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**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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# Open Issues

# Introduction

## Audience

## Purpose

## Scope

## Approach

## Organization of This Guide

* 1.

## Content of the Package

The following files comprise the package:

Table 1: Content of the Package

|  |  |  |
| --- | --- | --- |
| Filename | Description | Standards Applicability |
|  |  |  |
|  |  |  |

# General, Universal Realm, 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). Each document template defined in the Consolidated CDA guide recommends use of a single preferred clinicalDocument/code.

CDA R2 base Questionnaire Response documen is created by patient (i.e. non-clinicians) and could be considered as a sub type of patient generate document. The most general type of Patient Authored Note is denoted by the LOINC code 51855-5.

## 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 **(NC:xxxxx)**.
	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 **(NC:xxxxx)**.
2. SHALL contain exactly one [1..1] typeId (CONF:5361).
	1. This typeId SHALL contain exactly one [1..1] @root="2.16.840.1.113883.1.3" (**NC:xxxxx**).
	2. This typeId SHALL contain exactly one [1..1] @extension="POCD\_HD000040" (CONF:5251).
3. SHALL contain exactly one [1..1] header-level templateId (**NC:xxxxx**) such that it
	1. SHALL contain exactly one [1..1] @root=”2.16.840.1.113883.10.20.33” **(NC:xxxxx).**
4. SHALL contain exactly one [1..1] id (**NC:xxxxx**).
	1. This id SHALL be a globally unique identifier for the document (**NC:xxxxx**).
5. SHALL contain exactly one [1..1] code (**NC:xxxxx**).
	1. This code SHALL specify the Questionnaire Response document generated by patient. **(NC:xxxxx).**
	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. **(NEWCONF:xxxxx).**
6. SHALL contain exactly one [1..1] title (CONF:5254).
7. SHALL contain exactly one [1..1] effectiveTime (CONF:5256).
8. SHALL contain exactly one [1..1] confidentialityCode, which SHALL be selected from ValueSet HL7 BasicConfidentialityKind 2.16.840.1.113883.1.11.16926 STATIC 2010-04-21 (CONF:5259).
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:5372).

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 1: 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 2: 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 (**NC:xxxxx**).
	1. Such recordTargets SHALL contain exactly one [1..1] patientRole (CONF:5267).
		1. This patientRole SHALL contain at least one [1..\*] id (**NC:xxxxx**).

#### Patient

* + 1. This patientRole SHOULD contain zero or one [0..1] patient (**NC:xxxxx**).
			1. This patient SHALL contain exactly one [1..1] name (**NC:xxxxx**).
			2. This patient SHALL contain exactly one [1..1] administrativeGenderCode. (**NC:xxxxx**).

Figure 3: 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, it is the Questionnaire Response Document. The author is usually the patient who answers the questions.

1. SHALL contain at least one [1..\*] author (**NC:xxxxx**) .
	1. Such authors SHALL contain exactly one [1..1] time (**NC:xxxxx**).
	2. Such authors SHALL contain exactly one [1..1] assignedAuthor (**NC:xxxxx**).
		1. This assignedAuthor SHALL contain exactly one [1..1] id (**NC:xxxxx**) 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. **(NC:xxxxx)**.
		2. When the author is a person,this assignedAuthor SHALL contain one [1..1] code (**NC:xxxxx**).
			1. The code, SHaLL contain exactly one [1..1] @code, which SHOULD be selected from the PersonalRelationshipRoleType value set PLUS ResponsibleParty PLUS (**NC:xxxxx**)
		3. There SHALL be exactly one assignedAuthor/assignedPerson or exactly one assignedAuthor/assignedAuthoringDevice (**NC:xxxxx**).
		4. This assignedAuthor SHALL contain zero or one [0..1] assignedPerson (**NC:xxxxx**).
			1. The assignedPerson, if present, SHALL contain at least one [1..\*] name (**NC:xxxxx**).
		5. This assignedAuthor SHOULD contain zero or one [0..1] assignedAuthoringDevice (**NC:xxxxx**).
			1. The assignedAuthoringDevice, if present, SHALL contain exactly one [1..1] manufacturerModelName (**NC:xxxxx**).
			2. The assignedAuthoringDevice, if present, SHALL contain exactly one [1..1] softwareName (**NC:xxxxx**).
		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**. (**NC:xxxxx**).

Figure 4: 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"/>

 <!-- 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"/>

 <assignedPerson>

 <name>

 <given>Adam</given>

 <family>Everyman</family>

 </name>

 </assignedPerson>

 </assignedAuthor>

</author>

Figure 5: 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:5441).
	1. The dataEnterer, if present, **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:5442).
		1. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:5443).
		2. This assignedEntity **SHALL** contain at least one [1..\*] **addr** (CONF:5460).
		3. This assignedEntity **SHALL** contain at least one [1..\*] **telecom** (CONF:5466).
		4. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson** (CONF:5469).
			1. This assignedPerson **SHALL** contain at least one [1..\*] **name** (CONF:5470).
		5. This assignedEntity **MAY** contain zero or one [0..1] code to encode the relationship of the person to the recordTarget **(NEWCONF:xxxxx)**.

