IMPLEMENTATION GUIDE FOR A HEALTHCARE PARTNER

VERSION 1.8

JULY 30, 2009

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1.0 Introduction

Social Security Administration (SSA) requests 15-20 million medical records each year from healthcare facilities across the country. Almost 3 million people turn to Social Security Administration for help when facing an inability to work for at least a year, or a terminal condition. These claimants need the monthly income that SSA provides, and perhaps more importantly, they need the Medicare or Medicaid health coverage which comes based on the SSA disability determination. Providing medical records to SSA and to the tens of thousands of other requesters is a very labor-intensive and expensive proposition for healthcare facilities. Automating the solution for Release of Information will not only save time and money for the providers but will also ultimately yield benefits to patients as well. In addition there will be annual resource savings on printer, paper, postage, and HIM staff hours.

Recently when SSA implemented a partially automated solution with the Veteran Affairs (VA), the VA indicated that an average of 45 minutes was saved per request. If we conservatively apply 30 minutes per request to all the requests in the industry, the automation can save millions of labor hours per year. In addition, in the VA medical centers where the automation was piloted, the ease of the partially automated solution made it feasible for them to respond to more requests. The response rate increased approximately 38% to 97%. For a facility, this increase can be directly correlated to an increase in revenue for the provider. SSA spends almost $500 million each year on requesting of medical information.

Many of those applying for SSA Disability benefits are uninsured or under-insured. For those patients, the facilities can afford to provide limited care while recovering very little of the cost of care. The sooner SSA can make a disability determination, the sooner the provider can provide reimbursable care which clearly affects their bottom line.

1.1 PURPOSE OF GUIDE

The Social Security Administration has created this implementation guide to assist in medical/clinical exchange between a Healthcare Partner and the Social Security Administration. This document will provide all Healthcare Partners with a guide of the (CCD) Continuity of Care Document content (XML) that is expected during the medical/clinical exchange.

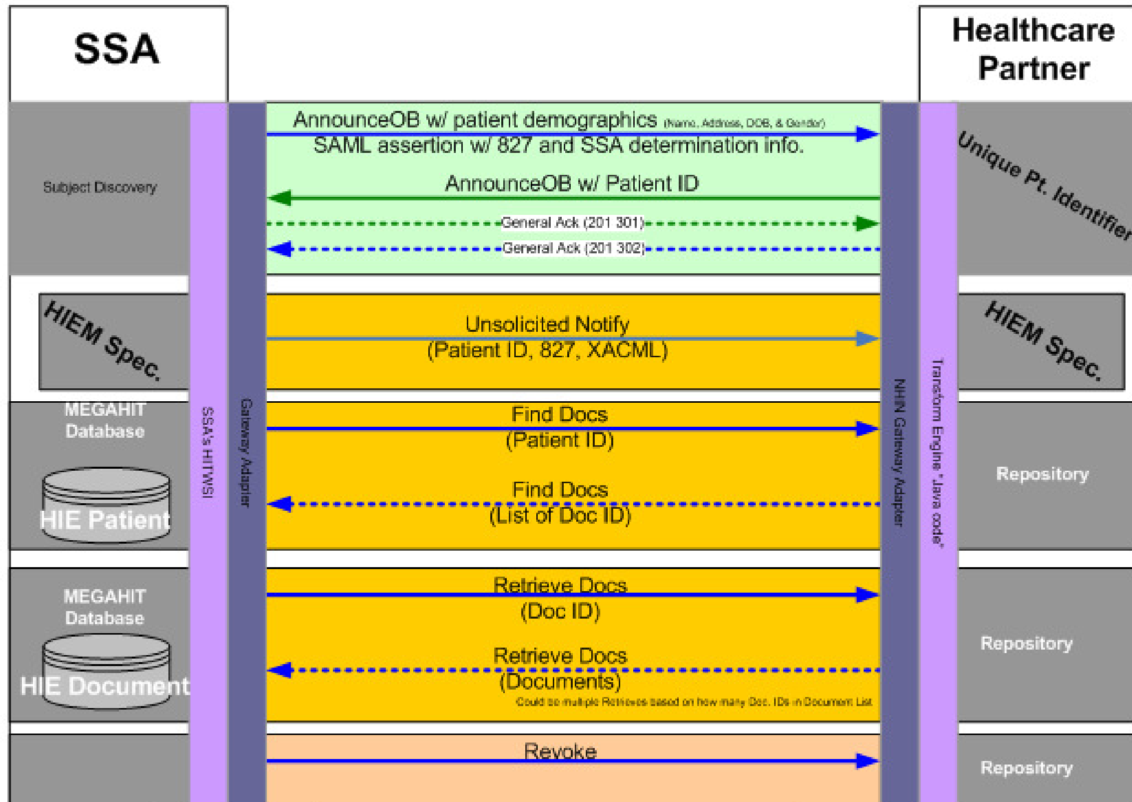
This documentation assumes that the reader has a general knowledge of XML, CCD, CDA r2, and the business workflow of medical/clinical exchange.

The Healthcare Partner should use this implementation guide to assist in generating a well formatted CCD (XML payload). SSA has performed a market scan of all industry documentation and has attempted to consolidate them into one guide. By doing this we have identified all areas of the CCD that are "**SHALL**" (i.e. required/mandatory) from the CDA R2 documentation and will use an "**R**" as the representation of "**SHALL**" within this document. SSA has also identified its own content needs and will represent this content with an "**R**" , **"R2"** or **"O"** as well. We will define this explaination further in section 1.3.

1.2 COMMUNICATION

The communication between Social Security Administration and the healthcare partners will happen via the NHIN adapter or a compariable adapter. The flow shown (figure 2) below illustrates the communication process via webservices.

Figure 2



Communication Webservice Code

Click on the links below to access code samples.

- Subject-discovery-201301—ACK-resquest
- Subject-discovery-201302—ACK-response
- Subject-discovery-201301—ACK-resquest
- Subject-discovery-201302—ACK-response
- Notify-request
- Find-document-request
- Find-document-response
- Revoke-patient-request

1.3 UNDERSTANDING THE GUIDE

The following instructions will help the healthcare partner understand this guide and how it is to be used to layout the XML payload being delivered to SSA. Each section of this documentation is broken out into four (4) sections: Table Section, Content, UML and XML sample payload. The Table and Content section are tied together via the Field Name column. The XML sample payload section will give the partner a great example of working XML. This guide follows and conforms to HL7's CDA R2 documentation. If there is any unclairified areas please refer to HL7's documentation for guidance.

Table Section

The purpose of the Table section is to show the XPATH (location) of each content field and the priority of that field in relation of CCD standards and the SSA needs. Table layouts are provided throughout this document to address CCD sections, Content, and XML layout. The tables will define the following items.

