)](#) (2.16.840.1.113883.10.20.22.5.2)
1846 (CONF:10417).

1847 iii. This assignedEntity **SHALL** contain at least one [1..*] telecom
1848 (CONF:5466).

- 1849 1. Such telecoms **SHOULD** contain exactly one [1..1] @use, which
 1850 **SHALL** be selected from ValueSet [Telecom Use \(US Realm](#)
 1851 [Header\) 2.16.840.1.113883.11.20.9.20 DYNAMIC](#)
 1852 (CONF:7996).
- 1853 iv. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson**
 1854 (CONF:5469).
- 1855 1. This assignedPerson **SHALL** contain at least one [1..*] **name**
 1856 (CONF:5470).
- 1857 a. The content of name **SHALL** be a conformant [US Realm](#)
 1858 [Person Name \(PN.US.FIELDDED\)](#)
 1859 (2.16.840.1.113883.10.20.22.5.1.1) (CONF:10418).
- 1860 v. This assignedEntity **MAY** contain zero or one [0..1] code which **SHOULD**
 1861 be selected from value set PersonalRelationshipRoleType plus
 1862 ResponsibleParty value set (**NEWCONF:xxxxx**).

1864 Figure 20: dataEnterer example

```

1865 <dataEnterer>
1866   <assignedEntity>
1867     <!-- Internal id using HL7 example OID. -->
1868     <id extension="999.1" root="2.16.840.1.113883.19"/>
1869     <addr use="HP">
1870       <!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->
1871       <streetAddressLine>2222 Home Street</streetAddressLine>
1872       <city>Boston</city>
1873       <state>MA</state>
1874       <postalCode>02368</postalCode>
1875       <!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->
1876       <country>US</country>
1877     </addr>
1878     <!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->
1879     <telecom value="tel:(555)555-2004" use="HP"/>
1880     <assignedPerson>
1881       <name>
1882         <given>Adam</given><family>Everyman</family>
1883       </name>
1884     </assignedPerson>
1885   </assignedEntity>
1886 </dataEnterer>
  
```

1887

1888 3.2.4 Informant

1889 The informant element describes the source of the information in a medical document.

1890 Assigned health care providers may be a source of information when a document is
 1891 created. (e.g., a nurse's aide who provides information about a recent significant health
 1892 care event that occurred within an acute care facility.) In these cases, the
 1893 assignedEntity element is used.

1894 When the informant is a personal relation, that informant is represented in the
 1895 relatedEntity element. The code element of the relatedEntity describes the

1896 relationship between the informant and the patient. The relationship between the
1897 informant and the patient needs to be described to help the receiver of the clinical
1898 document understand the information in the document.

1899 38. **MAY** contain zero or more [0..*] informant (CONF:8001).

1900 a. **SHALL** contain exactly one [1..1] assignedEntity OR exactly one [1..1]
1901 relatedEntity (CONF:8002).

1902 i. **SHOULD** contain at least one [1..*] addr (CONF:8220).

1903 1. The content of addr **SHALL** be a conformant [US Realm Address](#)
1904 [\(AD.US.FIELDDED\)](#) (2.16.840.1.113883.10.20.22.5.2)
1905 (CONF:10419).

1906 ii. **SHALL** contain exactly one [1..1] assignedPerson OR exactly one [1..1]
1907 relatedPerson (CONF:8221).

1908 1. **SHALL** contain at least one [1..*] name (CONF:8222).

1909 a. The content of name **SHALL** be a conformant [US Realm](#)
1910 [Person Name \(PN.US.FIELDDED\)](#)
1911 (2.16.840.1.113883.10.20.22.5.1.1) (CONF:10420).

1912 iii. This assignedEntity **MAY** contain zero or one [0..1] code which **SHOULD**
1913 be selected from coding system NUCC Health Care Provider
1914 Taxonomy 2.16.840.1.113883.6.101 for an assigned person who is a
1915 care provider or which **SHOULD** be selected from value set
1916 PersonalRelationshipRoleType plus ResponsibleParty value set
1917 for a relatedPerson (**NEWCONF:xxxxx**).

1918 iv. **SHOULD** contain zero or more [0..*] id (CONF:9945).

1919 1. If assignedEntity/id is for a provider then this id, **SHOULD**
1920 include zero or one [0..1] id where id/@root
1921 ="2.16.840.1.113883.4.6" National Provider Identifier
1922 [\(CONF:9946\)](#).

1923 2. If assignedEntity/id is for a related person then this id,
1924 **SHOULD** include zero or one [0..1] id where the id utilizes the
1925 combined @root and @extension attributes to record a
1926 patient's identity in a secure, trusted, and unique way.
1927 (**NEWCONF:xxxxx**).

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Figure 21: Informant with assignedEntity example

```
<informant>
  <assignedEntity>
    <!-- Internal id using HL7 example OID. -->
    <id extension="999.1" root="2.16.840.1.113883.19"/>
    <addr use="HP">
      <!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->
      <streetAddressLine>2222 Home Street</streetAddressLine>
      <city>Boston</city>
      <state>MA</state>
      <postalCode>02368</postalCode>
      <!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->
      <country>US</country>
    </addr>
    <!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->
    <telecom value="tel:(555)555-2004" use="HP"/>
    <assignedPerson>
      <name>
        <given>Adam</given><family>Everyman</family>
      </name>
    </assignedPerson>
  </assignedEntity>
</informant>
```

1952

1953 3.2.5 Custodian

1954 The custodian element represents the organization that is in charge of maintaining the
1955 document. The custodian is the steward that is entrusted with the care of the
1956 document. Every CDA document has exactly one custodian. The custodian participation
1957 satisfies the CDA definition of Stewardship. Because CDA is an exchange standard and
1958 may not represent the original form of the authenticated document (e.g., CDA could
1959 include scanned copy of original), the custodian represents the steward of the original
1960 source document. The custodian may be the document originator, a health information
1961 exchange, or other responsible party.

- 1962 39. **SHALL** contain exactly one [1..1] **custodian** (CONF:5519).
- 1963 a. This custodian **SHALL** contain exactly one [1..1] **assignedCustodian**
1964 (CONF:5520).
 - 1965 i. This assignedCustodian **SHALL** contain exactly one [1..1]
1966 **representedCustodianOrganization** which may be the person
1967 when the document is not maintained by an organization.
1968 **(NEWCONF:xxxxx)**.
 - 1969 1. This representedCustodianOrganization **SHALL** contain at least
1970 one [1..*] **id** (CONF:5522).
 - 1971 a. Such ids **SHOULD** utilize the combined **@root** and
1972 **@extension** attributes to record the custodian
1973 organization's identity in a secure, trusted, and unique
1974 way. **(NEWCONF:xxxxx)**.

