CDAR2\_IG\_QRDOC\_R1\_2013APR



**HL7 Implementation Guide for CDA® Release 2.0:**

**Questionnaire Response Document, Release 1**

April 2013

**HL7 DSTU Ballot**

**Sponsored by:
Structured Documents Work Group**

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# Introduction

## Audience

The audience for this document includes software developers and implementers of products and services that enable authoring, management, and administration of patient health surveys and their responses. This includes public and private disease management organizations as well as local, regional, and national health information exchange networks that wish to create and/or process Questionnaire Response documents (patient survey results) created according to this specification.

## Purpose

Patient-centred outcomes monitoring, is increasingly needed to improve the cost effectiveness and quality of health services.

This document describes constraints on the Clinical Document Architecture (CDA) Release 2 (R2) header and body elements of Questionnaire Response documents. The purpose of a Questionnaire Response document is to capture the health survey answers or answer sets to questions that have been administered to a patient. Questionnaire Response documents enable the capture of responses for surveying the patient’s perceptions on their health and the impact that any treatments or adjustments to lifestyle have had on their quality of life. The Questionnaire Response documents may carry a variety of clinical and non-clinical responses in order to convey back to the healthcare organization the results of a patient questionnaire prescribed acording to the Form Definition document [\href{reference to Form Definition IG}]. Authors of the Questionnaire Response documents may include the patients who are under the care of disease management organizations, primary care physicians, health and fitness coaches, chronic condition monitors, and post-acute and long-term care.

### Typical Use Case

The primary use case for the Questionnaire Response document starts with the authoring of the survey based on the Form Definition document . It involves the Form Definition author, which may be a human or a device or software system. After creation of the Form Definition document, it is placced in a repository that is accessible by a disease management service. The disease management service will then send the Form Definition to the application hosting device based on a prediscribed order or schedule. The application hosting device will in turn signal to the patient that a new Form Definition document is available and it will create a questionnaire specific for the particular patient. The Questionnaire Response document is created as the patient fills out the questionnaire and is sent back to the disease monitoring station where it is ready for review by a human or computer monitor. Figure 1 shows the entire ecosystem describing the primary use case.

## Scope

Figure 1: Typical Use Case

This implementation guide is a conformance profile, as described in the “Refinement and Localization”[[1]](#footnote-1) section of the *HL7 Version 3 Interoperability Standards*. The base standard for this implementation guide is the *HL7 Clinical Document Architecture, Release 2.0.*[[2]](#footnote-2) This implementation guide does not describe every aspect of CDA. Rather, it defines constraints on the base CDA used in Questionnaire Response in the Universal Realm. Additional optional CDA elements, not included here, can be included and the result will be compliant with the specifications in this guide.

## Approach

Overall, the approach taken here is consistent with balloted implementation guides (IGs) for CDA. These publications view the ultimate implementation specification as a series of layered constraints. CDA itself is a set of constraints on the Health Level Seven (HL7) Reference Information Model (RIM). Implementation guides such as this add constraints to CDA through conformance statements that further define and restrict the sequence and cardinality of CDA objects and the vocabulary sets for coded elements.

## Organization of This Guide

This guide includes a set of CDA Templates and prescribes their use within a Questionnaire Response CDA document. The main chapters are:

Chapter 2: Questionnaire Response Document Header Template describes constraints that apply to the header for all Universal Realm documents within the scope of this implementation guide.

Chapter 3: Questionnaire Response Document-Level Template defines the document constraints that apply to Questionnaire Response Documents.

Chapter 4: Section-Level Templates defines the section templates in Questionnaire Response Documents.

Chapter 5: Entry-Level Templates defines the entry template in Questionnaire Response Documents.

## Content of the Package

The following files comprise the package:

Table 1: Content of the Package

|  |  |  |
| --- | --- | --- |
| Filename | Description | Standards Applicability |
| CDAR2\_IG\_QRDOC\_R1\_2013APR | This implemenation guide. | Normative |
| QRSample-26032013.xml | The sample CDA XML file that includes examples of templates discussed in this guide. | informative |

# QuESTionnaire Response document Header Template

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

## Document Type Codes

CDA R2 states that LOINC is the preferred vocabulary for document type codes. The document type code specifies the type of document being exchanged (e.g., History and Physical). The use of a single clinicalDocument/code is preferred for a CDA document template. Questionnaire Response template is a universal realm document, therefore it does not mandate use of LOINC; however, LOINC is still the preferred document code vocabulary.

## Universal Realm Questionnaire Response Document Header

[ClinicalDocument: templateId 2.16.840.1.113883.10.20.33 (open)]

1. SHALL contain exactly one [1..1] realmCode (CONF: 1).
	1. This realmCode SHOULD be selected from HL7 ValueSet BindingRealm[2.16.840.1.113883.1.11.20355] from codesystem hl7Realm [2.16.840.1.113883.5.1124] STATIC 2010-11-11 (CONF: 2).
2. SHALL contain exactly one [1..1] typeId (CONF: 3).
	1. This typeId SHALL contain exactly one [1..1] @root="2.16.840.1.113883.1.3" (CONF: 4).
	2. This typeId SHALL contain exactly one [1..1] @extension="POCD\_HD000040" (CONF: 5).
3. SHALL contain exactly one [1..1] header-level templateId (CONF: 6)such that it
	1. SHALL contain exactly one [1..1] @root=”2.16.840.1.113883.10.20.33” (CONF: 7)**.**
4. SHALL contain exactly one [1..1] id (CONF: 8).
	1. This id SHALL be a globally unique identifier for the document (CONF: 9).
5. SHALL contain exactly one [1..1] code (CONF: 10).
	1. This code SHALL specify the Questionnaire Response document generated by patient. (CONF: 11).
	2. This code SHould be a code from the LOINC Document Ontology which indicates a Questionnaire Response document authored by the patient, an individual acting on behalf of the patient, or a patient’s device. CDA R2 states that LOINC is the preferred vocabulary for document type specification. Questionnaire Response template is a universal realm document, therefore it does not mandate use of LOINC; however, LOINC is still the preferred document code vocabulary (CONF: 12).
6. SHALL contain exactly one [1..1] title (CONF: 13).
7. SHALL contain exactly one [1..1] effectiveTime (CONF: 14).
8. SHALL contain exactly one [1..1] confidentialityCode, which SHALL be selected from ValueSet HL7 BasicConfidentialityKind 2.16.840.1.113883.1.11.16926 STATIC 2010-04-21 (CONF: 15).
9. SHALL contain exactly one [1..1] languageCode, which SHALL be selected from ValueSet Language 2.16.840.1.113883.1.11.11526 DYNAMIC (CONF: 16).

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  |

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 |
| … |  |  |

Figure 2: UV Realm Header Example

<realmCode code="UV"/>

<typeId root="2.16.840.1.113883.1.3" extension="POCD\_HD000040"/>

<templateId root="2.16.840.1.113883.10.20.33"/>

<!-- \*\*\* 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="2.16.840.1.113883.10.20.33.1.1"/>

<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="Questionnaire Response Document"/>

<title>Patient Questionnaire Response Document</title>

<effectiveTime value="20121126145000-0500"/>

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

<languageCode code="en-US"/>

Figure 3: effectiveTime with Time Zone Example

<!-- 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 -->

### RecordTarget

The recordTarget records the patient whose health information (in the context of this IG, patient responses to a set of questions asked through the Form Defintion Document) is described by the clinical document; each recordTarget must contain at least one patientRole element.