- **Field Name** – The Field Name header is a defined section and content portion of the Implementation Guide. Normal/Logical Name of the CCD element and ties both sections (normal and content sections). These names if possible have been pulled from industry standards documentation to keep consistent terms throughout.
- **XPATH** – The XPATH is a defined portion of the Implementation Guide the will show the location path of each element and/or attribute.
- **CCD** - The CCD header is a defined portion of the Implementation Guide that will illustrate the "**R - Required**", "**R2 - Required if Known**", and "**O - Optional**" elements and/or attributes that are based off the leading industry standards of interoperability. This section will provide both SSA and the Healthcare partner a consolidate guide of what is expected from the industry standards (i.e. CDA R2).
- **SSA** - The SSA header is a defined portion of the Implementation Guide that will illustrate the "**R - Required**", "**R2 - Required if Known**", and "**O - Optional**" elements and/or attributes that are based off Social Security Administration's needs of interoperability. Though similar to the CCD column, the partner will find differences in some sections. SSA would like to stay true to the industry standard CCD/CDA R2; however certain sections maybe "**Required**" or "**Required if Known**" elements and/or attributes by SSA.

Note: Below is a definition of the "Required", "Required if known", and "Optional".

R – Required	Required data elements must always be sent.
R2 – Required if known	Required if Known data elements must be sent when the sending application has that data available.

O – Optional	Optional data elements may be sent at the choice of the sending application.

Content
Purpose of this section is to illustrate specific content for certain fields within the XML. If a field has constant or predefined content this document will display the content values or identify where the content can be located in the Reference column.

UML
The UML sections will provide a generic layout of the HL7 CDA RIM flow and how each section follows the diagram. This should give the user a more condensed view of the section they are reviewing.

XML Payload
XML payload is available to show a full working example of each section.

SSA hopes that this document will provide an excellent starting point in our process. If there are any questions during this section or ways to improve the process, please alert the SSA Project Manager at any time.

2.0 Header

2.1 HEADER INFORMATION

The Header section is a **Required** section by the CCD standards. All documents begin with the root element ClinicalDocument.

Header Table

Field Name	XPATH	CCD	SSA
Class Code	ClinicalDocument/classcode	R	R
Mood Code	ClinicalDocument/moodCode	R	R
Id	ClinicalDocument/id	R	R
Title	ClinicalDocument/title	O	R2
Effective Time	ClinicalDocument/effectiveTime	R	R
Language Code	ClinicalDocument/languageCode	O	R2
setID	ClinicalDocument/setId	O	R2
Version Number	ClinicalDocument/versionNumber	O	R2
Confidentiality Code	ClinicalDocument/confidentialityCode/@code	R	R
Code System	ClinicalDocument/confidentialityCode/@codeSystem	R	R
OID for HL7 Registered Model	ClinicalDocument/typeId/@root	R	R
Unique id for CDA	ClinicalDocument/typeId/@extension	R	R
CCD v1.0 Template ID	ClinicalDocument/templateId/@root	R	R
HIE's OID	ClinicalDocument/id/@root	R	R
Vocabulary OID	ClinicalDocument/code/@codeSystem	R	R
code	ClinicalDocument/code/@code	R	R
Display Name	ClinicalDocument/code/@displayName	R	R
Code System	ClinicalDocument/code/@codeSystemName	R	R

Name			

2.1.1 Content of Header Section

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to access what documentation is available to view all possible content choices for that particular element.

Field Name	SSA Needed Content Values	Reference Documents
Class Code	**DOCCLIN**	
Mood Code	**EVN**	
Id	**0**	**(integer - i.e. 0,1,2,3,4…)**
OID for HL7 Registered Model	**2.16.840.1.113883.1.3**	
Unique id for CDA	**POCD_HD000040**	**CDA R2 document**
CCD v1.0 Template ID	**2.16.840.1.113883.10.20.1**	
HIE's OID	**x.xx.xxx.x.xxxxxxx.x.xxx**	http://www.hl7.org/oid/index.cfm
LOINC Code	**34133-9**	
Display Name	**Summarization of episode note**	
Vocabulary OID	**2.16.840.1.113883.6.1**	http://www.hl7.org/oid/index.cfm
Code System Name	**LOINC**	
Title	**Continuity of Care Document from "HIE Name"**	
Effective Time	**YYYYMMDDHHMMSS+0000**	
Confidentiality Code	Any of the following can be used: **Code** / **Description** **N** – Normal **R** – Restricted **V** – Very Restricted	HL7 v3 - confidentiality
Confidentiality Code System	**2.16.840.1.113883.5.25**	http://www.hl7.org/oid/index.cfm
Language Code	**en-US**	ISO-639-1 and ISO-3166

2.1.2 XML Sample of the CCD Header

```
<ClinicalDocument xsi:schemaLocation="urn:hl7-org:v3
```

```
http://xreg2.nist.gov:8080/hitspValidation/schema/cdar2c32/infrastructure/cda/C32_CDA.xsd">
<typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040"/>
<templateId root="2.16.840.1.113883.10.20.1"/>
<id root="6858a017-39c1-4153-bbd4-eaedac72a0e7"/>
<code code="34133-9" displayName="Summarization of episode note" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
<title> Continuity of Care Document from "HIE Name"</title>
<effectiveTime value="20081120161000+1400"/>
<confidentialityCode code="N" codeSystem="2.16.840.1.113883.5.25"/>
<languageCode code="en-US"/>
```

3.0 Participants

3.1 RECORDTARGET

The recordTarget section is a **required** section by the CCD standards.

Description of Section: The recordTarget element identifies the patient or patients whose health history is/are described within this payload. A recordTarget is represented as a relationship between a person and an organization, where the person is in a patient role (PatientRole class). The entity playing the role is a patient (Patient class). The entity scoping the role is an organization (Organization class). A patient is uniquely identified via the PatientRole.id attributes.

recordTarget Table

Field Name	XPATH	CCD	SSA
Type Code	ClinicalDocument/recordTarget/typeCode	R	R
Context Control Code	ClinicalDocument/recordTarget/contextControlCode	R	R
	ClincialDocument/recordTarget/patientRole	R	R
Id (SSN)	ClincialDocument/recordTarget/patientRole/id	R	R
Pt. Name	ClincialDocument/recordTarget/patientRole/patient/name	O	R2
Address Use	ClincialDocument/recordTarget/patientRole/addr/@use	O	R2
Pt's Address	ClincialDocument/recordTarget/patientRole/addr	O	R2
Gender Code	ClincialDocument/recordTarget/patientRole /patient/administrativeGenderCode	O	R2
Birth Time	ClincialDocument/recordTarget/patientRole/patient/birthTime/@value	O	R2
Telephone use	ClincialDocument/recordTarget/patientRole/telecom/@use	O	R2
Telephone Number	ClincialDocument/recordTarget/patientRole/telecom/@value	O	R2
Provider Org. Id	ClincialDocument/recordTarget/patientRole/providerOrganization/id @root	O	R2
Organization Name	ClincialDocument/recordTarget/patientRole/providerOrganization/name	O	R2