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2. This representedCustodianOrganization **SHALL** contain exactly one [1..1] **name** (CONF:5524).
 3. This representedCustodianOrganization **SHALL** contain exactly one [1..1] **telecom** (CONF:5525).
 - a. This telecom **SHOULD** contain exactly one [1..1] **@use**, which **SHALL** be selected from ValueSet [Telecom Use \(US Realm Header\)](#) [2.16.840.1.113883.11.20.9.20 DYNAMIC](#) (CONF:7998).
 4. This representedCustodianOrganization **SHALL** contain at least one [1..*] **addr** (CONF:5559).
 - a. The content of addr **SHALL** be a conformant [US Realm Address \(AD.US.FIELDDED\)](#) (2.16.840.1.113883.10.20.22.5.2) (CONF:10421).

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Figure 22: Custodian examples

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```

<custodian>
  <assignedCustodian>
    <representedCustodianOrganization>
      <!-- Internal id -->
      <id extension="999.3" root="2.16.840.1.113883.19"/>
      <name>MyPersonalHealthRecord.Com</name>
      <telecom value="tel:(555)555-1212" use="WP"/>
      <addr use="WP">
        <streetAddressLine>123 Boylston Street</streetAddressLine>
        <city>Blue Hill</city>
        <state>MA</state>
        <postalCode>02368</postalCode>
        <country>USA</country>
      </addr>
    </representedCustodianOrganization>
  </assignedCustodian>
</custodian>

<custodian>
  <assignedCustodian>
    <representedCustodianOrganization>
      <!-- This example assumes that Ned is using a Desktop PHR application.
           There is no larger system, just the application that Ned runs on
           his desktop.
      -->
      <!-- Internal id -->
      <id extension="999.8" root="2.16.840.1.113883.19"/>
      <name>Ned Nuclear</name>
      <telecom value="tel:(555)555-5001" use="WP"/>
      <addr use="HP">
        <!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->
        <streetAddressLine>6666 Home Street</streetAddressLine>
        <city>Boston</city>
        <state>MA</state>
        <postalCode>02368</postalCode>
        <country>US</country>
        <!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->
      </addr>
    </representedCustodianOrganization>
  </assignedCustodian>
</custodian>

```

2032

2033 3.2.6 InformationRecipient

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The informationRecipient element records the intended recipient of the information at the time the document is created. For example, in cases where the intended recipient of the document is the patient's health chart, set the receivedOrganization to be the scoping organization for that chart.

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

- 2039 a. The informationRecipient, if present, **SHALL** contain exactly one [1..1]
2040 **intendedRecipient** (CONF:5566).
- 2041 i. This intendedRecipient **SHOULD** contain atleast one [1..*] id
2042 **(NEWCONF:xxxxx)**.
- 2043 1. Such ids **SHOULD** utilize the combined @root and @extension
2044 attributes to record the information recipient's identity in a
2045 secure, trusted, and unique way. **(NEWCONF:xxxxx)**.
- 2046 2. For a provider then this id, **SHOULD** include zero or one [0..1]
2047 id where id/@root ="2.16.840.1.113883.4.6" National Provider
2048 Identifier **(NEWCONF:xxxxx)**.
- 2049 ii. This intendedRecipient **MAY** contain zero or one [0..1]
2050 **informationRecipient** (CONF:5567).
- 2051 1. The informationRecipient, if present, **SHALL** contain at least
2052 one [1..*] **name** (CONF:5568).
- 2053 a. The content of name **SHALL** be a conformant [US Realm](#)
2054 [Person Name \(PN.US.FIELDDED\)](#)
2055 (2.16.840.1.113883.10.20.22.5.1.1) (CONF:10427).
- 2056 iii. This intendedRecipient **MAY** contain zero or one [0..1]
2057 **receivedOrganization** (CONF:5577).
- 2058 1. The receivedOrganization, if present, **SHALL** contain exactly
2059 one [1..1] **name** (CONF:5578).

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Figure 23: informationRecipient examples

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```
<!-- The document is intended for multiple recipients,
Adam himself and his PCP physician.
-->

<informationRecipient>
  <intendedRecipient>
    <!-- Internal id using HL7 example OID. -->
    <id extension="999.1" root="2.16.840.1.113883.19"/>
    <!-- Identifier based on the person's Direct Address which is a secure
and trusted mechanism for identifying a person discretely.
The root of the id is the OID of the HISP Assigning Authority
for the Direct Address-->
    <id extension="adameveryman@direct.sampleHISP.com"
root="2.16.123.123.12345.1234"/>
  <informationRecipient>
    <name>
      <given>Adam</given><family>Everyman</family>
    </name>
  </informationRecipient>
  <receivedOrganization>
    <!-- Internal id -->
    <id extension="999.3" root="2.16.840.1.113883.19"/>
    <name>MyPersonalHealthRecord.Com</name>
  </receivedOrganization>
</intendedRecipient>
</informationRecipient>

<informationRecipient>
  <intendedRecipient>
    <!-- Internal id using HL7 example OID. -->
    <id extension="999.4" root="2.16.840.1.113883.19"/>
    <!-- The physician's NPI number -->
    <id extension="1122334455" root="2.16.840.1.113883.4.6"/>
    <!-- The physician's Direct Address -->
    <!-- Identifier based on the person's Direct Address which is a secure
and trusted mechanism for identifying a person discretely.
The root of the id is the OID of the HISP Assigning Authority for
the Direct Address-->
    <id extension="DrP@direct.sampleHISP2.com" root="2.16.123.123.12345.4321"/>
    <telecom use="WP" value="tel:(781)555-1212"/>
    <telecom use="WP" value="mailto:DrP@direct.sampleHISP2.com"/>
  <informationRecipient>
    <name>
      <prefix>Dr.</prefix>
      <given>Patricia</given>
      <family>Primary</family>
    </name>
  </informationRecipient>
  <receivedOrganization>
    <!-- Internal id -->
    <id extension="999.2" root="2.16.840.1.113883.19"/>
    <!-- NPI for the organization -->
    <id extension="1234567890" root="2.16.840.1.113883.4.6"/>
    <name>Good Health Internal Medicine</name>
    <telecom use="WP" value="tel:(781)555-1212"/>
  </receivedOrganization>
</informationRecipient>
```