Figure 6: 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** (**NEWCONF:xxxxx**).
	1. **SHALL** contain exactly one [1..1] assignedEntity OR exactly one [1..1] relatedEntity (**NEWCONF:xxxxx**).
		1. **SHOULD** contain at least one [1..\*] **addr** (**NEWCONF:xxxxx**).
		2. **SHALL** contain exactly one [1..1] assignedPerson OR exactly one [1..1] relatedPerson (**NEWCONF:xxxxx**).
			1. **SHALL** contain at least one [1..\*] **name** (**NEWCONF:xxxxx**).
		3. This assignedEntity **MAY** contain zero or one [0..1] code **(NEWCONF:xxxx**).
		4. **SHOULD** contain zero or more [0..\*] **id** (**NEWCONF:xxxxx**).

***Figure 7: 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 care of the document. Every CDA document has exactly one custodian.

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

Figure 7: 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:5565).
	1. The informationRecipient, if present, SHALL contain exactly one [1..1] intendedRecipient (CONF:5566).
		1. This intendedRecipient SHOULD contain atleast one [1..\*] id (**NEWCONF:xxxxx)**.
		2. This intendedRecipient MAY contain zero or one [0..1] informationRecipient (CONF:5567).
			1. The informationRecipient, if present, SHALL contain at least one [1..\*] name (CONF:5568).
		3. This intendedRecipient MAY contain zero or one [0..1] receivedOrganization (CONF:5577).
			1. The receivedOrganization, if present, SHALL contain exactly one [1..1] name (CONF:5578).

***Figure 9: 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 patient authored 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, patient authored documents may be provided without legal authentication. This implies that a patient authored 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:5579).
	1. The legalAuthenticator, if present, SHALL contain exactly one [1..1] time (CONF:5580).
	2. The legalAuthenticator, if present, SHALL contain exactly one [1..1] signatureCode (CONF:5583).
		1. This signatureCode SHALL contain exactly one [1..1] @code="S" (CodeSystem: Participationsignature 2.16.840.1.113883.5.89) (CONF:5584).
	3. The legalAuthenticator, if present, SHALL contain exactly one [1..1] assignedEntity (CONF:5585).
		1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:5586).
		2. This assignedEntity MAY contain zero or one [0..1] code (**NEWCONF:xxxxx)**
		3. This assignedEntity SHALL contain at least one [1..\*] addr (CONF:5589).
		4. This assignedEntity SHALL contain at least one [1..\*] telecom (CONF:5595).
		5. This assignedEntity SHALL contain exactly one [1..1] assignedPerson (CONF:5597).
			1. This assignedPerson SHALL contain at least one [1..\*] name (CONF:5598).

***Figure 10: 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:5607).
	1. The authenticator, if present, SHALL contain exactly one [1..1] time (CONF:5608).
	2. The authenticator, if present, SHALL contain exactly one [1..1] signatureCode (CONF:5610).
		1. This signatureCode SHALL contain exactly one [1..1] @code="S" (CodeSystem: Participationsignature 2.16.840.1.113883.5.89) (CONF:5611).
	3. The authenticator, if present, SHALL contain exactly one [1..1] assignedEntity (CONF:5612).
		1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:5613).
		2. This assignedEntity MAY contain zero or one [0..1] code (CONF:16825).
		3. This assignedEntity SHALL contain at least one [1..\*] addr (CONF:5616).
		4. This assignedEntity SHALL contain at least one [1..\*] telecom (CONF:5622).
			1. Such telecoms SHOULD contain exactly one [1..1] @use **(NEWCONF:xxxxx)**
		5. This assignedEntity SHALL contain exactly one [1..1] assignedPerson (CONF:5624).
			1. This assignedPerson SHALL contain at least one [1..\*] name (CONF:5625).

***Figure 11: 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:10003).
	1. The participant, if present, MAY contain zero or one [0..1] time (CONF:10004).
	2. Such participants, if present, SHALL have an associatedPerson or scopingOrganization element under participant/associatedEntity (CONF:10006).
	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:10007).

***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 12: 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. Reference to such task is stored in the id field of the Questionnaire Response Document.

1. SHOULD contain zero or one [0..1] inFulfillmentOf (**NC:xxxxx**).
	1. The inFulfillmentOf, if present, SHALL contain exactly one [1..1] order (CONF:9953).
		1. This order SHALL contain at least one [1..\*] id (PGD:**xxxxx**)
			1. Such ids MAY represent a scheduled appointment or service event in a practice management system (**NC:xxxxx**).