3.1.1 Content of recordTarget

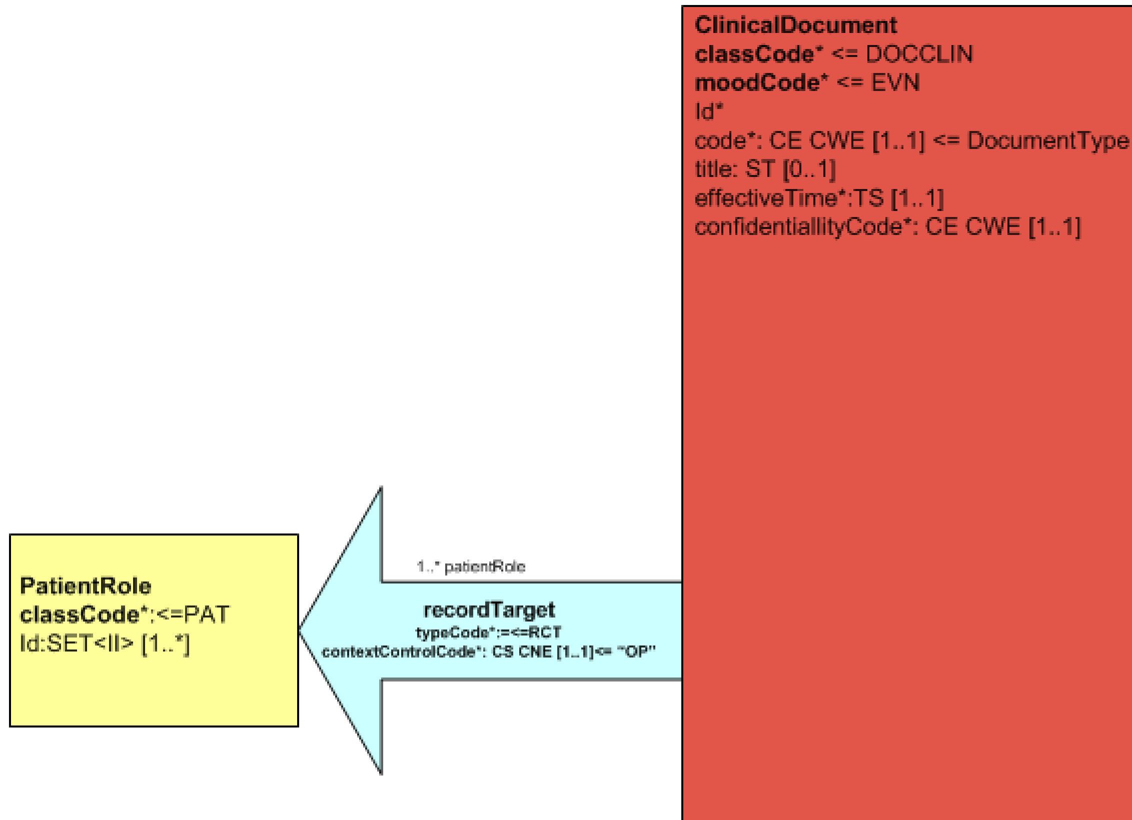
This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to access what documentation is available to view all possible content choices for that particular element.

<table>
<tr><th><u>Field Name</u></th><th><u>Content Values</u></th><th><u>Reference</u></th></tr>
<tr><td>typeCode</td><td>Any of the following can be used:<table><tr><th>Type Code</th><th>Description</th></tr><tr><td>RCT</td><td>Record target - The record target indicates whose medical record holds the documentation of this act. This is especially important when the subject of a service is not the patient himself.</td></tr></table></td><td>HL7 v3 - ParticipationType</td></tr>
<tr><td>Context Control Code</td><td>OP</td><td></td></tr>
<tr><td>Id (SSN)</td><td>xxxxxxxxx</td><td>(Social Security Number)</td></tr>
</table>

<table>
<tr><td>Address Use</td><td>Any of the following can be used:
<table>
<tr><th>Code</th><th>Description</th></tr>
<tr><td>H</td><td>home address</td></tr>
<tr><td>HP</td><td>primary home</td></tr>
<tr><td>WP</td><td>work place</td></tr>
<tr><td>HV</td><td>vacation home</td></tr>
</table></td><td>HL7 v3 - Datatypes</td></tr>
<tr><td>Telephone Use</td><td>Any of the following can be used:
<table>
<tr><th>Code</th><th>Description</th></tr>
<tr><td>H</td><td>home address</td></tr>
<tr><td>HP</td><td>primary home</td></tr>
<tr><td>WP</td><td>work place</td></tr>
<tr><td>HV</td><td>vacation home</td></tr>
<tr><td>MC</td><td>Mobile contact</td></tr>
</table></td><td>HL7 v3 - Datatypes</td></tr>
<tr><td>Name use</td><td>Any of the following can be used:
<table>
<tr><th>Code</th><th>Description</th></tr>
<tr><td>L</td><td>Legal</td></tr>
<tr><td>C</td><td>License</td></tr>
<tr><td>I</td><td>Indigenous/Tribal</td></tr>
<tr><td>P</td><td>Pseudonym</td></tr>
<tr><td>A</td><td>Artist/Stage</td></tr>
<tr><td>R</td><td>Religious</td></tr>
</table></td><td>HL7 v3 - Datatypes</td></tr>
<tr><td>Given qualifier</td><td>Any of the following can be used:
<table>
<tr><th>Code</th><th>Description</th></tr>
<tr><td>CL</td><td>callme</td></tr>
<tr><td>SP</td><td>spouse</td></tr>
<tr><td>AD</td><td>Adopted</td></tr>
<tr><td>BR</td><td>Birth</td></tr>
</table></td><td>HL7 v3 - Datatypes</td></tr>
</table>

<table>
<tr><td>Family qualifier</td><td>Any of the following can be used:<table><tr><th>Code</th><th>Description</th></tr><tr><td>BR</td><td>birth</td></tr><tr><td>CL</td><td>Callme</td></tr><tr><td>SP</td><td>Spouse</td></tr><tr><td>AD</td><td>Adopted</td></tr></table></td><td>HL7 v3 - Datatypes</td></tr>
<tr><td>Gender Code</td><td>Any of the following can be used:<table><tr><th>Code</th><th>Description</th></tr><tr><td>F</td><td>Female</td></tr><tr><td>M</td><td>Male</td></tr><tr><td>UN</td><td>Undifferentiated</td></tr></table></td><td>HL7 v3 - AdministrativeGenderCode</td></tr>
<tr><td>Birth Time</td><td>YYYYMMDD</td><td></td></tr>
</table>