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```
<addr>  
  <streetAddressLine>100 Health Drive</streetAddressLine>  
  <city>Boston</city>  
  <state>MA</state>  
  <postalCode>02368</postalCode>  
  <country>USA</country>  
</addr>  
</receivedOrganization>  
</intendedRecipient>  
</informationRecipient>
```

2127 3.2.7 LegalAuthenticator

2128 In a patient authored document, the legalAuthenticator identifies the single person
2129 legally responsible for the document and must be present if the document has been
2130 legally authenticated. (Note that per the following section, there may also be one or
2131 more document authenticators.)

2132 Based on local practice, patient authored documents may be provided without legal
2133 authentication. This implies that a patient authored document that does not contain
2134 this element has not been legally authenticated.

2135 The act of legal authentication requires a certain privilege be granted to the legal
2136 authenticator depending upon local policy. All patient documents have the potential for
2137 legal authentication, given the appropriate legal authority.

2138 Local policies **MAY** choose to delegate the function of legal authentication to a device or
2139 system that generates the document. In these cases, the legal authenticator is the
2140 person accepting responsibility for the document, not the generating device or system.

2141 Note that the legal authenticator, if present, must be a person.

2142 41. **SHOULD** contain zero or one [0..1] legalAuthenticator (CONF:5579).

- 2143 a. The legalAuthenticator, if present, **SHALL** contain exactly one [1..1] time
2144 (CONF:5580).
 - 2145 i. The content **SHALL** be a conformant [US Realm Date and Time](#)
2146 ([DTM.US.FIELDDED](#)) (2.16.840.1.113883.10.20.22.5.4) (CONF:16873).
- 2147 b. The legalAuthenticator, if present, **SHALL** contain exactly one [1..1]
2148 signatureCode (CONF:5583).
 - 2149 i. This signatureCode **SHALL** contain exactly one [1..1] @code="S"
2150 (CodeSystem: Participationsignature
2151 2.16.840.1.113883.5.89) (CONF:5584).
- 2152 c. The legalAuthenticator, if present, **SHALL** contain exactly one [1..1]
2153 assignedEntity (CONF:5585).
 - 2154 i. This assignedEntity **SHALL** contain at least one [1..*] id (CONF:5586).
 - 2155 1. Such ids **SHOULD** utilize the combined @root and @extension
2156 attributes to record the legal authenticator's identity in a
2157 secure, trusted, and unique way. (**NEWCONF:xxxxx**).

- 2158 ii. This assignedEntity **MAY** contain zero or one [0..1] **code**, which
 2159 **SHOULD** be selected from the PersonalRelationshipRoleType plus
 2160 ResponsibleParty value set (**NEWCONF:xxxxx**).
- 2161 iii. This assignedEntity **SHALL** contain at least one [1..*] **addr**
 2162 (CONF:5589).
- 2163 1. The content of addr **SHALL** be a conformant [US Realm Address](#)
 2164 ([AD.US.FIELDDED](#)) (2.16.840.1.113883.10.20.22.5.2)
 2165 (CONF:10429).
- 2166 iv. This assignedEntity **SHALL** contain at least one [1..*] **telecom**
 2167 (CONF:5595).
- 2168 1. Such telecoms **SHOULD** contain exactly one [1..1] **@use**, which
 2169 **SHALL** be selected from ValueSet [Telecom Use \(US Realm](#)
 2170 [Header\)](#) [2.16.840.1.113883.11.20.9.20 DYNAMIC](#)
 2171 (CONF:7999).
- 2172 v. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson**
 2173 (CONF:5597).
- 2174 1. This assignedPerson **SHALL** contain at least one [1..*] **name**
 2175 (CONF:5598).
- 2176 a. The content of name **SHALL** be a conformant [US Realm](#)
 2177 [Person Name \(PN.US.FIELDDED\)](#)
 2178 (2.16.840.1.113883.10.20.22.5.1.1) (CONF:10430).

2179 **Figure 24: legalAuthenticator example**

```

2180 <legalAuthenticator>
2181   <time value="20121126145000-0500"/>
2182   <signatureCode code="S"/>
2183   <assignedEntity>
2184     <!-- Internal id using HL7 example OID. -->
2185     <id extension="999.1" root="2.16.840.1.113883.19"/>
2186     <addr use="HP">
2187       <!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->
2188       <streetAddressLine>2222 Home Street</streetAddressLine>
2189       <city>Boston</city>
2190       <state>MA</state>
2191       <postalCode>02368</postalCode>
2192       <!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->
2193       <country>US</country>
2194     </addr>
2195     <!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->
2196     <telecom value="tel:(555)555-2004" use="HP"/>
2197     <assignedPerson>
2198       <name>
2199         <given>Adam</given><family>Everyman</family>
2200       </name>
2201     </assignedPerson>
2202   </assignedEntity>
2203 </legalAuthenticator>

```

2204

2205 3.2.8 Authenticator

2206 The authenticator identifies a participant or participants who attested to the accuracy
2207 of the information in the document.

2208 42. **MAY** contain zero or more [0..*] **authenticator** (CONF:5607).

- 2209 a. The authenticator, if present, **SHALL** contain exactly one [1..1] **time**
2210 (CONF:5608).
 - 2211 i. The content **SHALL** be a conformant [US Realm Date and Time](#)
2212 ([DTM.US.FIELDDED](#)) (2.16.840.1.113883.10.20.22.5.4) (CONF:16874).
- 2213 b. The authenticator, if present, **SHALL** contain exactly one [1..1]
2214 **signatureCode** (CONF:5610).
 - 2215 i. This signatureCode **SHALL** contain exactly one [1..1] **@code="S"**
2216 (CodeSystem: Participationsignature
2217 2.16.840.1.113883.5.89) (CONF:5611).
- 2218 c. The authenticator, if present, **SHALL** contain exactly one [1..1]
2219 **assignedEntity** (CONF:5612).
 - 2220 i. This assignedEntity **SHALL** contain at least one [1..*] **id** (CONF:5613).
 - 2221 1. Such ids **SHOULD** utilize the combined **@root** and **@extension**
2222 attributes to record the authenticator's identity in a secure,
2223 trusted, and unique way. (**NEWCONF:xxxxx**).
 - 2224 ii. This assignedEntity **SHOULD** contain zero or one [0..1] **code**
2225 (**NEWCONF:xxxxx**).
 - 2226 1. The code **SHOULD** be selected from value set
2227 PersonalRelationshipRoleType plus ResponsibleParty
2228 value set (**NEWCONF:xxxxx**).
 - 2229 iii. This assignedEntity **SHALL** contain at least one [1..*] **addr**
2230 (CONF:5616).
 - 2231 1. The content of addr **SHALL** be a conformant [US Realm Address](#)
2232 ([AD.US.FIELDDED](#)) (2.16.840.1.113883.10.20.22.5.2)
2233 (CONF:10425).
 - 2234 iv. This assignedEntity **SHALL** contain at least one [1..*] **telecom**
2235 (CONF:5622).
 - 2236 1. Such telecoms **SHOULD** contain exactly one [1..1] **@use**, which
2237 **SHALL** be selected from ValueSet [Telecom Use \(US Realm](#)
2238 [Header\)](#) 2.16.840.1.113883.11.20.9.20 **DYNAMIC**
2239 (CONF:8000).
 - 2240 v. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson**
2241 (CONF:5624).
 - 2242 1. This assignedPerson **SHALL** contain at least one [1..*] **name**
2243 (CONF:5625).
 - 2244 a. The content of name **SHALL** be a conformant [US Realm](#)
2245 [Person Name \(PN.US.FIELDDED\)](#)
2246 (2.16.840.1.113883.10.20.22.5.1.1) (CONF:10424).

2247

Figure 25: Authenticator example

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```
<authenticator>
  <time value="20121126145000-0500"/>
  <signatureCode code="S"/>
  <assignedEntity>
    <!-- Internal id using HL7 example OID. -->
    <id extension="999.1" root="2.16.840.1.113883.19"/>
    <addr use="HP">
      <!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->
      <streetAddressLine>2222 Home Street</streetAddressLine>
      <city>Boston</city>
      <state>MA</state>
      <postalCode>02368</postalCode>
      <!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->
      <country>US</country>
    </addr>
    <!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->
    <telecom value="tel:(555)555-2004" use="HP"/>
    <assignedPerson>
      <name>
        <given>Adam</given><family>Everyman</family>
      </name>
    </assignedPerson>
  </assignedEntity>
</authenticator>
```