### 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 ClinicalDocument/documentationOf/serviceEvent/@classCode to “PCPR” (care provision). The ClinicalDocument/documentationOf/serviceEvent/effectiveTime indicates the span of time documented in the note. Additional data from outside this duration may also be included if it is 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).

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

* 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.
1. **SHALL** contain exactly one [1..1] **documentationOf** (CONF:8452).
	1. This documentationOf **SHALL** contain exactly one [1..1] **serviceEvent** (CONF:8480).
		1. This serviceEvent **SHALL** contain exactly one [1..1] **@classCode**="PCPR" Provision of Care indicating the person’s health care, health practices and relevant health history (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6) (CONF:8453).
		2. This serviceEvent **MAY** contain one [1..1] code (**NEWCONF:xxxxx**).
			1. The code, SHould contain exactly one [1..1] @code, which SHOULD be selected from a value set established by the document-level template for a specific type of Patient Authored Note. (**NEWCONF:xxxxx**)
		3. This serviceEvent **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:8481).
			1. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:8454).
			2. This effectiveTime **SHALL** contain exactly one [1..1] **high** (CONF:8455).
		4. This serviceEvent **SHOULD** contain zero or more [0..\*] **performer** (CONF:8482).
			1. serviceEvent/performer represents the healthcare providers, allied health professionals or other individuals involved in the current or pertinent historical care of the patient during the time span covered by the document (**NEWCONF:xxxxx**).
			2. Such performers **SHALL** contain exactly one [1..1] **@typeCode**="PRF" Participation physical performer (CodeSystem: HL7ParticipationType 2.16.840.1.113883.5.90) (CONF:8458).
			3. Such performers **MAY** contain exactly one [1..1] **functionCode=**”PCP” when indicating the performer was the primary care physician (CodeSystem: HL7ParticipationType 2.16.840.1.113883.5.90) **(NewCONF:xxxxx)**
			4. Such performers **MAY** contain zero or more [0..1] **assignedEntity** (CONF:8459).
				1. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:8460).
				2. This assignedEntity **MAY** contain zero or one [0..1] **code** (CONF:8461).

***Figure 13: DocumentationOf example***

<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>

 <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>

 </functionCode>

 <time>

 <low value="19551125"/>

 <high value="1971"/>

 </time>

 <assignedEntity>

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

 <id extension="999.6" root="2.16.840.1.113883.19"/>

 <!-- The physician's NPI number -->

 <id extension="1122334477" root="2.16.840.1.113883.4.6"/>

 <!-- Type of Physician -->

 <code code="208000000X" displayName="Pediatrics"

 codeSystemName="NUCC Health Care Provider Taxonomy"

 codeSystem="2.16.840.1.113883.6.101">

 <originalText>Pediatrician</originalText>

 </code>

 <addr>

 <streetAddressLine>10 Rue De Seville</streetAddressLine>

 <city>Pointe-Claire</city>

 <state>QC</state>

 <postalCode>H9R 1E9</postalCode>

 <country>CAB</country>

 </addr>

 <telecom use="WP" value="tel:514-333-1234"/>

 <assignedPerson>

 <name>

 <prefix>Dr.</prefix>

 <given>Karen</given>

 <family>Kidder</family>

 </name>

 </assignedPerson>

 <representedOrganization>

 <!-- Internal id -->

 <id extension="999.7" root="2.16.840.1.113883.19"/>

 <name>Pointe-Claire Pediatrics</name>

 <telecom use="WP" value="tel:514-333-1234"/>

 <addr>

 <streetAddressLine>10 Rue De Seville</streetAddressLine>

 <city>Pointe-Claire</city>

 <state>QC</state>

 <postalCode>H9R 1E9</postalCode>

 <country>CAN</country>

 </addr>

 </representedOrganization>

 </assignedEntity>

 </performer>

 </serviceEvent>

### Authorization/consent

The header can record information about the patient’s consent.

The type of consent (e.g., a consent to perform the related serviceEvent) is conveyed in consent/code. Consents in the header have been finalized (consent/statusCode must equal Completed) and should be on file. This specification does not address how Privacy Consent’ is represented, but does not preclude the inclusion of ‘Privacy Consent’.

1. **MAY** contain zero or more [0..\*] **authorization** (**NEWCONF:xxxxx**) such that it
	1. SHALL contain exactly one [1..1] consent (CONF:16793).
		1. This consent MAY contain zero or more [0..\*] id (CONF:16794).
		2. This consent MAY contain zero or one [0..1] code (CONF:16795).
			1. The type of consent (e.g., a consent to perform the related serviceEvent) is conveyed in consent/code (CONF:16796).
		3. This consent SHALL contain exactly one [1..1] statusCode (CONF:16797).
			1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6) (CONF:16798).