3.1.2 UML of recordTarget



3.1.3 XML Sample of the recordTarget

```
<recordTarget typeCode="RCT" contextControlCode="OP">
<patientRole>
<id extension="#########"/>
<addr use="HP">
<streetAddressLine>15 New Kidney St. </streetAddressLine>
<city>Richmond</city>
<state>VA</state>
<postalCode>22222</postalCode>
</addr>
<telecom use="HP" value="tel:+1-703-555-1212"/>
```

```
<telecom use="WP" value="tel:+1-703-555-2323"/>
<patient>
<name use="L">
<given qualifier="CL">Jane</given>
<given qualifier="CL">M</given>
<family qualifier="BR">Snow</family>
</name>
<administrativeGenderCode code="F" displayName="Female" codeSystem="2.16.840.1.113883.5.1"
 codeSystemName="HL7 AdministrativeGenderCode"/>
<birthTime value="19610821"/>
</patient>
</patientRole>
</recordTarget>
```

3.2 AUTHENTICATOR

The Authenticator section is a **required if known** section by Social Security Administration.

Description of Section: The Authenticator section represents a participant who has attested to the accuracy of the document, but who does not have privileges to legally authenticate the document.

Authenticator Table

Field Name	XPATH	CCD	SSA
Type Code	**ClinicalDocument/Authenticator/@typeCode**	**R**	**R**
Time	**ClinicalDocument/Authenticator/time/@value**	**R**	**R**
Signature Code	**ClinicalDocument/Authenticator/@signatureCode**	**R**	**R**

3.2.1 Content of Authenticator

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to access what documentation is available to view all possible content choices for that particular element.

Field Name	Content Values	Reference
Type Code	Any of the following can be used: **Code** | **Description**	

<table>
<tr><td></td><td><table><tr><td>AUTHEN</td><td>authenticator</td></tr></table></td><td></td></tr>
<tr><td>Time</td><td>YYYYMMDDHHMM</td><td></td></tr>
<tr><td>Signature Code</td><td>Any of the following can be used:<table><tr><td>Code</td><td>Description</td></tr><tr><td>S</td><td>signed</td></tr></table></td><td></td></tr>
</table>

3.3 LEGALAUTHENTICATOR

The legalAuthenticator section is a **required if known** section by Social Security Administration.

Description of Section: The legalAuthenticator represents a participant who has legally authenticated the document.

legalAuthenticator Table

Field Name	XPATH	CCD	SSA
Type Code	**ClinicalDocument/legalAuthenticator/@typeCode**	**R**	**R**
Context Control Code	**ClinicalDocument/legalAuthenticator/@contextControlCode**	**R**	**R**
Time	**ClinicalDocument/legalAuthenticator/time/@value**	**R**	**R**
Signature Code	**ClinicalDocument/legalAuthenticator/@signatureCode**	**R**	**R**

3.3.1 Content of legalAuthenticator

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to access what documentation is available to view all possible content choices for that particular element.

<table>
<tr><th>Field Name</th><th>Content Values</th><th>Reference</th></tr>
<tr><td>Type Code</td><td>Any of the following can be used:<table><tr><td>Code</td><td>Description</td></tr><tr><td>LA</td><td>Legal authenticator</td></tr></table></td><td></td></tr>
<tr><td>Context Control Code</td><td>OP</td><td></td></tr>
<tr><td>Time</td><td>YYYYMMDDHHMM</td><td></td></tr>
</table>

<table>
<tr><td>Signature Code</td><td>Any of the following can be used:<table><tr><th>Code</th><th>Description</th></tr><tr><td>S</td><td>signed</td></tr></table></td><td></td></tr>
</table>

3.4 AUTHOR

The author section is a **required** section by the CCD standards.

Description of Section: The author element represents the creator (human and/or machines) of the document. *CDA r2 note:* Represents a participant who has attested to the accuracy of the document, but who does not have privileges to legally authenticate the document.

author Table

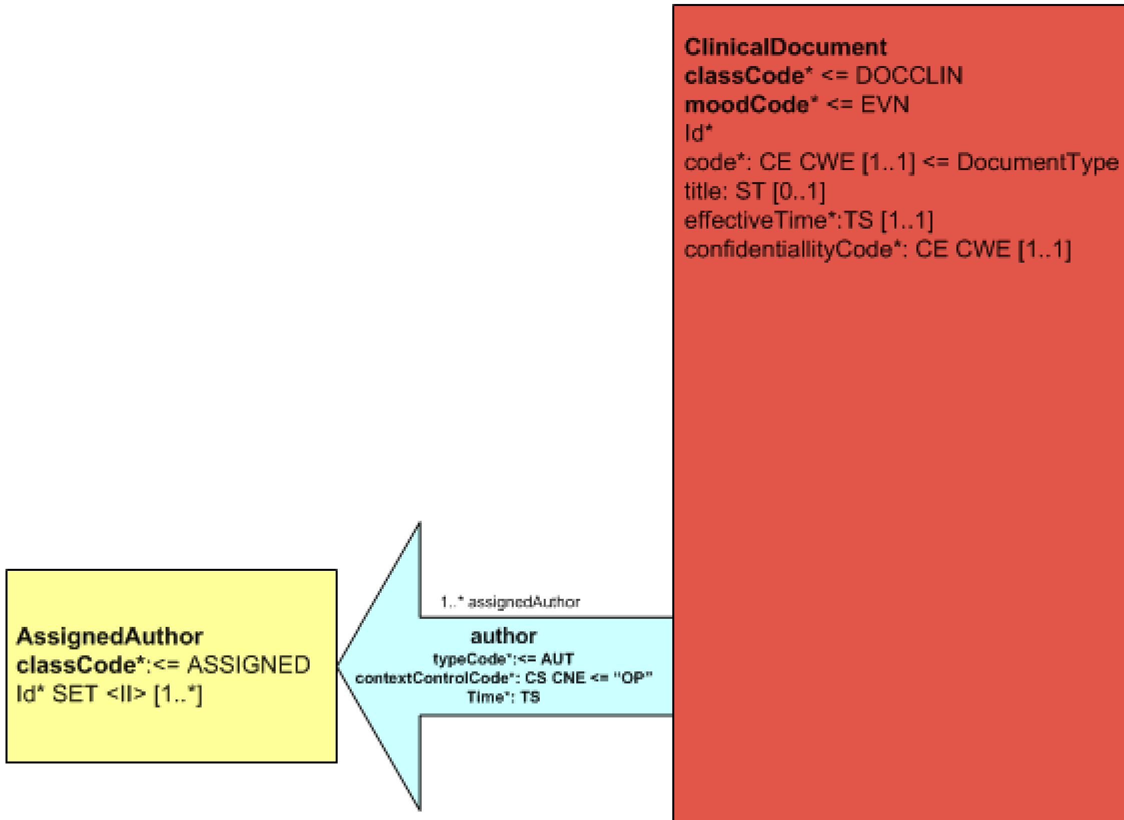
Field Name	XPATH	CCD	SSA
Type Code	**ClinicalDocument/author/@typeCode**	**R**	**R**
Time	**ClinicalDocument/author/time/@value**	**R**	**R**
ClinicalDocument/author/			
Assigned Author	**assignedAuthor**	**R**	**R**
Class code	**assignedAuthor/classCode**	**R**	**R**
Id	**assignedAuthor/id**	**R**	**R**
address	**assignedAuthor/addr**	**O**	**R2**
Telephone Use	**assignedAuthor/telecom/@use**	**O**	**R2**
Telephone Number	**assignedAuthor/telecom/@value**	**O**	**R2**
Name of Person	**assignedAuthor/assignedPerson/name**	**O**	**R2**
Represented Organizaton Id	**assignedAuthor/representedOrganization/id@root**	**O**	**R2**
Represented Organization Name	**assignedAuthor/representedOrganization/name**	**O**	**R2**