2272

2273 3.2.9 Participant (Support)

2274 The participant element identifies other supporting participants, including parents,
2275 relatives, caregivers, insurance policyholders, guarantors, and other participants
2276 related in some way to the patient.

2277 A supporting person or organization is an individual or an organization with a
2278 relationship to the patient. A supporting person who is playing multiple roles would be
2279 recorded in multiple participants (e.g., emergency contact and next-of-kin)

2280 43. **MAY** contain zero or more [0..*] **participant** (CONF:10003).

- 2281 a. The participant, if present, **MAY** contain zero or one [0..1] **time**
2282 (CONF:10004).
- 2283 b. Such participants, if present, **SHALL** have an associatedPerson or
2284 scopingOrganization element under participant/associatedEntity
2285 (CONF:10006).
- 2286 c. Unless otherwise specified by the document specific header constraints,
2287 when participant/@typeCode is IND, associatedEntity/@classCode **SHALL** be
2288 selected from ValueSet 2.16.840.1.113883.11.20.9.33 INDRoleclassCodes
2289 **STATIC** 2011-09-30 (CONF:10007).

2290

Table 20: IND Role classCode Value Set

Value Set: INDRoleclassCodes 2.16.840.1.113883.11.20.9.33 STATIC 2011-09-30		
Code System(s): RoleClass 2.16.840.1.113883.5.110		
Code	Code System	Print Name
PRS	RoleClass	personal relationship
NOK	RoleClass	next of kin
CAREGIVER	RoleClass	caregiver
AGNT	RoleClass	agent
GUAR	RoleClass	guarantor
ECON	RoleClass	emergency contact