1. SHALL contain at least one [1..1] recordTarget (CONF: 17).
	1. Such recordTargets SHALL contain exactly one [1..1] patientRole (CONF: 18).
		1. This patientRole SHALL contain at least one [1..\*] id (CONF: 19).

#### Patient

* + 1. This patientRole SHALL contain exactly one [1..1] patient (CONF: 20).
			1. This patient SHALL contain exactly one [1..1] name (CONF: 21).
			2. This patient SHALL contain exactly one [1..1] administrativeGenderCode (CONF: 22).

Figure 4: UV Realm Questionnaire Response recordTarget Example

<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"/>

 <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"/>

 </patient>

 </patientRole>

</recordTarget>

### Author

The author element represents the creator of the clinical document. In the context of this IG (the Questionnaire Response Document), the author is usually the patient who answers the questions.

1. SHALL contain at least one [1..\*] author (CONF: 23).
	1. Such authors SHALL contain exactly one [1..1] time (CONF: 24).
	2. Such authors SHALL contain exactly one [1..1] assignedAuthor (CONF: 25).
		1. This assignedAuthor SHALL contain exactly one [1..1] id (CONF: 26) such that it
			1. The id SHOULD utilize the combined @root and @extension attributes to record the person’s or the device’s identity in a secure, trusted, and unique way (CONF: 27).
		2. When the author is a person,this assignedAuthor SHALL contain one [1..1] code (CONF: 28).
			1. The code, SHaLL contain exactly one [1..1] @code, which SHOULD be selected from the PersonalRelationshipRoleType value set PLUS ResponsibleParty PLUS (CONF: 29).
		3. There SHALL be exactly one assignedAuthor/assignedPerson or exactly one assignedAuthor/assignedAuthoringDevice (CONF: 30).
		4. This assignedAuthor SHALL contain zero or one [0..1] assignedPerson (CONF: 31).
			1. The assignedPerson, if present, SHALL contain at least one [1..\*] name (CONF: 32).
		5. This assignedAuthor SHOULD contain zero or one [0..1] assignedAuthoringDevice (CONF: 33).
			1. The assignedAuthoringDevice, if present, SHALL contain exactly one [1..1] manufacturerModelName (CONF: 34).
			2. The assignedAuthoringDevice, if present, SHALL contain exactly one [1..1] softwareName (CONF: 35).
		6. If assignedAuthor has an associated representedOrganization with no assignedPerson or assignedAuthoringDevice, then the value for "ClinicalDocument/author/assignedAuthor/id/@NullFlavor" **SHALL** be "NA" "Not applicable" 2.16.840.1.113883.5.1008 NullFlavor **STATIC** (CONF: 36).

Figure 5: Person Author Example

<author>

 <time value="20121126145000-0500"/>

 <assignedAuthor>

 <!-- Internal id using HL7 example OID. -->

 <id extension="999.1" root="2.16.840.1.113883.19"/>

 <!—This 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"/>

 <assignedPerson>

 <name>

 <given>Adam</given>

 <family>Everyman</family>

 </name>

 </assignedPerson>

 </assignedAuthor>

</author>

Figure 6: Device Author Example

<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>

### DataEnterer

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

1. **MAY** contain zero or one [0..1] **dataEnterer** (CONF: 37).
	1. The dataEnterer, if present, **SHALL** contain exactly one [1..1] **assignedEntity** (CONF: 38).
		1. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF: 39).
		2. This assignedEntity **SHALL** contain at least one [1..\*] **addr** (CONF: 40).
		3. This assignedEntity **SHALL** contain at least one [1..\*] **telecom** (CONF: 41).
		4. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson** (CONF: 42).
			1. This assignedPerson **SHALL** contain at least one [1..\*] **name** (CONF: 43).
		5. This assignedEntity **MAY** contain zero or one [0..1] code to encode the relationship of the person to the recordTarget (CONF: 44).

Figure 7: dataEnterer Example

<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>

### Informant

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

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

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

1. **MAY** contain zero or more [0..\*] **informant** (CONF: 45).
	1. **SHALL** contain exactly one [1..1] assignedEntity OR exactly one [1..1] relatedEntity (CONF: 46).
		1. **SHOULD** contain at least one [1..\*] **addr** (CONF: 47).
		2. **SHALL** contain exactly one [1..1] assignedPerson OR exactly one [1..1] relatedPerson (CONF: 48).
			1. **SHALL** contain at least one [1..\*] **name** (CONF: 49).
		3. This assignedEntity **MAY** contain zero or one [0..1] code (CONF: 50).
		4. **SHOULD** contain zero or more [0..\*] **id** (CONF: 51).

***Figure 8: 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>

### Custodian

The custodian element represents the organization that is in charge of maintaining the document (e.g. a remote disease management organization (DMO)). The custodian is the steward that is entrusted with the use and management of the document. Every CDA document has exactly one custodian.

1. SHALL contain exactly one [1..1] custodian (CONF: 52).
	1. This custodian SHALL contain exactly one [1..1] assignedCustodian (CONF: 53).
		1. This assignedCustodian SHALL contain exactly one [1..1] representedCustodianOrganization which may be the person when the document is not maintained by an organization (CONF: 54).
			1. This representedCustodianOrganization SHALL contain at least one [1..\*] id (CONF: 55).
			2. This representedCustodianOrganization SHOULD contain exactly one [1..1] name (CONF: 56).
			3. This representedCustodianOrganization May contain zero or one [0..1] telecom (CONF: 57).
				1. This telecom SHOULD contain exactly one [1..1] @use(CONF: 58).
			4. This representedCustodianOrganization May contain zero or one [0..1] addr (CONF: 59).

Figure 9: Custodian Examples

<custodian>

 <assignedCustodian>

 <representedCustodianOrganization>

 <!-- Internal id -->

 <id extension="999.3" root="2.16.840.1.113883.19"/>

 <name>MyPersonalHealthRecord.Com</name>

 </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>

 </representedCustodianOrganization>

 </assignedCustodian>

</custodian>

### InformationRecipient

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.

1. MAY contain zero or more [0..\*] informationRecipient (CONF: 60).
	1. The informationRecipient, if present, SHALL contain exactly one [1..1] intendedRecipient (CONF: 61).
		1. This intendedRecipient SHOULD contain atleast one [1..\*] id (CONF: 62).
		2. This intendedRecipient MAY contain zero or one [0..1] informationRecipient (CONF: 63).
			1. The informationRecipient, if present, SHALL contain at least one [1..\*] name (CONF: 64).
		3. This intendedRecipient MAY contain zero or one [0..1] receivedOrganization (CONF: 65).
			1. The receivedOrganization, if present, SHALL contain exactly one [1..1] name (CONF: 66).

***Figure 10: informationRecipient Examples***

<!-- 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>

<!-- PCP physician as recipient -->

<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"/>

 <addr>

 <streetAddressLine>100 Health Drive</streetAddressLine>

 <city>Boston</city>

 <state>MA</state>

 <postalCode>02368</postalCode>

 <country>USA</country>

 </addr>

 </receivedOrganization>

 </intendedRecipient>

</informationRecipient>

### LegalAuthenticator

In a Questionnaire Response Document, the legalAuthenticator identifies the single person legally responsible for the document and must be present if the document has been legally authenticated. (Note that per the following section, there may also be one or more document authenticators.)