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

<authorization typeCode="AUTH">

 <consent classCode="CONS" moodCode="EVN">

 <id root="629deb70-5306-11df-9879-0800200c9a66" />

 <code codeSystem=" 2.16.840.1.113883.6.1" codeSystemName="LOINC"

 code="64293-4" displayName="Procedure consent"/>

 <statusCode code="completed"/>

 </consent>

</authorization>

### 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** (**NEWCONF:xxxxx**).
	1. The componentOf, if present, **SHALL** contain exactly one [1..1] **encompassingEncounter** (**NEWCONF:xxxxx**).
		1. This encompassingEncounter **SHALL** contain at least one [1..\*] **id** (**NEWCONF:xxxxx**).
		2. This encompassingEncounter **SHALL** contain exactly one [1..1] **effectiveTime** (**NEWCONF:xxxxx**).

## Rendering Header Information for Human Presentation

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

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

* Document title and document dates
* Header information which does not match information stored in the EMR
* Service and encounter types, and date ranges as appropriate
* 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

<place holder for providing context information (Informative)>

## Questionnaire Response Document

[ClinicalDocument: templateId 2.16.840.1.113883.10.20.33.1.1 (open)]

***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 |  | **NC:xxxxx** |  |
|  |  structuredBody | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  |  component | 1..\* | SHALL |  | **NC:xxxxx** |  |
|  |  section | 1..1 | SHALL |  | **NC:xxxxx** |  |

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

# Section-Level Templates

This section contains the 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)]

Table 7: Generic Section Pattern Contexts

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

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

***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 |  | **NC:xxxxx** |  |
|  |  @root | 1..1 | SHALL |  | **NC:xxxxx** | 2.16.840.1.113883.10.20.33.2.1 |
|  |  title | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  |  text | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  |  entry | 1..\* | SHALL |  | **NC:xxxxx** |  |
|  |  @typeCode | 1..1 | SHALL |  |  | DRIV |
|  | organizer | 1..1 | SHALL |  | **NC:xxxxx** |  |

1. **SHALL** contain exactly one [1..1] **templateId** (**NC:xxxxx**) such that it
	1. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.33.2.1" (**NC:xxxxx**).
2. **SHOULD** contain zero or one [1..1] **title** (**NC:xxxxx**).
3. **SHOULD** contain zero or one [1..1] **text** (**NC:xxxxx**).
4. **SHALL** contain at least one [1..\*] **entry** (CONF:17477) such that it
	1. **SHALL** contain exactly one [1..1] **@typeCode**=”DRIV”
	2. **SHALL** contain exactly one [1..1] Question Responses Organizer template(templateId: 2.16.840.1.113883.10.20.33.4.1) (**NC:xxxxx**).

***Figure 15: Questionnaire Response Section example***

<seciton>

 <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>

</seciton>

# 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:

1. Key template metadata (e.g., templateId, etc.)
2. Description and explanatory narrative.
3. Required CDA acts, participants and vocabularies.
4. 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 can be used to create groupings of other entries (or templates) that share a common context e.g. question responses related to a specific healthcare domain. The organizer/@classCode is equal to CLUSTER to group entries into a compound statement. The organizer/code could be used to indicate questions response to a specific healthcare domain e.g. nutrition or mental status.

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

| **Used By:** | **Contains Entries:** |
| --- | --- |
| Questionnaire Response Section Pattern (required) | Numeric Question Response PatternMultiple Choice Question 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 |  | **NC:xxxxx** | 2.16.840.1.113883.5.6 (HL7ActClass)=CLUSTER |
|  |  @moodCode | 1..1 | SHALL |  | **NC:xxxxx** | 2.16.840.1.113883.5.1001 (ActMood) = EVN |
|  |  templateId | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  |  @root | 1..1 | SHALL |  | **NC:xxxxx** | 2.16.840.1.113883.10.20.33.4.1 |
|  |  id | 0..1 | SHOULD |  | **NC:xxxxx** |  |
|  |  code | 1..1 | SHOULD |  | **NC:xxxxx** |  |
|  |  statusCode | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  |  @code | 1..1 | SHALL |  | **NC:xxxxx** | 2.16.840.1.113883.5.14 (ActStatus) = completed |
|  |  component | 1..\* | SHALL |  | **NC:xxxxx** |  |
|  |  observation | 1..1 | SHALL |  | **NC:xxxxx** |  |

1. SHALL contain exactly one [1..1] @classCode (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 STATIC) (**NC:xxxxx**).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: ActMood 2.16.840.1.113883.5.1001 STATIC) (**NC:xxxxx**).
3. SHALL contain exactly one [1..1] templateId (**NC:xxxxx**) such that it
	1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.33.4.1" (**NC:xxxxx**).
4. SHOULD contain zero or one [0..1] id (**NC:xxxxx**).
5. SHALL contain exactly one [1..1] statusCode (**NC:xxxxx**).
	1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" (CodeSystem: ActStatus 2.16.840.1.113883.5.14) (**NC:xxxxx**).
6. SHALL contain at least one [1..\*] component (**NC:xxxxx**) such that it
	1. SHALL contain at least one [1..\*] of the following templates (**NC:xxxxx**).
		1. Numeric Question Response Pattern template(templateID: 2.16.840.1.113883.10.20.33.4.4) (**NC:xxxxx**).
		2. Multiple Choice Question Response Pattern template(templateID: 2.16.840.1.113883.10.20.33.4.5) (**NC:xxxxx**).
		3. Text Question Response Pattern template(templateID: 2.16.840.1.113883.10.20.33.4.6) (**NC:xxxxx**).