2291

2292

Figure 26: Participant example for a supporting person

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```

<participant typeCode='IND'>
  <time xsi:type="IVL_TS">
    <low value="19551125"/>
    <high value="20121126"/>
  </time>
  <associatedEntity classCode='NOK'>
    <code code='MTH' codeSystem='2.16.840.1.113883.5.111' />
    <addr>
      <streetAddressLine>17 Daws Rd.</streetAddressLine>
      <city>Blue Bell</city>
      <state>MA</state>
      <postalCode>02368</postalCode>
      <country>US</country>
    </addr>
    <telecom value='tel:(555)555-2006' use='WP' />
    <associatedPerson>
      <name>
        <prefix>Mrs.</prefix>
        <given>Martha</given>
        <family>Mum</family>
      </name>
    </associatedPerson>
  </associatedEntity>
</participant>

```

2317

2318 3.2.10 InFulfillmentOf

2319

The inFulfillmentOf element represents orders that are fulfilled by this document.

2320

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

2321

a. The inFulfillmentOf, if present, **SHALL** contain exactly one [1..1] order (CONF:9953).

2322

2323

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

2324

1. Such ids **MAY** represent a scheduled appointment or service event in a practice management system (**NEWCONF:xxxxx**).

2325

2326 3.2.11 DocumentationOf/serviceEvent

2327 The main activity being described by a Patient Authored Note is the person's health
2328 care, health practices and relevant health history over a period of time. This is shown
2329 by setting the value of
2330 ClinicalDocument/documentationOf/serviceEvent/@classCode to "PCPR" (care
2331 provision). The ClinicalDocument/documentationOf/serviceEvent/effectiveTime
2332 indicates the span of time documented in the note. Additional data from outside this
2333 duration may also be included if it is relevant to care documented during the covered
2334 time range (e.g. A document covering this year may include information about a
2335 condition resolved several years ago which requires annual screening).

2336 **NOTE:** Implementations originating a Patient Authored Note should take care to
2337 indicate the time span being documented. For example:

- 2338 • When a patient fills out a form providing relevant health history prior to an
2339 initial visit to a new doctor, the span of time being documented might be from
2340 birth to the present.
- 2341 • When a patient is authoring a note to support an annual examination, it might
2342 cover just the prior year.
- 2343 • When a patient is going for a sick visit, the time span of the note may cover only
2344 a few days.

2345 2. **SHALL** contain exactly one [1..1] **documentationOf** (CONF:8452).

2346 a. This **documentationOf** **SHALL** contain exactly one [1..1] **serviceEvent**
2347 (CONF:8480).

2348 i. This **serviceEvent** **SHALL** contain exactly one [1..1]
2349 **@classCode**="PCPR" Provision of Care indicating the person's health
2350 care, health practices and relevant health history (CodeSystem:
2351 HL7ActClass 2.16.840.1.113883.5.6) (CONF:8453).

2352 ii. This **serviceEvent** **MAY** contain one [1..1] **code** (**NEWCONF:xxxxx**).

2353 1. The **code**, **SHOULD** contain exactly one [1..1] **@code**, which
2354 **SHOULD** be selected from a value set established by the
2355 document-level template for a specific type of Patient
2356 Authored note. (**NEWCONF:xxxxx**)

2357 iii. This **serviceEvent** **SHALL** contain exactly one [1..1] **effectiveTime**
2358 (CONF:8481).

2359 1. This **effectiveTime** **SHALL** contain exactly one [1..1] **low**
2360 (CONF:8454).

2361 2. This **effectiveTime** **SHALL** contain exactly one [1..1] **high**
2362 (CONF:8455).

2363 iv. This **serviceEvent** **SHOULD** contain zero or more [0..*] **performer**
2364 (CONF:8482).

2365 1. **serviceEvent/performer** represents the healthcare
2366 providers, allied health professionals or other individuals
2367 involved in the current or pertinent historical care of the
2368 patient during the time span covered by the document
2369 (**NEWCONF:xxxxx**).

- 2370 2. Such performers **SHALL** contain exactly one [1..1]
 2371 @typeCode="PRF" Participation physical performer
 2372 (CodeSystem: HL7ParticipationType
 2373 2.16.840.1.113883.5.90) (CONF:8458).
- 2374 3. Such performers **MAY** contain exactly one [1..1]
 2375 **functionCode**.
- 2376 a. The **functionCode** **SHALL** be selected from value set
 2377 ParticipationType 2.16.840.1.113883.1.11.10901
 2378 **(NEWCONF:xxxxxx)**.
- 2379 b. When indicating the performer was the primary care
 2380 physician the functionCode shall be ="PCP"
 2381 **(NewCONF:xxxxxx)**
- 2382 4. Such performers **MAY** contain zero or more [0..1]
 2383 **assignedEntity** (CONF:8459).
- 2384 a. This assignedEntity **SHALL** contain at least one [1..*] **id**
 2385 (CONF:8460).
- 2386 i. **MAY** include zero or one [0..1] id where id/@root
 2387 ="2.16.840.1.113883.4.6" National Provider
 2388 Identifier **(NEWCONF:xxxxxx)**.
- 2389 ii. **MAY** utilize the combined @root and
 2390 @extension attributes to record the
 2391 authenticator's identity in a secure, trusted,
 2392 and unique way. **(NEWCONF:xxxxxx)**.
- 2393
- 2394 b. This assignedEntity **MAY** contain zero or one [0..1]
 2395 **code** (CONF:8461).
- 2396 i. If the assignedEntity is a provider, the code
 2397 **SHOULD** be the NUCC Health Care Provider
 2398 Taxonomy (CodeSystem:
 2399 2.16.840.1.113883.6.101). (See
 2400 <http://www.nucc.org>) **(NEWCONF:xxxxxx)**.
- 2401 ii. If the assignedEntity is an individual, the code
 2402 **SHOULD** be selected from value set Personal
 2403 Relationship Role Type Plus
 2404 ResponsibleParty value set
 2405 **(NEWCONF:xxxxxx)**.

2406

Figure 27: DocumentationOf example

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```
<documentationOf typeCode="DOC">
  <serviceEvent classCode="PCPR">
    <effectiveTime>
      <low value="19551125"/>
      <high value="20121126145000"/>
    </effectiveTime>

    <performer typeCode="PRF">
      <functionCode code="PCP" displayName="Primary Care Provider"
        codeSystem="2.16.840.1.113883.5.88"
        codeSystemName="Participation Function">
        <originalText>Primary Care Provider (PCP)</originalText>
      </functionCode>
      <time>
        <low value="201101"/>
      </time>
      <assignedEntity>
        <!-- Internal id using HL7 example OID. -->
        <id extension="999.4" root="2.16.840.1.113883.19"/>
        <!-- The physician's NPI number -->
        <id extension="1122334455" root="2.16.840.1.113883.4.6"/>
        <!-- Type of Physician -->
        <code code="207R00000X" displayName="Internal Medicine"
          codeSystemName="NUCC Health Care Provider Taxonomy"
          codeSystem="2.16.840.1.113883.6.101"/>
        <addr>
          <streetAddressLine>100 Health Drive</streetAddressLine>
          <city>Boston</city>
          <state>MA</state>
          <postalCode>02368</postalCode>
          <country>USA</country>
        </addr>
        <telecom use="WP" value="tel:(781)555-1212"/>
        <assignedPerson>
          <name>
            <prefix>Dr.</prefix>
            <given>Patricia</given>
            <family>Primary</family>
          </name>
        </assignedPerson>
        <representedOrganization>
          <!-- Internal id -->
          <id extension="999.2" root="2.16.840.1.113883.19"/>
          <name>Good Health Internal Medicine</name>
          <telecom use="WP" value="tel:(781)555-1212"/>
          <addr>
            <streetAddressLine>100 Health Drive</streetAddressLine>
            <city>Boston</city>
            <state>MA</state>
            <postalCode>02368</postalCode>
            <country>USA</country>
          </addr>
        </representedOrganization>
      </assignedEntity>
    </performer>
  </serviceEvent>
</documentationOf>
```


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```
<performer typeCode="PRF">
  <functionCode code="PCP" displayName="Primary Care Provider"
    codeSystem="2.16.840.1.113883.5.88"
    codeSystemName="Participation Function">
    <originalText>Primary Care Provider (PCP)</originalText>
  </functionCode>
  <time>
    <low value="1971"/>
    <high value="201101"/>
  </time>
  <assignedEntity>
    <!-- Internal id using HL7 example OID. -->
    <id extension="999.4" root="2.16.840.1.113883.19"/>
    <!-- The physician's NPI number -->
    <id extension="1122334466" root="2.16.840.1.113883.4.6"/>
    <!-- Type of Physician -->
    <code code="207Q00000X" displayName="Family Medicine"
      codeSystemName="NUCC Health Care Provider Taxonomy"
      codeSystem="2.16.840.1.113883.6.101">
      <originalText>General Practitioner</originalText>
    </code>
    <addr>
      <streetAddressLine>103 Rue Champlain</streetAddressLine>
      <city>Roxboro</city>
      <state>QC</state>
      <postalCode>H8Y 3S6</postalCode>
      <country>CAN</country>
    </addr>
    <telecom use="WP" value="tel:514-555-1212"/>
    <assignedPerson>
      <name>
        <prefix>Dr.</prefix>
        <given>Fay</given>
        <family>Family</family>
      </name>
    </assignedPerson>
    <representedOrganization>
      <!-- Internal id -->
      <id extension="999.5" root="2.16.840.1.113883.19"/>
      <name>Roxboro Family Practice</name>
      <telecom use="WP" value="tel:514-555-1212"/>
      <addr>
        <streetAddressLine>103 Rue Champlain</streetAddressLine>
        <city>Roxboro</city>
        <state>QC</state>
        <postalCode>H8Y 3S6</postalCode>
        <country>CAN</country>
      </addr>
    </representedOrganization>
  </assignedEntity>
</performer>