Based on local practice, Questionnaire Response Document may be provided without legal authentication. This implies that a Questionnaire Response Document that does not contain this element has not been legally authenticated.

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

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

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

1. SHOULD contain zero or one [0..1] legalAuthenticator (CONF: 67).
	1. The legalAuthenticator, if present, SHALL contain exactly one [1..1] time (CONF: 68).
	2. The legalAuthenticator, if present, SHALL contain exactly one [1..1] signatureCode (CONF: 69).
		1. This signatureCode SHALL contain exactly one [1..1] @code="S" (CodeSystem: Participationsignature 2.16.840.1.113883.5.89) (CONF: 70).
	3. The legalAuthenticator, if present, SHALL contain exactly one [1..1] assignedEntity (CONF: 71).
		1. This assignedEntity SHALL contain at least one [1..\*] id (CONF: 72).
		2. This assignedEntity MAY contain zero or one [0..1] code (CONF: 73).
		3. This assignedEntity SHALL contain at least one [1..\*] addr (CONF: 74).
		4. This assignedEntity SHALL contain at least one [1..\*] telecom (CONF: 75).
		5. This assignedEntity SHALL contain exactly one [1..1] assignedPerson (CONF: 76).
			1. This assignedPerson SHALL contain at least one [1..\*] name (CONF: 77).

***Figure 11: legalAuthenticator Example***

<legalAuthenticator>

 <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>

</legalAuthenticator>

### Authenticator

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

1. MAY contain zero or more [0..\*] authenticator (CONF: 78).
	1. The authenticator, if present, SHALL contain exactly one [1..1] time (CONF: 79).
	2. The authenticator, if present, SHALL contain exactly one [1..1] signatureCode (CONF: 80).
		1. This signatureCode SHALL contain exactly one [1..1] @code="S" (CodeSystem: Participationsignature 2.16.840.1.113883.5.89) (CONF: 81).
	3. The authenticator, if present, SHALL contain exactly one [1..1] assignedEntity (CONF: 82).
		1. This assignedEntity SHALL contain at least one [1..\*] id (CONF: 83).
		2. This assignedEntity MAY contain zero or one [0..1] code (CONF: 84).
		3. This assignedEntity SHALL contain at least one [1..\*] addr (CONF: 85).
		4. This assignedEntity SHALL contain at least one [1..\*] telecom (CONF: 86).
			1. Such telecoms SHOULD contain exactly one [1..1] @use (CONF: 87).
		5. This assignedEntity SHALL contain exactly one [1..1] assignedPerson (CONF: 88).
			1. This assignedPerson SHALL contain at least one [1..\*] name (CONF: 89).

***Figure 12: Authenticator Example***

<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>

### Participant (Support)

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

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

1. MAY contain zero or more [0..\*] participant (CONF: 90).
	1. The participant, if present, MAY contain zero or one [0..1] time (CONF: 91).
	2. Such participants, if present, SHALL have an associatedPerson or scopingOrganization element under participant/associatedEntity (CONF: 92).
	3. Unless otherwise specified by the document specific header constraints, when participant/@typeCode is IND, associatedEntity/@classCode SHALL be selected from ValueSet 2.16.840.1.113883.11.20.9.33 INDRoleclassCodes STATIC 2011-09-30 (CONF: 93).

***Table 4: 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 |

***Figure 13: Participant Example for a Supporting Person***

<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>

### InFulfillmentOf

The inFulfillmentOf element represents orders that are fulfilled by this Questionnaire Response document. For example, in the Continua eco-system, a remote DMO creates a task for the patient to fill-in the Questionnaire which are represented according to the Form Defintion Document IG \href{need formal reference here}. Reference to such task is stored in the id field of the Questionnaire Response Document.

1. SHOULD contain zero or one [0..1] inFulfillmentOf (CONF: 94).
	1. The inFulfillmentOf, if present, SHALL contain exactly one [1..1] order (CONF: 95).
		1. This order SHALL contain at least one [1..\*] id (CONF: 96).
			1. Such ids MAY represent a gloabally unique identifier for the task object in the Continua eco-system (CONF: 97).

### ComponentOf

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

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

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

1. **MAY** contain zero or one [0..1] **componentOf** (CONF: 98).
	1. The componentOf, if present, **SHALL** contain exactly one [1..1] **encompassingEncounter** (CONF: 99).
		1. This encompassingEncounter **SHALL** contain at least one [1..\*] **id** (CONF: 100).
		2. This encompassingEncounter **SHALL** contain exactly one [1..1] **effectiveTime** (CONF: 101).

## Rendering Header Information for Human Presentation

Good practice would recommend that the following be present whenever the Questionnaire Response Document is viewed:

* Document title and document dates
* Names of all persons along with their roles, participations, participation date ranges, identifiers, address, and telecommunications information
* Names of selected organizations along with their roles, participations, participation date ranges, identifiers, address, and telecommunications information
* Date of birth for recordTarget

# Questionnaire Response Document-Level Template

This chapter defines document-level template used in the Questionnaire Response Document containing set of question responses answered by the patient. Document-level templates describe the purpose and rules for constructing a conforming CDA document for its use case. Document templates include constraints on the CDA header and contain section-level templates which, in turn contain entry-level templates. Questionnaire Response Document template is a universal template, hence contains the minimum constraints. Base CDA constraints are not repeated if not further constrained.

## Questionnaire Response Document

[ClinicalDocument: templateId 2.16.840.1.113883.10.20.33.1.1 (open)]

This template describes constraints that apply to the the Questionnaire Response Document containing set of question responses. Document templates include constraints on the CDA header and identify contained section-level templates.

This document-level template contains the following information:

* Description and explanatory narrative.
* Template metadata (e.g., templateId, etc.)
* Header constraints
* The required section-level template

***Table 5: Questionnaire Response Document Contexts***

| **Used By:** | **Contains Entries:** |
| --- | --- |
|  | Questionnaire Response Section |

Table 6: Questionnaire Response Document Constraints Overview

| Name | XPath | Card. | Verb | Data Type | CONF# | Fixed Value |
| --- | --- | --- | --- | --- | --- | --- |
|  | ClinicalDocument[templateId/@root = '2.16.840.1.113883.10.20.33.1.1'] |
|  | component | 1..1 | SHALL |  | CONF:103 |  |
|  | structuredBody | 1..1 | SHALL |  | CONF:104 |  |
|  | component | 1..\* | SHALL |  | CONF:105 |  |
|  | section | 1..1 | SHALL |  | CONF:106 |  |

1. SHALL conform to the Universal Realm Questionnaire Response Document Header template (CONF: 102).
2. SHALLcontain exactly one[1..1]component(CONF: 103).
	1. **SHALL** contain exactly one [1..1] structuredBody (CONF: 104).
		1. This structuredBody SHALL contain at least one [1..\*] component (CONF: 105).
			1. Such components SHALL contain exactly one [1..1] Questionnaire Response Section template(templateId: '2.16.840.1.113883.10.20.33.1.1') (CONF: 106).

# Section-Level Templates

This section contains section-level templates used by the Questionnaire Response Document in this Implementation Guide. Section-level templates are always included in a document.