3.4.1 Content of author

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to access what documentation is available to view all possible content choices for that particular element.

<table>
<tr><th>Field Name</th><th>Content Values</th><th>Reference</th></tr>
<tr><td>Type Code</td><td>AUT</td><td></td></tr>
<tr><td>Time</td><td>YYYYMMDDHHMM</td><td></td></tr>
<tr><td>Telephone Use</td><td>Any of the following can be used:
<table><tr><th>Code</th><th>Description</th></tr><tr><td>H</td><td>home address</td></tr><tr><td>HP</td><td>primary home</td></tr><tr><td>WP</td><td>work place</td></tr><tr><td>HV</td><td>vacation home</td></tr><tr><td>MC</td><td>Mobile contact</td></tr></table></td><td>HL7 v3 – Datatypes</td></tr>
<tr><td>Represented Organizaton Id</td><td>x.xx.xxx.x.xxxxxx.x.xxx</td><td></td></tr>
</table>

3.4.2 UML of author



3.4.3 XML Sample of the author

```
<author>
<time value="20080731142500"/>
<assignedAuthor>
<id root="2.16.840.1.113883.4.6.1013905751"/>
<addr>
<streetAddressLine>612 Wharf Ave.</streetAddressLine>
<city>Fairfax</city>
<state>VA</state>
<postalCode>20151</postalCode>
</addr>
<telecom use="HP" value="tel:+1-703-555-0033"/>
<assignedPerson>
<name>
```

```
<prefix>Dr.</prefix>
<given>John</given>
<family>Lee</family>
</name>
</assignedPerson>
 <representedOrganization>
<id root="2.16.840.1.113883.X.XXX"/>
<name>Hospital Name</name>
 </representedOrganization>
</assignedAuthor>
</author>
```

3.5 CUSTODIAN

The custodian section is a **Required** section by the CCD standards.

Description of Section: The custodian element represents the organization that is in charge of maintaining the document.

Custodian Table

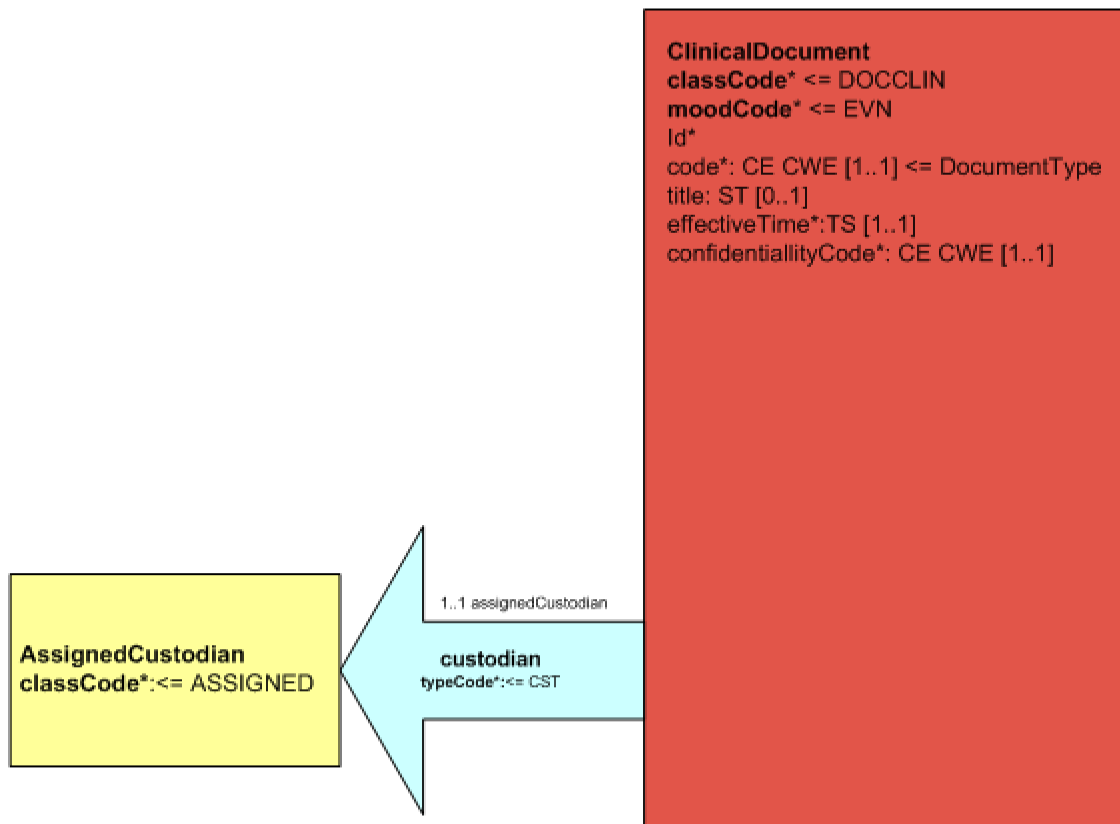
Field Name	XPATH	CCD	SSA
custodian	ClinicalDocument/custodian/	R	R
Type Code	ClinicalDocument/custodian/@typeCode	R	R
Assigned Custodian	ClinicalDocument/custodian/assignedCustodian	R	R
class Code	ClinicalDocument/custodian/assignedCustodian/@classCode	R	R
Class Code	ClinicalDocument/custodian/representedCustodianOrganization/@classCode	R	R
Determiner Code	ClinicalDocument/custodian/representedCustodianOrganization/@determinerCode	R	R
OID of Facility	ClinicalDocument/custodian/representedCustodianOrganization/id/@root	R	R
Name of Facility	ClinicalDocument/custodian/representedCustodianOrganization/name	O	R2
Telephone	ClinicalDocument/custodian/representedCustodianOrganization/telecom	O	R2
Address	ClinicalDocument/custodian/representedCustodianOrganization/addr	O	R2

3.5.1 Content of custodian

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to access what documentation is available to view all possible content choices for that particular element.