<performer typeCode="PRF">
  <functionCode code="PCP" displayName="Primary Care Provider"
    codeSystem="2.16.840.1.113883.5.88"
    codeSystemName="Participation Function">
    <originalText>Primary Care Provider (PCP)</originalText>
```

```

2519 </functionCode>
2520 <time>
2521   <low value="19551125"/>
2522   <high value="1971"/>
2523 </time>
2524 <assignedEntity>
2525   <!-- Internal id using HL7 example OID. -->
2526   <id extension="999.6" root="2.16.840.1.113883.19"/>
2527   <!-- The physician's NPI number -->
2528   <id extension="1122334477" root="2.16.840.1.113883.4.6"/>
2529   <!-- Type of Physician -->
2530   <code code="208000000X" displayName="Pediatrics"
2531     codeSystemName="NUCC Health Care Provider Taxonomy"
2532     codeSystem="2.16.840.1.113883.6.101">
2533     <originalText>Pediatrician</originalText>
2534   </code>
2535   <addr>
2536     <streetAddressLine>10 Rue De Seville</streetAddressLine>
2537     <city>Pointe-Claire</city>
2538     <state>QC</state>
2539     <postalCode>H9R 1E9</postalCode>
2540     <country>CAB</country>
2541   </addr>
2542   <telecom use="WP" value="tel:514-333-1234"/>
2543   <assignedPerson>
2544     <name>
2545       <prefix>Dr.</prefix>
2546       <given>Karen</given>
2547       <family>Kidder</family>
2548     </name>
2549   </assignedPerson>
2550   <representedOrganization>
2551     <!-- Internal id -->
2552     <id extension="999.7" root="2.16.840.1.113883.19"/>
2553     <name>Pointe-Claire Pediatrics</name>
2554     <telecom use="WP" value="tel:514-333-1234"/>
2555     <addr>
2556       <streetAddressLine>10 Rue De Seville</streetAddressLine>
2557       <city>Pointe-Claire</city>
2558       <state>QC</state>
2559       <postalCode>H9R 1E9</postalCode>
2560       <country>CAN</country>
2561     </addr>
2562   </representedOrganization>
2563 </assignedEntity>
2564 </performer>
2565 </serviceEvent>
2566 </documentationOf>

```

2567

2568 3.2.12 Authorization/consent

2569 The header can record information about the patient's consent.

2570 The type of consent (e.g., a consent to perform the related serviceEvent) is conveyed in
2571 consent/code. Consents in the header have been finalized (consent/statusCode must

2572 equal Completed) and should be on file. This specification does not address how Privacy
2573 Consent' is represented, but does not preclude the inclusion of 'Privacy Consent'.

- 2574 45. **MAY** contain zero or more [0..*] **authorization** (CONF:16792) such that it
2575 a. **SHALL** contain exactly one [1..1] **consent** (CONF:16793).
- 2576 i. This consent **MAY** contain zero or more [0..*] **id** (CONF:16794).
 - 2577 ii. This consent **MAY** contain zero or one [0..1] **code** (CONF:16795).
 - 2578 1. The type of consent (e.g., a consent to perform the related
2579 serviceEvent) is conveyed in consent/code (CONF:16796).
 - 2580 iii. This consent **SHALL** contain exactly one [1..1] **statusCode**
2581 (CONF:16797).
 - 2582 1. This statusCode **SHALL** contain exactly one [1..1]
2583 **@code="completed"** Completed (CodeSystem: HL7ActClass
2584 2.16.840.1.113883.5.6) (CONF:16798).

2585 **Figure 28: Procedure note consent example**