***Figure 16: Responses Organizer***

<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 Continua Numeric, Multiple Choice or other defined templates

 -->

 <component>

 <sequenceNumber=”1">

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

 <templateID root="2.16.840.1.113883.10.20.33.4.4"/>

 ...

 </observation>

 </component>

 <component>

 <sequenceNumber=”2">

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

 <templateID root="2.16.840.1.113883.10.20.33.4.5"/>

 ...

 </observation>

 <component>

 <sequenceNumber=”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)]

<place holder for providing context information (Informative)>

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

| **Used By:** | **Contains Entries:** |
| --- | --- |
| Numeric Question Response Pattern (optional)Multiple Choice Question 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 | **NC:xxxxx** | 2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
|  |  @moodCode | 1..1 | SHALL | CD | **NC:xxxxx** | 2.16.840.1.113883.5.1001 (ActMood) = EVN |
|  |  templateId | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  |  @root | 1..1 | SHALL |  | **NC:xxxxx** | 2.16.840.1.113883.10.20.33.4.2 |
|  |  value | 1..1 | SHALL |  | **NC:xxxxx**  |  |

1. SHALL contain exactly one [1..1] @classCode (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 STATIC) (**NC:xxxxx**).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: ActMood 2.16.840.1.113883.5.1001 STATIC) (**NC:xxxxx**).
3. SHALL contain exactly one [1..1] templateId (CONF:7126) such that it
	1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.33.4.2" (**NC:xxxxx**).
4. **SHALL** contain exactly one [1..1] **value** (**NC:xxxxx**)

## Response Reference Range Pattern

[referenceRange: templateId 2.16.840.1.113883.10.20.33.4.3 (open)]

<place holder for providing context information (Informative)>

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

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

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

| **Name** | **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Fixed Value** |
| --- | --- | --- | --- | --- | --- | --- |
|  | referenceRanage[templateId/@root ='2.16.840.1.113883.10.20.33.4.3'] |
|  | @typeCode | 1..1 | SHALL | CD | **NC:xxxxx** | REFV |
|  | templateID | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | @root | 1..1 | SHALL |  | **NC:xxxxx** | 2.16.840.1.113883.10.20.33.4.3 |
|  | observationRange | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | value | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | @xsi:type | 1..1 | SHALL |  | **NC:xxxxx** | IVL\_INT |
|  | Low | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | high | 1..1 | SHALL |  | **NC:xxxxx** |  |

1. The referenceRange, SHALL contain exactly one [1..1] @typeCode="REFV" (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (**NC:xxxxx**).
2. SHALL contain exactly one [1..1] templateId (CONF:7126) such that it
	1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.33.4.3" (**NC:xxxxx**).
3. The referenceRange SHALL contain exactly one [1..1] observationRange (**NC:xxxxx**).
	1. SHALL contain exactly one [1..1] value (**NC:xxxxx**) such that it
		1. SHALL contain exactly one [1..1] @xsi:type=”IVL\_INT” (**NC:xxxxx**).
		2. SHALL contain exactly one [1..1] low (**NC:xxxxx**).
		3. SHALL contain exactly one [1..1] high (**NC:xxxxx**).

## Numeric Response Pattern

[observation: templateId 2.16.840.1.113883.10.20.33.4.4 (open)]

<place holder for providing context information (Informative)>

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

| **Used By:** | **Contains Entries:** |
| --- | --- |
| Responses Organizer (required)  | Question Response Media PatternQuestion Response 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 |  | **NC:xxxxx** | 2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
|  |  @moodCode | 1..1 | SHALL |  | **NC:xxxxx** | 2.16.840.1.113883.5.1001 (ActMood) = EVN |
|  |  templateId | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  |  @root | 1..1 | SHALL |  | **NC:xxxxx** | 2.16.840.1.113883.10.20.33.4.4 |
|  | id | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  |  code | 1..1 | SHALL | CE | **NC:xxxxx** |  |
|  |  @code | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  |  @codesystem | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  |  originalText | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | text | 0..1 | SHALL | ED | **NC:xxxx** |  |
|  |  statusCode | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  |  @code | 1..1 | SHALL |  | **NC:xxxxx** | 2.16.840.1.113883.5.14 (ActStatus) = completed |
|  |  value | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | referenceRanage | 0..\* | SHOULD |  | **NC:xxxxx** |  |
|  |  entryRelationship | 0..1 | SHOULD |  | **NC:xxxxx** |  |
|  |  @typeCode | 1..1 | SHALL | CD | **NC:xxxxx** | REFR |
|  |  observationMedia | 1..1 | SHALL |  | **NC:xxxxx** |  |