Field Name	Content Values	Reference
OID of Facility	x.xx.xxx.x.xxxxxx.x.xxx	http://www.hl7.org/oid/index.cfm

3.5.2 URL of custodian



3.5.3 XML Sample of the custodian

```
<custodian>
<assignedCustodian>
<representedCustodianOrganization>
```

```
<id root="2.16.840.1.113883.X.X.XXXX"/>
<name>Smith Medical Center</name>
</representedCustodianOrganization>
</assignedCustodian>
</custodian>
```

3.6 PARTICIPANT

The participant section is a **Required** section by the CCD standards.

Participant Table

Field Name	XPATH	CCD	SSA
Type Code	ClinicalDocument/participant/@typeCode		R
templateId	ClinicalDocument/participant/templateId/@root		R
ClinicalDocument/participant/associatedEntity/			
class Code	@classCode		R
Code code	code/@code		R
Display Name	code/@displayName		R
Code system	code/@codeSystem		R
Code System Name	code/@codeSystemName		R
Address use	addr/@use		R
Address	addr		R
Telephone use	telecom/@use		R
Telephone #	telecom/@value		R
associatedPerson	associatedPerson/name		R

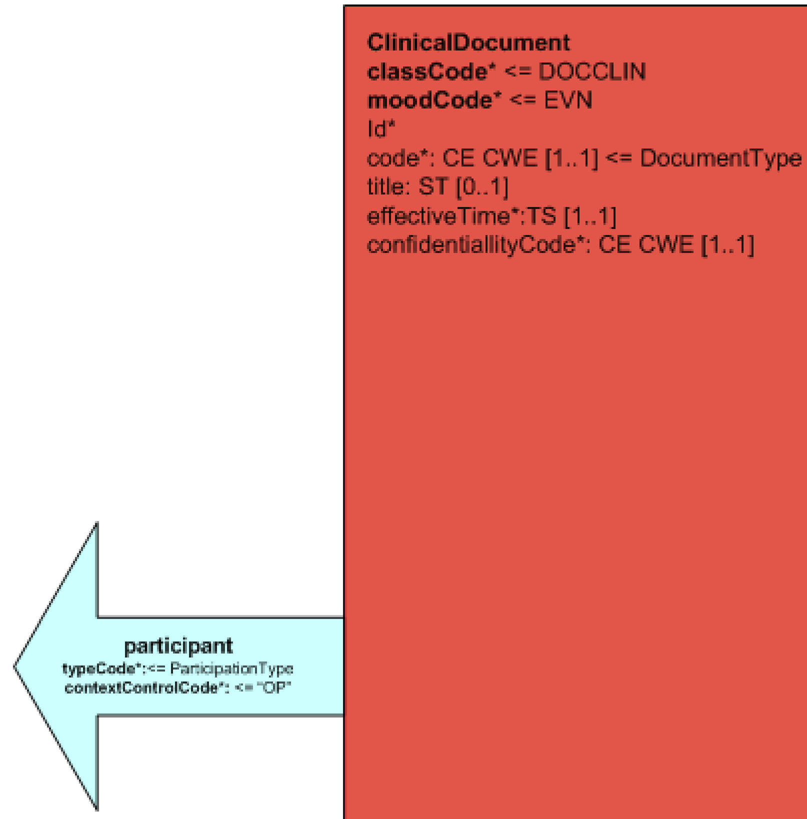
3.6.1 Content of participant

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to access what documentation is available to view all possible content choices for that particular element.

Field Name	Content Values	Reference

<table>
<tr><td>Type Code</td><td>“see document in Reference column for possible values”</td><td>HL7 v3 ParticipationType</td></tr>
<tr><td>Template ID</td><td>2.16.840.1.113883.3.88.11.32.3</td><td></td></tr>
<tr><td colspan="3">ClinicalDocument/participant/associatedEntity/</td></tr>
<tr><td>class Code</td><td>Any of the following can be used:<table><tr><th>class Code</th><th>Description</th></tr><tr><td>PRS</td><td>Personal relationship</td></tr></table></td><td>HL7 v3 RoleClass</td></tr>
<tr><td>Code
Display Name</td><td>“see document in Reference column for possible values”</td><td>HL7 v3 RoleCode</td></tr>
<tr><td>Code system</td><td>2.16.840.1.113883.5.111</td><td></td></tr>
<tr><td>Code System Name</td><td>HL7 RoleCode</td><td></td></tr>
<tr><td>Address use</td><td>Any of the following can be used:<table><tr><th>Use Code</th><th>Description</th></tr><tr><td>H</td><td>home address</td></tr><tr><td>HP</td><td>primary home</td></tr><tr><td>WP</td><td>work place</td></tr><tr><td>HV</td><td>vacation home</td></tr></table></td><td>HL7 v3 datatypes</td></tr>
<tr><td>Telephone use</td><td>Any of the following can be used:<table><tr><th>Use Code</th><th>Description</th></tr><tr><td>H</td><td>home address</td></tr><tr><td>HP</td><td>primary home</td></tr><tr><td>WP</td><td>work place</td></tr><tr><td>HV</td><td>vacation home</td></tr><tr><td>MC</td><td>Mobile contact</td></tr></table></td><td>HL7 v3 datatypes</td></tr>
</table>

3.6.2 URL of participant



3.6.3 XML Sample of the participant

```
<participant typeCode="IND" contextControlCode="OP">
<templateId root="2.16.840.1.113883.3.88.11.32.3"/>
<time/>
<associatedEntity classCode="PRS">
<code code="DAU" displayName="Daughter" codeSystem="2.16.840.1.113883.5.111"
 codeSystemName="HL7 RoleCode"/>
<addr use="HP">
<streetAddressLine>612 Wharf Ave.</streetAddressLine>
<city>Fairfax</city>
<state>VA</state>
<postalCode>20151</postalCode>
</addr>
<telecom use="HP" value="tel:+1-703-555-0033"/>
```

```
<telecom use="WP" value="tel:+1-703-555-3434"/>
<telecom value="mailto:Janet_Snow@email.com"/>
<associatedPerson>
<name>
<given>Janet</given>
<family>Snow</family>
<suffix/>
</name>
</associatedPerson>
</associatedEntity>
</participant>
```

3.7 DOCUMENTATIONOF

The documentationOf section is a **required** section by the CCD standards. **Note**: SSA would like to view multiple performer elements during the testing phase in order to validate that several physicians can be sent in the xml payload.