```
2586 <authorization typeCode="AUTH">  
2587   <consent classCode="CONS" moodCode="EVN">  
2588     <id root="629deb70-5306-11df-9879-0800200c9a66" />  
2589     <code codeSystem=" 2.16.840.1.113883.6.1" codeSystemName="LOINC"  
2590       code="64293-4" displayName="Procedure consent"/>  
2591     <statusCode code="completed"/>  
2592   </consent>  
2593 </authorization>
```

2594

2595 3.2.13 ComponentOf

2596 The componentOf element contains the encompassing encounter for this document.
2597 The encompassing encounter represents the setting of the clinical encounter during
2598 which the document act(s) or ServiceEvent occurred.

2599 In order to represent providers associated with a specific encounter, they are recorded
2600 within the encompassingEncounter as participants.

2601 In a CCD the encompassingEncounter may be used when documenting a specific
2602 encounter and its participants. All relevant encounters in a CCD may be listed in the
2603 encounters section.

- 2604 46. **MAY** contain zero or one [0..1] **componentOf** (CONF:9955).
- 2605 a. The componentOf, if present, **SHALL** contain exactly one [1..1]
2606 **encompassingEncounter** (CONF:9956).
 - 2607 i. This encompassingEncounter **SHALL** contain at least one [1..*] **id**
2608 (CONF:9959).
 - 2609 ii. This encompassingEncounter **SHALL** contain exactly one [1..1]
2610 **effectiveTime** (CONF:9958).

3.3 US Realm Address (AD.US.FIELDDED)

- 2611 [addr: 2.16.840.1.113883.10.20.22.5.2(open)]
- 2612 Reusable "address" template, designed for use in US Realm CDA Header.
- 2613
- 2614 1. **SHOULD** contain exactly one [1..1] @use, which **SHALL** be selected from ValueSet
 - 2615 [PostalAddressUse 2.16.840.1.113883.1.11.10637](#) **STATIC** 2005-05-01
 - 2616 (CONF:7290).
 - 2617 2. **SHOULD** contain zero or one [0..1] country, where the @code **SHALL** be selected from
 - 2618 ValueSet [CountryValueSet 2.16.840.1.113883.3.88.12.80.63](#) **DYNAMIC**
 - 2619 (CONF:7295).
 - 2620 3. **SHOULD** contain zero or one [0..1] state (ValueSet: [StateValueSet](#)
 - 2621 [2.16.840.1.113883.3.88.12.80.1](#) **DYNAMIC**) (CONF:7293).
 - 2622 a. State is required if the country is US. If country is not specified, its assumed
 - 2623 to be US. If country is something other than US, the state **MAY** be present
 - 2624 but **MAY** be bound to different vocabularies (CONF:10024).
 - 2625 4. **SHALL** contain exactly one [1..1] city (CONF:7292).
 - 2626 5. **SHOULD** contain zero or one [0..1] postalCode (ValueSet: [PostalCodeValueSet](#)
 - 2627 [2.16.840.1.113883.3.88.12.80.2](#) **DYNAMIC**) (CONF:7294).
 - 2628 a. PostalCode is required if the country is US. If country is not specified, its
 - 2629 assumed to be US. If country is something other than US, the postalCode
 - 2630 **MAY** be present but **MAY** be bound to different vocabularies (CONF:10025).
 - 2631 6. **SHALL** contain at least one and not more than 4 **streetAddressLine** (CONF:7291).
 - 2632 7. **SHALL NOT** have mixed content except for white space⁶ (CONF:7296).

Table 21: PostalAddressUse Value Set

Value Set: PostalAddressUse 2.16.840.1.113883.1.11.10637 STATIC 2005-05-01		
Code System(s): AddressUse 2.16.840.1.113883.5.1119		
Code	Code System	Print Name
BAD	AddressUse	bad address
DIR	AddressUse	direct
H	AddressUse	home address
HP	AddressUse	primary home
HV	AddressUse	vacation home
PHYS	AddressUse	physical visit address
PST	AddressUse	postal address
PUB	AddressUse	public
TMP	AddressUse	temporary
WP	AddressUse	work place

2634

⁶ For information on mixed content see Extensible Markup Language (XML) (<http://www.w3.org/TR/2008/REC-xml-20081126/#sec-mixed-content>).

2635 **3.4 US Realm Date and Time (DT.US.FIELDDED)**

2636 [effectiveTime: 2.16.840.1.113883.10.20.22.5.3(open)]

2637 The US Realm Clinical Document Date and Time datatype flavor records date and time
2638 information. If no time zone offset is provided, you can make no assumption about time,
2639 unless you have made a local exchange agreement.

2640 This data type uses the same rules as US Realm Date and Time (DTM.US.FIELDDED),
2641 but is used with the effectiveTime element.

- 2642 1. **SHALL** be precise to the day (CONF:10078).
- 2643 2. **SHOULD** be precise to the minute (CONF:10079).
- 2644 3. **MAY** be precise to the second (CONF:10080).
- 2645 4. If more precise than day, **SHOULD** include time-zone offset (CONF:10081).

2646 **3.5 US Realm Date and Time (DTM.US.FIELDDED)**

2647 [time: 2.16.840.1.113883.10.20.22.5.4(open)]

2648 The US Realm Clinical Document Date and Time datatype flavor records date and time
2649 information. If no time zone offset is provided, you can make no assumption about time,
2650 unless you have made a local exchange agreement.

2651 This data type uses the same rules as US Realm Date and Time (DT.US.FIELDDED),
2652 but is used with the time element.

- 2653 1. **SHALL** be precise to the day (CONF:10127).
- 2654 2. **SHOULD** be precise to the minute (CONF:10128).
- 2655 3. **MAY** be precise to the second (CONF:10129).
- 2656 4. If more precise than day, **SHOULD** include time-zone offset (CONF:10130).

2657 **3.6 US Realm Patient Name (PTN.US.FIELDDED)**

2658 [PN: templateId 2.16.840.1.113883.10.20.22.5.1 (open)]

2659 The US Realm Patient Name datatype flavor is a set of reusable constraints that can be
2660 used for the patient or any other person. It requires a first (given) and last (family)
2661 name. If a patient or person has only one name part (e.g., patient with first name only)
2662 place the name part in the field required by the organization. Use the appropriate
2663 nullFlavor, "Not Applicable" (NA), in the other field.

2664 For information on mixed content see the Extensible Markup Language reference
2665 (<http://www.w3c.org/TR/2008/REC-xml-20081126/>).

- 2666 1. **MAY** contain zero or one [0..1] @use, which **SHALL** be selected from ValueSet
2667 EntityNameUse 2.16.840.1.113883.1.11.15913 **STATIC** 2005-05-01
2668 (CONF:7154).
- 2669 2. **SHALL** contain exactly one [1..1] family (CONF:7159).
 - 2670 a. This family **MAY** contain zero or one [0..1] @qualifier, which **SHALL** be
2671 selected from ValueSet EntityPersonNamePartQualifier
2672 2.16.840.1.113883.11.20.9.26 **STATIC** 2011-09-30 (CONF:7160).
- 2673 3. **SHALL** contain at least one [1..*] given (CONF:7157).

- 2674 a. Such givens **MAY** contain zero or one [0..1] @qualifier, which **SHALL** be
 2675 selected from ValueSet EntityPersonNamePartQualifier
 2676 2.16.840.1.113883.11.20.9.26 **STATIC** 2011-09-30 (CONF:7158).
 2677 b. The second occurrence of given (given[2]) if provided, **SHALL** include middle
 2678 name or middle initial (CONF:7163).
 2679 4. **MAY** contain zero or more [0..*] **prefix** (CONF:7155).
 2680 a. The prefix, if present, **MAY** contain zero or one [0..1] @qualifier, which
 2681 **SHALL** be selected from ValueSet EntityPersonNamePartQualifier
 2682 2.16.840.1.113883.11.20.9.26 **STATIC** 2011-09-30 (CONF:7156).
 2683 5. **MAY** contain zero or one [0..1] **suffix** (CONF:7161).
 2684 a. The suffix, if present, **MAY** contain zero or one [0..1] @qualifier, which
 2685 **SHALL** be selected from ValueSet EntityPersonNamePartQualifier
 2686 2.16.840.1.113883.11.20.9.26 **STATIC** 2011-09-30 (CONF:7162).
 2687 6. **SHALL NOT** have mixed content except for white space (CONF:7278).

Table 22: EntityNameUse Value Set

Value Set: EntityNameUse 2.16.840.1.113883.1.11.15913 STATIC 2005-05-01		
Code System(s): EntityNameUse 2.16.840.1.113883.5.45		
Code	Code System	Print Name
A	EntityNameUse	Artist/Stage
ABC	EntityNameUse	Alphabetic
ASGN	EntityNameUse	Assigned
C	EntityNameUse	License
I	EntityNameUse	Indigenous/Tribal
IDE	EntityNameUse	Ideographic
L	EntityNameUse	Legal
P	EntityNameUse	Pseudonym