Each section-level template contains the following:

* Template metadata (e.g., templateId, etc.)
* Description
* Section code
* Section title
* Entry-level template names and Ids for referenced templates (required and optional)

## Questionnaire Response Section

[section: templateId 2.16.840.1.113883.10.20.33.2.1 (open)]

Questionnaire Response Document consists of sections that groups related question responses. Section titles ease human-readability and navigation in the document. Section codes may help with the recipient’s interpretation of each section. A section template defined by this implementation guide requires the use of at least one structured entry, where structured entry contains patient response to a question.

Table 7: Questionnaire Response Section Pattern Contexts

| Used By: | Contains Entries: |
| --- | --- |
| Questionnaire Response Document-Level Template (required) | Responses Organizer |

***Table 8: Questionnaire Response Section Constraints Overview***

| **Name** | **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Fixed Value** |
| --- | --- | --- | --- | --- | --- | --- |
|  | section[templateId/@root = '2.16.840.1.113883.10.20.33.2.1'] |
|  | templateId | 1..1 | SHALL |  | CONF:107 |  |
|  | @root | 1..1 | SHALL |  | CONF:108 | 2.16.840.1.113883.10.20.33.2.1 |
|  | title | 1..1 | SHOULD |  | CONF:109 |  |
|  | text | 1..1 | SHALL |  | CONF:110 |  |
|  | languageCode | 0..1 | SHOULD |  | CONF:111 |  |
|  | entry | 1..\* | SHALL |  | CONF:112 |  |
|  | @typeCode | 1..1 | SHALL |  | CONF:113 | DRIV |
|  | organizer | 1..1 | SHALL |  | CONF:114 |  |

1. **SHALL** contain exactly one [1..1] **templateId** (CONF: 107) such that it
	1. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.33.2.1" (CONF: 108).
2. **SHOULD** contain zero or one [0..1] **title** (CONF: 109).
3. **SHALL** contain exactly one [1..1] **text** (CONF: 110).
4. SHOULD contain zero or one [1..1] languageCode which SHALL be selected from ValueSet Language 2.16.840.1.113883.1.11.11526 DYNAMIC (CONF: 111).
5. **SHALL** contain at least one [1..\*] **entry** (CONF: 112) such that it
	1. **SHALL** contain exactly one [1..1] **@typeCode**=”DRIV” (CONF: 113).
	2. **SHALL** contain exactly one [1..1] Responses Organizer template(templateId: 2.16.840.1.113883.10.20.33.4.1) (CONF: 114).

***Figure 14: Questionnaire Response Section Example***

<section>

 <templateId root="2.16.840.1.113883.10.20.33.2.1"/>

 <title>Questionnaire Response Document</title>

 <text>

 ...

 </text>

 <entry typeCode="DRIV">

 <organizer classCode="CLUSTER" moodCode="EVN">

 ...

 </organizer>

 </entry>

</section>

# Entry-Level Templates

This part of the guide describes the clinical statement entry templates used within the sections of the Questionnaire Response document. Entry templates contain constraints that are required for conformance.

Each entry-level template description contains the following information:

* Key template metadata (e.g., templateId, etc.)
* Description and explanatory narrative.
* Required CDA acts, participants and vocabularies.
* Optional CDA acts, participants and vocabularies.

Entry-level templates may also describe an id element, which is an identifier for that entry. This id may be referenced within the document, or by the system receiving the document. The id assigned must be globally unique.

## Responses Organizer

[organizer: templateId 2.16.840.1.113883.10.20.33.4.1 (open)]

This template is used to create groupings of other entries (or templates) that share a common context e.g. question responses related to a specific health domain or topic. The organizer/@classCode is equal to CLUSTER to group entries into a compound statement. The organizer/code could be used to indicate question responses to a specific health domain e.g. nutrition or mental status. The sequenceNumber is used to indicate the relative order of the organizer/component which contains a question reponse represented by the generic observation class.

***Table 9: Responses Organizer Contexts***

| **Used By:** | **Contains Entries:** |
| --- | --- |
| Questionnaire Response Section Pattern (required) | Numeric Question Response PatternMultiple Choice Response PatternText Response PatternAnalog Slider Response PatternDiscrete Slider Response Pattern |

***Table 10: Response Organizer Constraints Overview***

| **Name** | **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Fixed Value** |
| --- | --- | --- | --- | --- | --- | --- |
|  | organizer[templateId/@root = '2.16.840.1.113883.10.20.33.4.1'] |
|  | @classCode | 1..1 | SHALL |  | CONF:115 | 2.16.840.1.113883.5.6 (HL7ActClass)=CLUSTER |
|  | @moodCode | 1..1 | SHALL |  | CONF:116 | 2.16.840.1.113883.5.1001 (ActMood) = EVN |
|  | templateId | 1..1 | SHALL |  | CONF:117 |  |
|  | @root | 1..1 | SHALL |  | CONF:118 | 2.16.840.1.113883.10.20.33.4.1 |
|  | id | 1..1 | SHALL |  | CONF:119 |  |
|  | code | 0..1 | SHOULD |  | CONF:120 |  |
|  | statusCode | 1..1 | SHALL |  | CONF:121 |  |
|  | @code | 1..1 | SHALL |  | CONF:122 | 2.16.840.1.113883.5.14 (ActStatus) = completed |
|  | component | 1..\* | SHALL |  | CONF:123 |  |
|  | sequenceNumber | 1..1 | SHALL |  | CONF:124 |  |
|  |  observation | 1..1 | SHALL |  | CONF:125 |  |

1. SHALL contain exactly one [1..1] @classCode (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 STATIC) (CONF: 115).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: ActMood 2.16.840.1.113883.5.1001 STATIC) (CONF: 116).
3. SHALL contain exactly one [1..1] templateId (CONF: 117) such that it
	1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.33.4.1" (CONF: 118).
4. SHALL contain exactly one [1..1] id (CONF: 119).
5. SHALL contain zero or one [0..1] code (CONF: 120).
6. SHALL contain exactly one [1..1] statusCode (CONF: 121).
	1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" (CodeSystem: ActStatus 2.16.840.1.113883.5.14) (CONF: 122).
7. SHALL contain at least one [1..\*] component (CONF: 123) such that it
	1. SHALL contain exactly one [1..1] squenceNumber (CONF: 124)
	2. SHALL contain at least one [1..\*] of the following templates (CONF: 125).
		1. Numeric Response Pattern template(templateID: 2.16.840.1.113883.10.20.33.4.4) (CONF: 126).
		2. Multiple Choice Response Pattern template(templateID: 2.16.840.1.113883.10.20.33.4.5) (CONF: 127).
		3. Text Response Pattern template(templateID: 2.16.840.1.113883.10.20.33.4.6) (CONF: 128).
		4. Analog Slider Response Pattern template(templateID: 2.16.840.1.113883.10.20.33.4.7) (CONF: 128).
		5. Discrete Slider Response Pattern template(templateID: 2.16.840.1.113883.10.20.33.4.8) (CONF: 129).