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (**NC:xxxxx**).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (**NC:xxxxx**).
3. **SHALL** contain exactly one [1..1] **templateId** (**NC:xxxxx**) such that it
	1. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.33.4.4" (**NC:xxxxx**).
4. **SHALL** contain exactly one [1..1] **id** (**NC:xxxxx**)
5. **SHALL** contain exactly one [1..1] **code** (**NC:xxxxx**).
	1. This code **SHALL** contain exactly one [1..1] @**code** (**NC:xxxxx**).
	2. This code **SHALL** contain exactly one [1..1] @**CodeSystem** (**NC:xxxxx**).
	3. This code **SHALL** contain exactly one [1..1] **@originalText** (**NC:xxxxx**)
6. **May** contain zero or one [0..1] **text** (**NC:xxxxx**).
7. **SHALL** contain exactly one [1..1] **statusCode** (**NC:xxxxx**).
	1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" (CodeSystem: ActStatus 2.16.840.1.113883.5.14) (**NC:xxxxx**).
8. **SHALL** contain exactly one [1..1] **value** (**NC:xxxxx**)
9. **SHOULD** contain zero or more [0..\*] Response Reference Range Pattern template (templateId 2.16.840.1.113883.10.20.33.4.3) (**NC:xxxxx**)
10. **SHOULD** contain zero or one [0..1] entryRelationship (**NC:xxxxx**)
	1. The entryRelationship, if present, SHALL contain exactly one [1..1] @typeCode="REFR" (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (**NC:xxxxx**).
	2. SHALL conform to the Response Media Pattern template (templateId 2.16.840.1.113883.10.20.33.4.2) (**NC:xxxxx**).

***Figure 17: Numeric Response Pattern example***

<entry>

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

 <templateId root="2.16.840.1.113883.10.20.33.4.4"/>

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

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

 </code>

 <value xsi:type="INT">5</value>

 <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>

 <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>

 </observation>

 </entry>

## Multiple Choice Response Pattern

[observation: templateId 2.16.840.1.113883.10.20.33.4.5 (open)]

<place holder for providing context information (Informative)>

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

| **Used By:** | **Contains Entries:** |
| --- | --- |
| Responses Organizer (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 |  | **NC:xxxxx** | 2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
|  |  @moodCode | 1..1 | SHALL |  | **NC:xxxxx** | 2.16.840.1.113883.5.1001 (ActMood) = EVN |
|  |  templateId | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  |  @root | 1..1 | SHALL |  | **NC:xxxxx** | 2.16.840.1.113883.10.20.33.4.5 |
|  |  id | 1..1 | SHALL | CE | **NC:xxxxx** |  |
|  |  code | 1..1 | SHALL | CE | **NC:xxxxx** |  |
|  |  @code | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  |  @codesystem | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  |  originalText | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  |  text | 0..1 | MAY |  | **NC:xxxxx** |  |
|  |  statusCode | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  |  @code | 1..1 | SHALL |  | **NC:xxxxx** | 2.16.840.1.113883.5.14 (ActStatus) = completed |
|  |  value | 1..\* | SHALL |  | **NC:xxxxx** |  |
|  |  @xsi:type | 1..1 | SHALL |  | **NC:xxxxx** | CE |
|  |  @code | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  |  @codesystem | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  |  @displayName | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | referenceRanage | 0..\* | SHOULD |  | **NC:xxxxx** |  |
|  |  entryRelationship | 0..1 | SHOULD |  | **NC:xxxxx** |  |
|  |  @typeCode | 1..1 | SHALL | CD | **NC:xxxxx** | REFR |
|  |  observationMedia | 1..1 | SHALL |  | **NC:xxxxx** |  |

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (**NC:xxxxx**).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (**NC:xxxxx**).
3. **SHALL** contain exactly one [1..1] **templateId** (**NC:xxxxx**) such that it
	1. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.33.4.5" (**NC:xxxxx**).
4. **SHALL** contain exactly one [1..1] **id** (**NC:xxxxx**).
5. **SHALL** contain exactly one [1..1] **code** (**NC:xxxxx**).
	1. This code **SHALL** contain exactly one [1..1] @**code** (**NC:xxxxx**).
	2. This code **SHALL** contain exactly one [1..1] @**CodeSystem** (**NC:xxxxx**).
	3. This code **SHALL** contain exactly one [1..1] **@originalText** (**NC:xxxxx**)
6. **MAY** contain zero or one [0..1] **text** (**NC:xxxxx**).
7. **SHALL** contain exactly one [1..1] **statusCode** (**NC:xxxxx**).
	1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" (CodeSystem: ActStatus 2.16.840.1.113883.5.14) (**NC:xxxxx**).
8. **SHALL** contain at least one [1..\*] **value** (**NC:xxxxx**)
	1. SHALL contain exactly one [1..1] @xsi:type="CE" (**NC:xxxxx**).
	2. This code **SHALL** contain exactly one [1..1] @**code** (**NC:xxxxx**).
	3. This code **SHALL** contain exactly one [1..1] @**CodeSystem** (**NC:xxxxx**).
9. **SHOULD** contain zero or more [0..\*] Response Reference Range Pattern template (templateId 2.16.840.1.113883.10.20.33.4.3) (**NC:xxxxx**)
10. **SHOULD** contain zero or one [0..1] entryRelationship (**NC:xxxxx**)
	1. The entryRelationship, if present, SHALL contain exactly one [1..1] @typeCode="REFR" (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (**NC:xxxxx**).
	2. SHALL conform to the Response Media Pattern template (templateId 2.16.840.1.113883.10.20.33.4.2) (**NC:xxxxx**).