PHON	EntityNameUse	Phonetic
R	EntityNameUse	Religious
SNDX	EntityNameUse	Soundex
SRCH	EntityNameUse	Search
SYL	EntityNameUse	Syllabic

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Table 23: EntityPersonNamePartQualifier Value Set

Value Set: EntityPersonNamePartQualifier 2.16.840.1.113883.11.20.9.26 STATIC 2011-09-30		
Code System(s): EntityNamePartQualifier 2.16.840.1.113883.5.43		
Code	Code System	Print Name
AC	EntityNamePartQualifier	academic
AD	EntityNamePartQualifier	adopted
BR	EntityNamePartQualifier	birth
CL	EntityNamePartQualifier	callme
IN	EntityNamePartQualifier	initial
NB	EntityNamePartQualifier	nobility
PR	EntityNamePartQualifier	professional
SP	EntityNamePartQualifier	spouse
TITLE	EntityNamePartQualifier	title
VV	EntityNamePartQualifier	voorvoegsel

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2692 **3.7 US Realm Person Name (PN.US.FIELDDED)**

2693 [name: 2.16.840.1.113883.10.20.22.5.1.1(open)]

2694 The US Realm Clinical Document Person Name datatype flavor is a set of reusable
2695 constraints that can be used for Persons.

- 2696 1. **SHALL** contain exactly one [1..1] **name** (CONF:9368).
 - 2697 a. The content of name **SHALL** be either a conformant [Patient Name](#)
 - 2698 (**PTN.US.FIELDDED**), or a string (CONF:9371).
 - 2699 b. The string **SHALL NOT** contain name parts (CONF:9372).

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2701 **3.8 Rendering Header Information for Human Presentation**

2702 [Note: This section is repeated for readability as an exact duplication of the section by
2703 the same name in the General Universal Realm Patient Authored Note chapter of this
2704 document.]

2705 Metadata carried in the header of a Patient Authored Note may not match information
2706 available in an electronic medical records (EMRs) or other sources external to the
2707 document. Information provided by the individual may be more accurate and up to date
2708 than information in the EMR, or it may be missing some of the most recent data
2709 available in the EMR. Therefore, it is a requirement to render information which
2710 represents differences between the document header information and the information
2711 stored in the EMR. When there are differences, information should be rendered directly
2712 from the document as well as the EMR so that potential changes can be made and
2713 errors can be caught. An example of this would be a doctor using an EMR that already
2714 contains the patient's name, date of birth, current address, and phone number. When a

2715 CDA document is rendered within that EMR, if the address and phone number in the
2716 patient authored note does not match those pieces of information in the EMR, the EMR
2717 may need to be updated.

2718 Good practice would recommend that the following be present whenever the document
2719 is viewed:

- 2720 • Document title and document dates
- 2721 • Header information which does not match information stored in the EMR
- 2722 • Service and encounter types, and date ranges as appropriate
- 2723 • Names of all persons along with their roles, participations, participation date
2724 ranges, identifiers, address, and telecommunications information
- 2725 • Names of selected organizations along with their roles, participations,
2726 participation date ranges, identifiers, address, and telecommunications
2727 information
- 2728 • Date of birth for recordTarget

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APPENDIX A. PARTICIPANT SCENARIOS

2731 Participant Scenarios have been provided as an informative appendix to augment the implementation
 2732 guidance provided above. The scenarios fall into two broad categories, where the primary subject of the
 2733 document (the recordTarget) authors the document for his or her self or where another individual
 2734 having a personal relationship or role of responsibility for the primary subject.

<p>In use cases where the person is authoring a note for themselves, such as:</p> <ul style="list-style-type: none"> - A individual documenting his health history - A individual documenting her nutrition and allergy information - A individual documenting alerts and care preferences - A individual requesting an update to his health record to adjust for changes - A individual completing a pre-visit “clipboard” questionnaire - A individual completing a screening questionnaire - <p>Header participation generally follow the pattern below.</p>	
Record Target	The individual
Author	The individual
Custodian	Could be the organization providing the PHR application that manages the document or Self if the patient manages the information on their own system.
InformationRecipient	The organization, or person(s) at an organization, intended to receive the information.
Informant	A person or people who have provided information which is represented in the document. Information not attributed to a specific informant is provided by the author.
Participant	Other parties named in or referenced by the content in the document.
DataEnterer	The person who entered the information or device which entered information to create the CDA. If the data enterer is not explicitly listed, then the author is assumed to be the DataEnterer.
Authenticator	The party attesting to the content.
Legal Authenticator	The legally responsible party attesting to the content of the document.
InFulfillmentOf/Order	A scheduled appointment or service event in a practice management system
DocumentationOf/ServiceEvent	The main activity being described by a Patient Authored Note is the person’s health care, health practices and relevant health history over a period of time. This is shown by setting the value of <code>ClinicalDocument/documentationOf/serviceEvent/@classCode</code> to “PCPR” (care provision). The <code>ClinicalDocument/documentationOf/serviceEvent/effectiveTime</code> indicates the span of time documented in the note. Additional data from outside this duration may also be included if it is

	<p>relevant to care documented during the covered time range (e.g. A document covering this year may include information about a condition resolved several years ago which requires annual screening).</p> <p>NOTE: Implementations originating a Patient Authored Note should take care to indicate the time span being documented. For example:</p> <ul style="list-style-type: none"> • When a patient fills out a form providing relevant health history prior to an initial visit to a new doctor, the span of time being documented might be from birth to the present. • When a patient is authoring a note to support an annual examination, it might cover just the prior year. • When a patient is going for a sick visit, the time span of the note may cover only a few days.
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<p>In scenarios where the subject of the document (recordTarget) is not authoring a note for themselves, and a related person or responsible party is authoring the document such as:</p> <ul style="list-style-type: none"> - A parent authoring a note for a child - A adult child authoring a note for a parent - A guardian authoring a note for a child - A healthcare power of attorney authoring a note for the person they represent <p>Header participation follows a similar pattern to the use case where an individual is the author. The differences are documented below:</p>	
Author	<p>The person in these roles may not be the individual who is the recordTarget of the document. Their role may be a personal relationship to the individual who is the recordTarget of the document, or they may be in a position of responsibility for the individual.</p>
Informant	
Authenticator	
Legal Authenticator	

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