***Figure 15: Responses Organizer Example***

<organizer classCode="CLUSTER" moodCode="EVN">

 <!-- Answers Organizer template -->

 <templateId root="2.16.840.1.113883.10.20.33.4.1"/>

 <code code="O1" codeSystem="CONTINUA-Organizer-OID" displayName="Questions related fitness"/>

 <statusCode code="completed"/>

 <!--

 Conains response to Numeric, Multiple Choice Responses or other defined templates

 -->

 <component>

 <sequenceNumber value=”1">

 <observation classCode="OBS" moodCode="EVN">

 <templateID root="2.16.840.1.113883.10.20.33.4.4"/>

 ...

 </observation>

 </component>

 <component>

 <sequenceNumber value=”2">

 <observation classCode="OBS" moodCode="EVN">

 <templateID root="2.16.840.1.113883.10.20.33.4.5"/>

 ...

 </observation>

 <component>

 <sequenceNumber value=”4">

 <observation classCode="OBS" moodCode="EVN">

 <templateID root="2.16.840.1.113883.10.20.33.4.6"/>

 ...

 </observation>

 </component>

</organizer>

## Response Media Pattern

[observationMedia: templateId 2.16.840.1.113883.10.20.33.4.2 (open)]

The Response Media Pattern is used to associate media with a response represented by one of the following templates:

* Numeric Response Pattern
* Multiple Choice Response Pattern
* Text Response Pattern
* Analog Slider Response Pattern
* Discrete Slider Response Pattern

The media was part of the question presented to the user.

***Table 11: Response Media Pattern Contexts***

| **Used By:** | **Contains Entries:** |
| --- | --- |
| Numeric Response Pattern (optional)Multiple Choice Response Pattern (optional)Text Response Pattern (optional)Analog Slider Response Pattern (optional)Discrete Slider Response Pattern (optional) |  |

***Table 12: Response Media Pattern Constraints Overview***

| **Name** | **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Fixed Value** |
| --- | --- | --- | --- | --- | --- | --- |
|  | observationMedia[templateId/@root ='2.16.840.1.113883.10.20.33.4.2'] |
|  | @classCode | 1..1 | SHALL | CD | CONF:131 | 2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
|  | @moodCode | 1..1 | SHALL | CD | CONF:132 | 2.16.840.1.113883.5.1001 (ActMood) = EVN |
|  | templateId | 1..1 | SHALL |  | CONF:133 |  |
|  | @root | 1..1 | SHALL |  | CONF:134 | 2.16.840.1.113883.10.20.33.4.2 |
|  | value | 1..1 | SHALL |  | CONF:135 |  |

1. SHALL contain exactly one [1..1] @classCode (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 STATIC) (CONF: 131).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: ActMood 2.16.840.1.113883.5.1001 STATIC) (CONF: 132).
3. SHALL contain exactly one [1..1] templateId (CONF: 133) such that it
	1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.33.4.2" (CONF: 134).
4. **SHALL** contain exactly one [1..1] **value** (CONF: 135).

## Response Reference Range Pattern

[referenceRange: templateId 2.16.840.1.113883.10.20.33.4.3 (open)]

The Response Reference Range Pattern is used to hold lower and upper boundaries for the question response in the context of this implementation guide. For example, in case of Multiple Choice Response Pattern this indicates the minimum and maximum choices that a user should have selected.

***Table 13: Question Reference Range Pattern Contexts***

| **Used By:** | **Contains Entries:** |
| --- | --- |
| Numeric Response Pattern (optional)Multiple Choice Response Pattern (optional) |  |

***Table 14: Response Reference Range Pattern Constraints Overview***

| **Name** | **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Fixed Value** |
| --- | --- | --- | --- | --- | --- | --- |
|  | referenceRange[templateId/@root ='2.16.840.1.113883.10.20.33.4.3'] |
|  | @typeCode | 1..1 | SHALL | CD | CONF:136 | REFV |
|  | templateID | 1..1 | SHALL |  | CONF:137 |  |
|  | @root | 1..1 | SHALL |  | CONF:138 | 2.16.840.1.113883.10.20.33.4.3 |
|  | observationRange | 1..1 | SHALL |  | CONF:139 |  |
|  | text | 0..1 | MAY |  | CONF:140 |  |
|  | value | 1..1 | SHALL |  | CONF:141 |  |
|  | @xsi:type | 1..1 | SHALL |  | CONF:142 | IVL\_INT |
|  | low | 1..1 | SHALL |  | CONF:143 |  |
|  | high | 1..1 | SHALL |  | CONF:144 |  |
|  | interpretationCode | 0..1 | SHOULD |  | CONF:145 |  |

1. The referenceRange, SHALL contain exactly one [1..1] @typeCode="REFV" (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF: 136).
2. SHALL contain exactly one [1..1] templateId (CONF: 137) such that it
	1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.33.4.3" (CONF: 138).
3. The referenceRange SHALL contain exactly one [1..1] observationRange (CONF: 139).
	1. MAY contain zero or one [0..1] text (CONF: 140).
	2. SHALL contain exactly one [1..1] value (CONF: 141) such that it
		1. SHALL contain exactly one [1..1] @xsi:type=”IVL\_INT” (CONF: 142).
		2. SHALL contain exactly one [1..1] low (CONF: 143).
		3. SHALL contain exactly one [1..1] high (CONF: 144).
	3. SHOULD contain zero or one [0..1] interpretationCode (CONF: 145).

***Figure 16: Question Reference Range Pattern Example***

<referenceRange typeCode="REFV">

 <templateId root="2.16.840.1.113883.10.20.32.4.4"/>

 <observationRange>

 <value xsi:type="IVL\_INT">

 <low value='0'>

 <high value='8'>

 <value>

 </observationRange>

</referenceRange>

## Numeric Response Pattern

[observation: templateId 2.16.840.1.113883.10.20.33.4.4 (open)]

The Numeric Response Pattern is used to construct the response instance where the response value is a number of the following data types

1. INT

2. REAL

3. TS

Response Reference Range Pattern template may also be associated with this pattern indicating the expected range of observation/value (i.e. answer to the question).

***Table 15: Numeric Question Response Pattern Contexts***

| **Used By:** | **Contains Entries:** |
| --- | --- |
| Responses Organizer (required)Analog Slider Response Pattern (required) | Response Media PatternResponse Reference Range Pattern |

***Table 16: Numeric Response Pattern Constraints Overview***

| **Name** | **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Fixed Value** |
| --- | --- | --- | --- | --- | --- | --- |
|  | observation[templateId/@root = '2.16.840.1.113883.10.20.33.4.4'] |
|  | @classCode | 1..1 | SHALL |  | CONF:146 | 2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
|  | @moodCode | 1..1 | SHALL |  | CONF:147 | 2.16.840.1.113883.5.1001 (ActMood) = EVN |
|  | templateId | 1..1 | SHALL |  | CONF:148 |  |
|  | @root | 1..1 | SHALL |  | CONF:149 | 2.16.840.1.113883.10.20.33.4.4 |
|  | id | 1..1 | SHALL |  | CONF:150 |  |
|  | code | 1..1 | SHALL | CE | CONF:151 |  |
|  | @code | 1..1 | SHALL |  | CONF:152 |  |
|  | @codesystem | 1..1 | SHALL |  | CONF:153 |  |
|  | originalText | 1..1 | SHALL |  | CONF:154 |  |
|  | text | 0..1 | MAY | ED | CONF:155 |  |
|  | languageCode | 0..1 | SHOULD |  | CONF:156 |  |
|  | statusCode | 1..1 | SHALL |  | CONF:157 |  |
|  | @code | 1..1 | SHALL |  | CONF:158 | 2.16.840.1.113883.5.14 (ActStatus) = completed |
|  | value | 1..1 | SHALL |  | CONF:159 |  |
|  |  |  |  |  |  |  |
|  | entryRelationship | 0..1 | SHOULD |  | CONF:160 |  |
|  | @typeCode | 1..1 | SHALL | CD | CONF:161 | REFR |
|  |  observationMedia | 1..1 | SHALL |  | CONF:162 |  |
|  | referenceRange | 0..\* | SHOULD |  | CONF:163 |  |