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

<entry>

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

 <templateId root="2.16.840.1.113883.10.20.33.4.5"/>

 <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>

 <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>

 </observation>

 </entry>

## Text Response Pattern

[observation: templateId 2.16.840.1.113883.10.20.33.4.6 (open)]

<place holder for providing context information (Informative)>

***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 |  | **NC:xxxxx** | 2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
|  | @moodCode | 1..1 | SHALL |  | **NC:xxxxx** | 2.16.840.1.113883.5.1001 (ActMood) = EVN |
|  | templateId | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | @root | 1..1 | SHALL |  | **NC:xxxxx** | 2.16.840.1.113883.10.20.33.4.6 |
|  | Id | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | Code | 1..1 | SHALL | CE | **NC:xxxxx** |  |
|  | @code | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | @codesystem | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | originalText | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | Text | 0..1 | SHALL | ED | **NC:xxxx** |  |
|  | statusCode | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | @code | 1..1 | SHALL |  | **NC:xxxxx** | 2.16.840.1.113883.5.14 (ActStatus) = completed |
|  | value | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | @xsi:type | 1..1 | SHALL |  | **NC:xxxxx** | ST |
|  | entryRelationship | 0..1 | SHOULD |  | **NC:xxxxx** |  |
|  | @typeCode | 1..1 | SHALL | CD | **NC:xxxxx** | REFR |
|  |  observationMedia | 1..1 | SHALL |  | **NC:xxxxx** |  |

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (**NC:xxxxx**).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (**NC:xxxxx**).
3. **SHALL** contain exactly one [1..1] **templateId** (**NC:xxxxx**) such that it
	1. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.33.4.4" (**NC:xxxxx**).
4. **SHALL** contain exactly one [1..1] **id** (**NC:xxxxx**)
5. **SHALL** contain exactly one [1..1] **code** (**NC:xxxxx**).
	1. This code **SHALL** contain exactly one [1..1] @**code** (**NC:xxxxx**).
	2. This code **SHALL** contain exactly one [1..1] @**CodeSystem** (**NC:xxxxx**).
	3. This code **SHALL** contain exactly one [1..1] **@originalText** (**NC:xxxxx**)
6. **May** contain zero or one [0..1] **text** (**NC:xxxxx**).
7. **SHALL** contain exactly one [1..1] **statusCode** (**NC:xxxxx**).
	1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" (CodeSystem: ActStatus 2.16.840.1.113883.5.14) (**NC:xxxxx**).
8. **SHALL** contain exactly one [1..1] **value**  (**NC:xxxxx**)
	1. SHALL contain exactly one [1..1] @xsi:type=”ST” (**NC:xxxxx**).
9. **SHOULD** contain zero or one [0..1] entryRelationship (**NC:xxxxx**)
	1. The entryRelationship, if present, SHALL contain exactly one [1..1] @typeCode="REFR" (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (**NC:xxxxx**).
	2. SHALL conform to the Response Media Pattern template (templateId 2.16.840.1.113883.10.20.33.4.2) (**NC:xxxxx**).

***Figure 19: Text Response Pattern example***

<entry typeCode="DRIV">

 <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>

 <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>

 </entry>

## Analog Slider Response Pattern

[observation: templateId 2.16.840.1.113883.10.20.33.4.7 (open)]