Description of Section: The documentationOf section provides documentation of an episode of care where main service event is Care Provision. The DocumentationOf section contains the healthcare providers involved in the current or pertinent historical care of the patient and/or claimant.

documentationOf Table

Field Name	XPATH	CCD	SSA
class Code	ClinicalDocument/documentationOf/serviceEvent/@classCode	R	R
Mood Code	ClinicalDocument/documentationOf/serviceEvent/@moodCode	R	R
Duration of Care Date – Low	ClinicalDocument/documentationOf/serviceEvent/effectiveTime/low	O	R2
Duration of Care Date - High	ClinicalDocument/documentationOf/serviceEvent/effectiveTime/high	O	R2
ClinicalDocument/documentationOf/serviceEvent/performer/			
Type Code	@typeCode	R	R
templateId root	templateId/@root		R2
Provider Role coded	functionCode/@code	O	R2
fuctionCode display Name	functionCode/@displayName	O	R2

functionCode code System	**functionCode/@codeSystem**	**O**	**R2**
functionCode code System Name	**functionCode/@codeSystemName**	**O**	**R2**
Time (low)	**time/low/@value**	**O**	**R2**
Time (high)	**time/high/@value**	**O**	**R2**
ClinicalDocument/documentationOf/performer/assignedEntity/			
assignedEntity		**O**	**R2**
Provider ID root	**id/@root**	**R**	**R**
Provider ID ext.	**Id/@extension**	**R**	**R**
assignedEntity code	**code/@code**	**R**	**R**
assignedEntity display Name	**code/@displayName**	**R**	**R**
assignedEntity code System	**code/@codeSystem**	**R**	**R**
assignedEntity code System Name	**code/@codeSystemName**	**R**	**R**
Physician's name	**assignedPerson/name**	**R2**	**R2**
Organization id	**representedOrganization documentationOf/id/@root**	**R2**	**R2**
Organization name	**representedOrganization/@name**	**R2**	**R2**
Address use	**addr/@use**	**R2**	**R2**
Address	**addr**	**R2**	**R2**
Telephone use	**telecom/@use**	**R2**	**R2**
Telephone #	**telecom/@value**	**R2**	**R2**
Name	**assignedPerson/name**		**R2**
Represented Org. ID	**representedOrganization/id/@root**		**R2**
Represented Org.	**representedOrganization/name**		**R2**
Patient unique id	**sdtc:patient/sdtc:id/@root**		**R2**
Patient unique #	**sdtc:patient/sdtc:id/@extension**	**R2**	**R2**

3.7.1 Content of documentOf

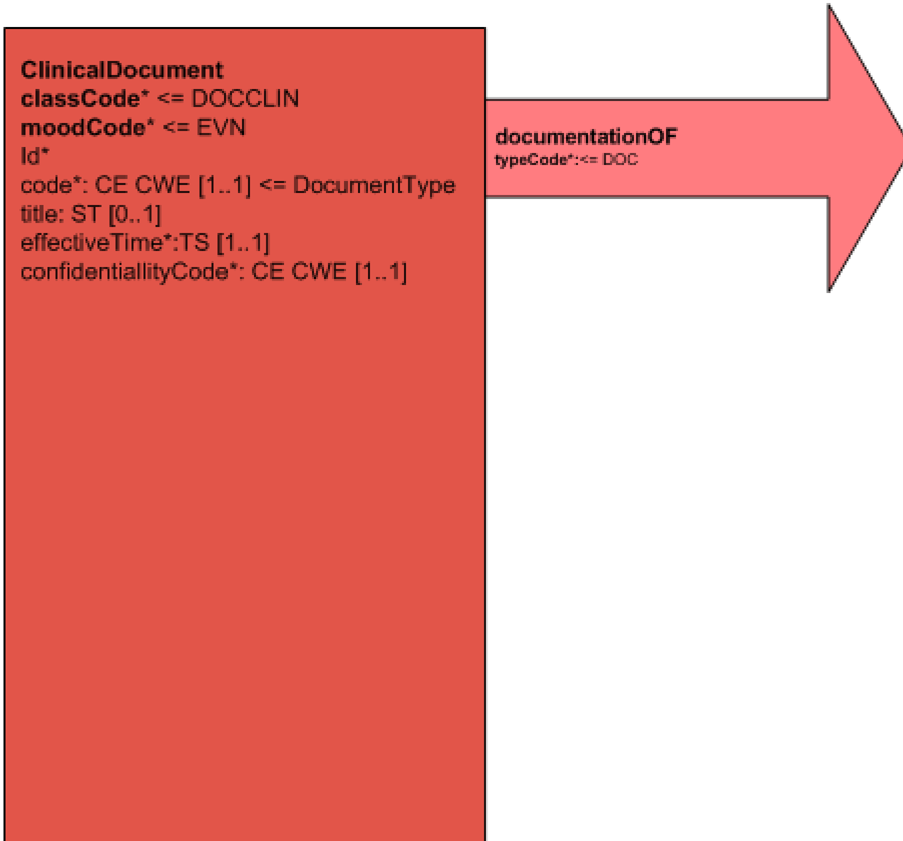
This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to

access what documentation is available to view all possible content choices for that particular element.

<table>
<tr><th>Field Name</th><th>SSA Needed Content Values</th><th>Reference Documents</th></tr>
<tr><td>Service Event class Code</td><td>Any of the following can be used:<table><tr><th>class code</th><th>Description</th></tr><tr><td>PCPR</td><td>Act that of taking on whole or partial responsibility</td></tr></table></td><td>HL7 v3 - ActClass</td></tr>
<tr><td>Duration of Care Date – Low</td><td>YYYYMMDD</td><td></td></tr>
<tr><td>Duration of Care Date - High</td><td>YYYYMMDD</td><td></td></tr>
<tr><td colspan="3">ClinicalDocument/documentationOf/performer/</td></tr>
<tr><td>Type Code</td><td>Any of the following can be used:<table><tr><th>Type Code</th><th>Description</th></tr><tr><td>PRF</td><td>Performer - A person, non-person living subject, organization or device that who actually and principally carries out the action.</td></tr></table></td><td>HL7 v3 - ParticipationType</td></tr>
<tr><td>templateId root</td><td>2.16.840.1.113883.3.88.11.32.4</td><td>C32 Module TemplateId</td></tr>
<tr><td>Provider Role coded</td><td>PP</td><td>HL7 v3 - ParticipationType</td></tr>
<tr><td>functionCode code System</td><td>2.16.840.1.113883.12.443</td><td>Provider Role OID</td></tr>
<tr><td>functionCode code System Name</td><td>Provider Role</td><td>HL7 v3 - ProviderCodes</td></tr>
<tr><td>fuctionCode display Name</td><td>Primary Care Provider</td><td></td></tr>
<tr><td colspan="3">ClinicalDocument/documentationOf/performer/assignedEntity/</td></tr>
<tr><td>Provider ID root</td><td>2.16.840.1.113883.x.x.xxxxxxxxxx</td><td></td></tr>
<tr><td>Provider ID ext.</td><td>Provider ID</td><td></td></tr>
<tr><td>assignedEntity code</td><td>“see document in Reference column for possible values”</td><td>HL7 v3 - ProviderCodes</td></tr>
<tr><td>assignedEntity code System</td><td>2.16.840.1.113883.6.101</td><td></td></tr>
</table>