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF: 146).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF: 147).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF: 148) such that it
	1. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.33.4.4" (CONF: 149).
4. **SHALL** contain exactly one [1..1] **id** (CONF: 150).
5. **SHALL** contain exactly one [1..1] **code** (CONF: 151).
	1. This code **SHALL** contain exactly one [1..1] @**code** (CONF: 152).
	2. This code **SHALL** contain exactly one [1..1] @**CodeSystem** (CONF: 153).
	3. This code **SHALL** contain exactly one [1..1] **@originalText** (CONF: 154).
6. **May** contain zero or one [0..1] **text** (CONF: 155).
7. SHOULD contain zero or one [1..1] languageCode which SHALL be selected from ValueSet Language 2.16.840.1.113883.1.11.11526 DYNAMIC (CONF: 156).
8. **SHALL** contain exactly one [1..1] **statusCode** (CONF: 157).
	1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" (CodeSystem: ActStatus 2.16.840.1.113883.5.14) (CONF: 158).
9. **SHALL** contain exactly one [1..1] **value** (CONF: 159).
10. **SHOULD** contain zero or one [0..1] entryRelationship (CONF: 160).
	1. The entryRelationship, if present, SHALL contain exactly one [1..1] @typeCode="REFR" (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF: 161).
	2. SHALL conform to the Response Media Pattern template (templateId 2.16.840.1.113883.10.20.33.4.2) (CONF: 162).
11. **SHOULD** contain zero or more [0..\*] Response Reference Range Pattern template (templateId 2.16.840.1.113883.10.20.33.4.3) (CONF: 163).

***Figure 17: Numeric Response Pattern Example***

 <observation classCode="OBS" moodCode="EVN">

 <templateId root="2.16.840.1.113883.10.20.33.4.4"/>

 <id extension="q1" root="CONTINUA-ID-OID">

 <code code="q2" codeSystem="CONTINUA-QA-OID">

 <originalText>How many hours did you sleep last night?</originalText>

 </code>

 <value xsi:type="INT" value=”5”/>

 <entryRelationship typeCode="REFR">

 <observationMedia classCode="OBS" moodCode="EVN">

 <templateId root="2.16.840.1.113883.10.20.33.4.2"/>

 <value mediaType="image/jpeg">

 <reference value="smileyface.jpg or URL"/>

 </value>

 </observationMedia>

 </entryRelationship>

 <referenceRange typeCode="REFV">

 <templateId root="2.16.840.1.113883.10.20.33.4.3"/>

 <observationRange>

 <value xsi:type="IVL\_INT">

 <low value='0'/>

 <high value='24'/>

 </value>

 </observationRange>

 </referenceRange>

 </observation>

## Multiple Choice Response Pattern

[observation: templateId 2.16.840.1.113883.10.20.33.4.5 (open)]

The Multiple Choice Response Pattern is used to hold response from a multiple choice question where a user can select mulitple options. Response Reference Range Pattern template may also be assoicated with this pattern indicating the minimum and

and maximim number of options that should have been selected by a user.

***Table 17: Multiple Choice Response Pattern Contexts***

| **Used By:** | **Contains Entries:** |
| --- | --- |
| Responses Organizer (required) Discrete Slider Response Pattern (required)  | Response Media PatternResponse Reference Range Pattern |

***Table 18: Multiple Choice Response Pattern Constraints Overview***

| **Name** | **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Fixed Value** |
| --- | --- | --- | --- | --- | --- | --- |
|  | observation[templateId/@root = '2.16.840.1.113883.10.20.33.4.5'] |
|  | @classCode | 1..1 | SHALL |  | CONF:164 | 2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
|  | @moodCode | 1..1 | SHALL |  | CONF:165 | 2.16.840.1.113883.5.1001 (ActMood) = EVN |
|  | templateId | 1..1 | SHALL |  | CONF:166 |  |
|  | @root | 1..1 | SHALL |  | CONF:167 | 2.16.840.1.113883.10.20.33.4.5 |
|  | id | 1..1 | SHALL | CE | CONF:168 |  |
|  | code | 1..1 | SHALL | CE | CONF:169 |  |
|  | @code | 1..1 | SHALL |  | CONF:170 |  |
|  | @codesystem | 1..1 | SHALL |  | CONF:171 |  |
|  | originalText | 1..1 | SHALL |  | CONF:172 |  |
|  | text | 0..1 | MAY |  | CONF:173 |  |
|  | languageCode | 0..1 | SHOULD |  | CONF:174 |  |
|  | statusCode | 1..1 | SHALL |  | CONF:175 |  |
|  | @code | 1..1 | SHALL |  | CONF:176 | 2.16.840.1.113883.5.14 (ActStatus) = completed |
|  | value | 1..\* | SHALL |  | CONF:177 |  |
|  | @xsi:type | 1..1 | SHALL |  | CONF:178 | CE |
|  | @code | 1..1 | SHALL |  | CONF:179 |  |
|  | @codesystem | 1..1 | SHALL |  | CONF:180 |  |
|  | @displayName | 1..1 | SHALL |  | CONF:181 |  |
|  | entryRelationship | 0..1 | SHOULD |  | CONF:182 |  |
|  | @typeCode | 1..1 | SHALL | CD | CONF:183 | REFR |
|  |  observationMedia | 1..1 | SHALL |  | CONF:184 |  |
|  | entryRelationship | 0..1 | SHOULD |  | CONF:185 |  |
|  | @typeCode | 1..1 | SHALL | CD | CONF:186 | REFR |
|  |  observation | 1..1 | SHALL |  | CONF:187 |  |
|  | referenceRange | 0..\* | SHOULD |  | CONF:188 |  |