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

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

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

| **Name** | **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Fixed Value** |
| --- | --- | --- | --- | --- | --- | --- |
|  | observation[templateId/@root = '2.16.840.1.113883.10.20.33.4.7'] |
|  | @classCode | 1..1 | SHALL |  | **NC:xxxxx** | 2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
|  | @moodCode | 1..1 | SHALL |  | **NC:xxxxx** | 2.16.840.1.113883.5.1001 (ActMood) = EVN |
|  | templateId | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | @root | 1..1 | SHALL |  | **NC:xxxxx** | 2.16.840.1.113883.10.20.33.4.7 |
|  | id | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | code | 1..1 | SHALL | CE | **NC:xxxxx** |  |
|  | @code | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | @codesystem | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | originalText | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | text | 0..1 | SHALL | ED | **NC:xxxx** |  |
|  | value | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | referenceRanage | 0..\* | SHOULD |  | **NC:xxxxx** |  |
|  | @typeCode | 1..1 | SHALL | CD | **NC:xxxxx** | REFV |
|  | observationRange | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | value | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | @xsi:type | 1..1 | SHALL |  | **NC:xxxxx** | GLIST\_PQ |
|  | head | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | Increment | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | Denominator | 1..1 | SHALL |  | **NC:xxxxx** |  |
|  | entryRelationship | 0..1 | SHOULD |  | **NC:xxxxx** |  |
|  | @typeCode | 1..1 | SHALL | CD | **NC:xxxxx** | REFR |
|  |  observationMedia | 1..1 | SHALL |  | **NC:xxxxx** |  |

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (**NC:xxxxx**).
2. **SHALL** contain exactly one [1..1] **@moodCode**="DEF" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (**NC:xxxxx**).
3. **SHALL** contain exactly one [1..1] **templateId** (**NC:xxxxx**) such that it
	1. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.32.4.6" (**NC:xxxxx**).
4. **SHALL** contain exactly one [1..1] **id** (**NC:xxxxx**)
5. **SHALL** contain exactly one [1..1] **code** (**NC:xxxxx**).
	1. This code **SHALL** contain exactly one [1..1] @**code** (**NC:xxxxx**).
	2. This code **SHALL** contain exactly one [1..1] @**codeSystem** (**NC:xxxxx**).
	3. This code **SHALL** contain exactly one [1..1] **@originalText** (**NC:xxxxx**)
6. **MAY** contain zero or one [0..1] text (**NC:xxxxx**).
7. **SHALL** contain exactly one [1..1] **value** (**NC:xxxxx**)
8. **SHOULD** contain zero or more [0..\*] referenceRange (**NC:xxxxx**)
	1. The referenceRange SHALL contain exactly one [1..1] observationRange (**NC:xxxxx**).
		1. SHALL contain exactly one [1..1] value (**NC:xxxxx**) such that it
		2. SHALL contain exactly one [1..1] @xsi:type=”GLIST\_PQ” (**NC:xxxxx**).
			1. SHALL contain exactly one [1..1] head (**NC:xxxxx**).
			2. SHALL contain exactly one [1..1] increment (**NC:xxxxx**).
			3. SHALL contain exactly one [1..1] denominator (**NC:xxxxx**).
9. **SHOULD** contain zero or one [0..1] entryRelationship (**NC:xxxxx**)
	1. The entryRelationship, if present, SHALL contain exactly one [1..1] @typeCode="REFR" (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (**NC:xxxxx**).
	2. SHALL conform to the Response Media Pattern template (templateId 2.16.840.1.113883.10.20.33.4.2) (**NC:xxxxx**)..

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

<entry>

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

 <templateId root="2.16.840.1.113883.10.20.32.4.6"/>

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

 <code code="q1" codeSystem="CONTINUA-QA-OID">

 <originalText>How many hour do you sleep last night?</originalText>

 </code>

 <text>Please enter only one value</text>

 <value xsi:type="INT"></value>

 <!— the expected value should be between 0 and 10.-->

 <referenceRange typeCode="REFV">

 <observationRange>

 <value xsi:type="GLIST\_PQ" denominator=”10”>

 <head value='0'/>

 <increment value='1'/>

 </value>

 </observationRange>

 </referenceRange>

 <entryRelationship typeCode="REFR">

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

 <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>

 </observation>

 </entry>

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** |
| --- | --- | --- |
| 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 |
| Question Responses Organizer | entry | 2.16.840.1.113883.10.20.33.4.1 |
| Question Response Media Pattern | entry | 2.16.840.1.113883.10.20.33.4.2 |
| Question Response Reference Range Pattern | entry | 2.16.840.1.113883.10.20.33.4.3 |
| Numeric Question Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.4 |
| Multiple Choice Question Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.5 |
| Text Question Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.6 |
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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 |
| Question Responses Organizer | entry | 2.16.840.1.113883.10.20.33.4.1 |
| Numeric Question Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.4 |
| Question Response Media Pattern | entry | 2.16.840.1.113883.10.20.33.4.2 |
| Question Response Reference Range Pattern | entry | 2.16.840.1.113883.10.20.33.4.3 |
| Multiple Choice Question Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.5 |
| Question Response Media Pattern | entry | 2.16.840.1.113883.10.20.33.4.2 |
| Question Response Reference Range Pattern | entry | 2.16.840.1.113883.10.20.33.4.3 |
| Text Question Response Pattern | entry | 2.16.840.1.113883.10.20.33.4.6 |
| Question Response Media Pattern | entry | 2.16.840.1.113883.10.20.33.4.2 |
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