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF: 164).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF: 165).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF: 166) such that it
	1. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.33.4.5" (CONF: 167).
4. **SHALL** contain exactly one [1..1] **id** (CONF: 168).
5. **SHALL** contain exactly one [1..1] **code** (CONF: 169).
	1. This code **SHALL** contain exactly one [1..1] @**code** (CONF: 170).
	2. This code **SHALL** contain exactly one [1..1] @**CodeSystem** (CONF: 171).
	3. This code **SHALL** contain exactly one [1..1] **@originalText** (CONF: 172).
6. **MAY** contain zero or one [0..1] **text** (CONF: 173).
7. SHOULD contain zero or one [1..1] languageCode which SHALL be selected from ValueSet Language 2.16.840.1.113883.1.11.11526 DYNAMIC (CONF: 174).
8. **SHALL** contain exactly one [1..1] **statusCode** (CONF: 175).
	1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" (CodeSystem: ActStatus 2.16.840.1.113883.5.14) (CONF: 176).
9. **SHALL** contain at least one [1..\*] **value** (CONF: 177).
	1. SHALL contain exactly one [1..1] @xsi:type="CE" (CONF: 178).
	2. **SHALL** contain exactly one [1..1] @**code** (CONF: 179).
	3. **SHALL** contain exactly one [1..1] @**CodeSystem** (CONF: 180).
	4. **SHALL** contain exactly one [1..1] @**displayName** (CONF: 181).
10. **SHOULD** contain zero or one [0..1] entryRelationship (CONF: 182).
	1. The entryRelationship, if present, SHALL contain exactly one [1..1] @typeCode="REFR" (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF: 183).
	2. SHALL conform to the Response Media Pattern template (templateId 2.16.840.1.113883.10.20.33.4.2) (CONF: 184).
11. **SHOULD** contain zero or one [0..1] entryRelationship (CONF: 185).
	1. The entryRelationship, if present, SHALL contain exactly one [1..1] @typeCode="REFR" (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF: 186).
	2. SHALL conform to the Text Response Pattern template (templateId 2.16.840.1.113883.10.20.33.4.6) (CONF: 187).
12. **SHOULD** contain zero or more [0..\*] Response Reference Range Pattern template (templateId 2.16.840.1.113883.10.20.33.4.3) (CONF: 188).

***Figure 18: Multiple Choice Response Pattern Example***

 <observation classCode="OBS" moodCode="EVN">

 <templateId root="2.16.840.1.113883.10.20.33.4.5"/>

 <id extension="q2" root="CONTINUA-ID-OID">

 <code code="q2" codeSystem="CONTINUA-QA-OID">

 <originalText>Compared to last week, how would you rate your health status in general?</originalText>

 </code>

 <value xsi:type="CE" code="A1" codeSystem="CONTINUA\_MUL\_OID”, displayName="The same as  last week"/>

 <referenceRange typeCode="REFV">

 <templateId root="2.16.840.1.113883.10.20.33.4.3"/>

 <observationRange>

 <value xsi:type="IVL\_INT">

 <low value='1'/>

 <high value='3'/>

 </value>

 </observationRange>

 </referenceRange>

 </observation>

## Text Response Pattern

[observation: templateId 2.16.840.1.113883.10.20.33.4.6 (open)]

The Text Response Pattern is used to hold response from a text question where the expected answer is free text.

***Table 19: Text Response Pattern Contexts***

| **Used By:** | **Contains Entries:** |
| --- | --- |
| Responses Organizer (required)  | Response Media Pattern |

***Table 20: Text Response Pattern Constraints Overview***

| **Name** | **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Fixed Value** |
| --- | --- | --- | --- | --- | --- | --- |
|  | observation[templateId/@root = '2.16.840.1.113883.10.20.33.4.6'] |
|  | @classCode | 1..1 | SHALL |  | CONF:189 | 2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
|  | @moodCode | 1..1 | SHALL |  | CONF:190 | 2.16.840.1.113883.5.1001 (ActMood) = EVN |
|  | templateId | 1..1 | SHALL |  | CONF:191 |  |
|  | @root | 1..1 | SHALL |  | CONF:192 | 2.16.840.1.113883.10.20.33.4.6 |
|  | id | 1..1 | SHALL |  | CONF:193 |  |
|  | code | 1..1 | SHALL | CE | CONF:194 |  |
|  | @code | 1..1 | SHALL |  | CONF:195 |  |
|  | @codesystem | 1..1 | SHALL |  | CONF:196 |  |
|  | originalText | 1..1 | SHALL |  | CONF:197 |  |
|  | text | 0..1 | MAY | ED | CONF:198 |  |
|  | languageCode | 0..1 | SHOULD |  | CONF:199 |  |
|  | statusCode | 1..1 | SHALL |  | CONF:200 |  |
|  | @code | 1..1 | SHALL |  | CONF:201 | 2.16.840.1.113883.5.14 (ActStatus) = completed |
|  | value | 1..1 | SHALL |  | CONF:202 |  |
|  | @xsi:type | 1..1 | SHALL |  | CONF:203 | ST |
|  | entryRelationship | 0..1 | SHOULD |  | CONF:204 |  |
|  | @typeCode | 1..1 | SHALL | CD | CONF:205 | REFR |
|  |  observationMedia | 1..1 | SHALL |  | CONF:206 |  |

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF: 189).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF: 190).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF: 191) such that it
	1. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.33.4.4" (CONF: 192).
4. **SHALL** contain exactly one [1..1] **id** (CONF: 193).
5. **SHALL** contain exactly one [1..1] **code** (CONF: 194).
	1. This code **SHALL** contain exactly one [1..1] @**code** (CONF: 195).
	2. This code **SHALL** contain exactly one [1..1] @**CodeSystem** (CONF: 196).
	3. This code **SHALL** contain exactly one [1..1] **@originalText** (CONF: 197).
6. **May** contain zero or one [0..1] **text** (CONF: 198).
7. SHOULD contain zero or one [1..1] languageCode which SHALL be selected from ValueSet Language 2.16.840.1.113883.1.11.11526 DYNAMIC (CONF: 199).
8. **SHALL** contain exactly one [1..1] **statusCode** (CONF: 200).
	1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" (CodeSystem: ActStatus 2.16.840.1.113883.5.14) (CONF: 201).
9. **SHALL** contain exactly one [1..1] **value**  (CONF: 202).
	1. SHALL contain exactly one [1..1] @xsi:type=”ST” (CONF: 203).
10. **SHOULD** contain zero or one [0..1] entryRelationship (CONF: 204).
	1. The entryRelationship, if present, SHALL contain exactly one [1..1] @typeCode="REFR" (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF: 205).
	2. SHALL conform to the Response Media Pattern template (templateId 2.16.840.1.113883.10.20.33.4.2) (CONF: 206).

***Figure 19: Text Response Pattern Example***

 <observation classCode="OBS" moodCode="EVN">

 <templateId root="2.16.840.1.113883.10.20.33.4.6"/>

 <id extension="q3" codeSystem="CONTINUA-ID-OID">

 <code code="q3" codeSystem="CONTINUA-QA-OID">

 <originalText>Why do you feel worse?</originalText>

 </code>

 <value xsi:type="ST">I didn’t drink coffee☺</</value>

 </observation>

## Analog Slider Response Pattern

[observation: templateId 2.16.840.1.113883.10.20.33.4.7 (open)]

The Analog Slider Response Pattern is used to hold response to a Visual Analog Slider Question [\ref{\form definition document\analog slider question}].

***Table 21: Analog Slider Response Pattern Contexts***

| **Used By:** | **Contains Entries:** |
| --- | --- |
| Responses Organizer (required) Numeric Response Pattern (required) | Response Media Pattern |

***Table 22: Analog Slider Response Pattern Constraints Overview***

| **Name** | **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Fixed Value** |
| --- | --- | --- | --- | --- | --- | --- |
|  | observation[templateId/@root = '2.16.840.1.113883.10.20.32.4.9'] |
|  | templateId | 1..1 | SHALL |  | CONF:209 |  |
|  | @root | 1..1 | SHALL |  | CONF:210 | 2.16.840.1.113883.10.20.32.4.9 |
|  | referenceRange | 1..1 | SHALL |  | CONF:211 |  |
|  | @typeCode | 1..1 | SHALL | CD | CONF:212 | REFV |
|  | observationRange | 1..1 | SHALL |  | CONF:213 |  |
|  | value | 1..1 | SHALL |  | CONF:214 |  |
|  | @xsi:type | 1..1 | SHALL |  | CONF:215 | GLIST\_PQ |
|  | head | 1..1 | SHALL |  | CONF:216 |  |
|  | increment | 1..1 | SHALL |  | CONF:217 |  |
|  | denominator | 1..1 | SHALL |  | CONF:218 |  |
|  | interpretationCode | 0..1 | SHOULD |  | CONF:219 |  |

1. **SHALL** conform to the Numeric Response Pattern template (templateId 2.16.840.1.113883.10.20.32.4.6) (CONF: 207).
2. **SHALL NOT** contain Response Reference Range Pattern template (templateId 2.16.840.1.113883.10.20.32.4.4) (CONF: 208).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF: 209) such that it
	1. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.32.4.9" (CONF: 210).
4. **SHALL** contain exactly one [1..1] referenceRange (CONF: 211).
	1. SHALL contain exactly one [1..1] @typeCode="REFV" (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF: 212).
	2. The referenceRange SHALL contain exactly one [1..1] observationRange (CONF: 213).
		1. SHALL contain exactly one [1..1] value (CONF: 214) such that it
			1. SHALL contain exactly one [1..1] @xsi:type=”GLIST\_PQ” (CONF: 215).
			2. SHALL contain exactly one [1..1] head (CONF: 216).
			3. SHALL contain exactly one [1..1] increment (CONF: 217).
			4. SHALL contain exactly one [1..1] denominator (CONF: 218).
		2. SHOULD contain zero or one [0..1] interpretationCode (CONF: 219).

***Figure 20: Analog Slider Response Pattern Example***

 <observation classCode="OBS" moodCode="EVN">

 <templateId root="2.16.840.1.113883.10.20.33.4.7"/>

 <id extension="q4" root="CONTINUA-ID-OID">

 <code code="q4" codeSystem="CONTINUA-QA-OID">

 <originalText>what is the percentage of time that you are pain free?</originalText>

 </code>

 <text>…</text>

 <value xsi:type="INT" value=”60”/>

 <!— the expected value should be between 0 and 100.-->

 <referenceRange typeCode="REFV">

 <observationRange>

 <value xsi:type="GLIST\_PQ" denominator=”100”>

 <head value='0'/>

 <increment value='1'/>

 </value>

 </observationRange>

 </referenceRange>

 </observation>

## Discrete Slider Response Pattern

[observation: templateId 2.16.840.1.113883.10.20.33.4.8 (open)]

The Discrete Slider Response Pattern is used to hold the response from a discrete slider question [\ref{\form definition document\analog slider question}].

***Table 23: Discrete Slider Response Pattern Contexts***

| **Used By:** | **Contains Entries:** |
| --- | --- |
| Responses Organizer (required)  | Multiple Choice Response Pattern |

***Table 27: Discrete Slider Response Pattern Constraints Overview***

| **Name** | **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Fixed Value** |
| --- | --- | --- | --- | --- | --- | --- |
|  | observation[templateId/@root = '2.16.840.1.113883.10.20.32.4.10'] |
|  | templateId | 1..1 | SHALL |  | CONF:221 |  |
|  | @root | 1..1 | SHALL |  | CONF:222 | 2.16.840.1.113883.10.20.32.4.10 |
|  | value | 1..1 | SHALL |  | CONF:223 |  |
|  | referenceRange/observationRange/value/high/@value | 1..1 | SHALL | INT | CONF:224 | 1 |

1. **SHALL** confirm to Multiple Choice Response Pattern template (templateId 2.16.840.1.113883.10.20.32.4.7) (CONF: 220).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF: 221) such that it
	1. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.32.4.10" (CONF: 222).
3. **SHALL** contain exactly one [1..1] **value** (CONF: 223).
4. **SHALL** contain exactly one [1..1] referenceRange/observationRange/value/high/@value=”1” (CONF: 224).

***Figure 21: Discrete Slider Response Pattern Example***

 <observation classCode="OBS" moodCode="EVN">

 <templateId root="2.16.840.1.113883.10.20.33.4.5"/>

 <templateId root="2.16.840.1.113883.10.20.32.4.8"/>

 <id extension="q5" root="CONTINUA-ID-OID">

 <code code="GUID" codeSystem="CONTINUA-QA-OID">

 <originalText>Compared to last week how would you rate your health status in general?</originalText>

 </code>

 <value xsi:type="CE" code="A3" codeSystem="CONTINUA-ANS-OID”, displayName="Worse than last week"/>

 <referenceRange typeCode="REFV">

 <templateId root="2.16.840.1.113883.10.20.32.4.4"/>

 <observationRange>

 <value xsi:type="IVL\_INT">

 <low value='0'/>

 <high value='1'/>

 </value>

 </observationRange>

 </referenceRange>

 </observation>

1. Template IDs Used in This Guide

This appendix lists all templateIds used in this guide in [alphabetical order](#Alphabetical_List_of_Templates) and in [containment order](#Template_Containments).

***Table 21: Alphabetical*** ***List of Templates by Type***

| **Template Title** | **Template Type** | **templateId** |
| --- | --- | --- |
| Analog Slider Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.7 |
| Discrete Slider Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.8 |
| Multiple Choice Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.5 |
| Numeric Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.4 |
| Questionnaire Response Document-Level Template | document | 2.16.840.1.113883.10.20.33.1.1 |
| Questionnaire Response Section | section | 2.16.840.1.113883.10.20.33.2.1 |
| Responses Organizer | entry | 2.16.840.1.113883.10.20.33.4.1 |
| Response Media Pattern | entry | 2.16.840.1.113883.10.20.33.4.2 |
| Response Reference Range Pattern | entry | 2.16.840.1.113883.10.20.33.4.3 |
| Text Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.6 |

Table 22: Template Containments

| Template Title | Template Type | templateId |
| --- | --- | --- |
| Questionnaire Response Document-Level Template | document | 2.16.840.1.113883.10.20.33.1.1 |
| Questionnaire Response Section | section | 2.16.840.1.113883.10.20.33.2.1 |
| Responses Organizer | entry | 2.16.840.1.113883.10.20.33.4.1 |
| Numeric Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.4 |
| Response Media Pattern | entry | 2.16.840.1.113883.10.20.33.4.2 |
| Response Reference Range Pattern | entry | 2.16.840.1.113883.10.20.33.4.3 |
| Multiple Choice Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.5 |
| Response Media Pattern | entry | 2.16.840.1.113883.10.20.33.4.2 |
| Response Reference Range Pattern | entry | 2.16.840.1.113883.10.20.33.4.3 |
| Text Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.6 |
| Text Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.6 |
| Response Media Pattern | entry | 2.16.840.1.113883.10.20.33.4.2 |
| Analog Slider Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.7 |
| Numeric Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.2 |
| Discrete Slider Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.8 |
| Multiple Choice Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.5 |

1. <http://www.hl7.org/v3ballot/html/infrastructure/conformance/conformance.htm> [↑](#footnote-ref-1)
2. *HL7 Clinical Document Architecture (CDA Release 2).* <http://www.hl7.org/implement/standards/cda.cfm> [↑](#footnote-ref-2)