<table>
<tr><td>AssignedEntity code System Name</td><td>ProviderCodes</td><td></td></tr>
<tr><td>assignedEntity code display Name</td><td>“see document in Reference column for possible values”</td><td>HL7 v3 – ProviderCodes</td></tr>
<tr><td>address use</td><td>Any of the following can be used:
<table>
<tr><th>Use code</th><th>Description</th></tr>
<tr><td>H</td><td>home address</td></tr>
<tr><td>HP</td><td>primary home</td></tr>
<tr><td>WP</td><td>work place</td></tr>
<tr><td>HV</td><td>vacation home</td></tr>
</table></td><td></td></tr>
<tr><td>telephone use</td><td>Any of the following can be used:
<table>
<tr><th>Use Code</th><th>Description</th></tr>
<tr><td>H</td><td>home address</td></tr>
<tr><td>HP</td><td>primary home</td></tr>
<tr><td>WP</td><td>work place</td></tr>
<tr><td>HV</td><td>vacation home</td></tr>
<tr><td>MC</td><td>Mobile contact</td></tr>
</table></td><td></td></tr>
</table>

3.7.2 URL of documentationOf



3.7.3 XML Sample of the documentationOf

```
<documentationOf>
<serviceEvent classCode="PCPR">
<effectiveTime>
<low value="20000101"/>
<high value="20080731"/>
</effectiveTime>
<performer typeCode="PRF">
<templateId root="2.16.840.1.113883.3.88.11.32.4"/>
<functionCode code="PP" displayName="Primary Care Provider"
 codeSystem="2.16.840.1.113883.12.443" codeSystemName="Provider Role">
<originalText>Primary Care Provider</originalText>
</functionCode>
```

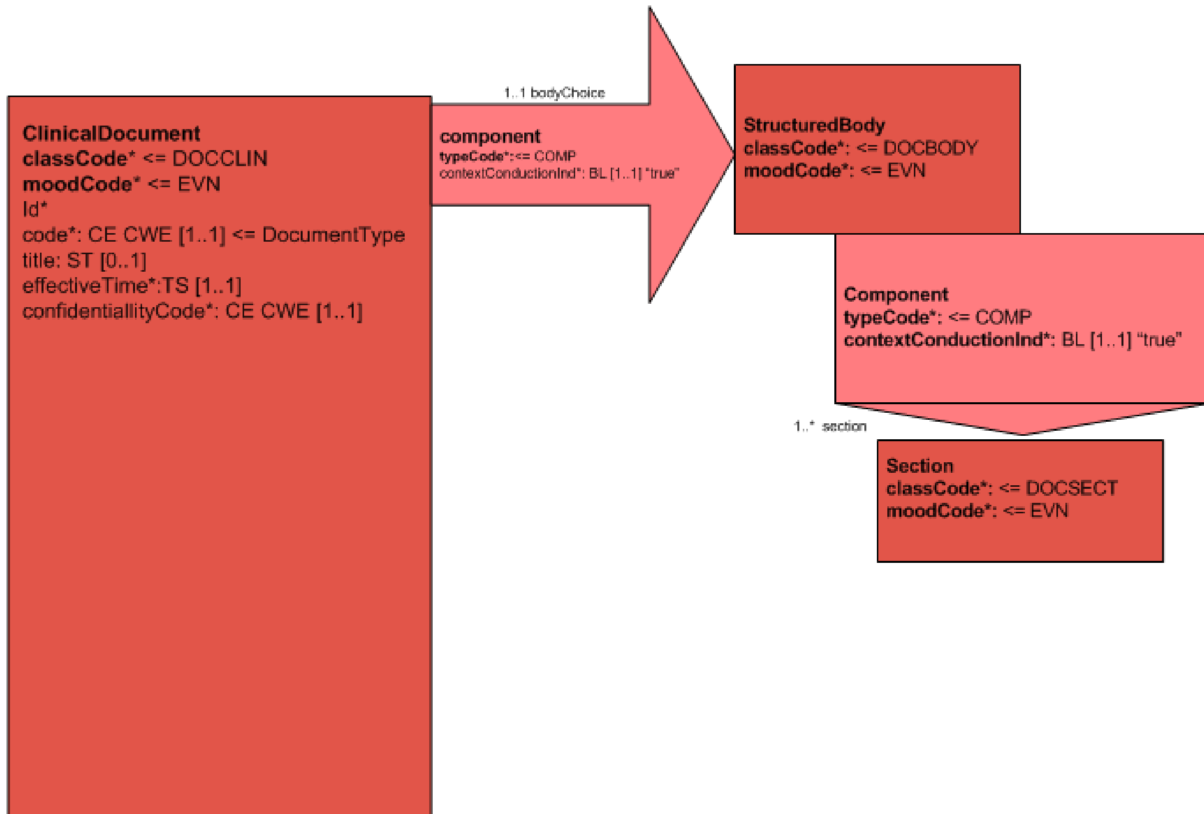
```
<time>
<low value="20020101"/>
<high nullFlavor="UNK"/>
</time>
<assignedEntity>
<id root="2.16.840.1.113883.4.6.1013905751" extension="Provider ID"/>
<code code="280000000X" displayName="Hospitals"
 codeSystem="2.16.840.1.113883.6.101" codeSystemName="ProviderCodes"/>
<addr use="WP">
<streetAddressLine>10 St. Sample Boulevard </streetAddressLine>
<city>Example</city>
<state>VA</state>
<postalCode>11111</postalCode>
</addr>
<addr use="WP">
<streetAddressLine>123 West Cove Alley</streetAddressLine>
<streetAddressLine>Suite #22</streetAddressLine>
<city>Richmond</city>
<state>VA</state>
<postalCode>11111</postalCode>
</addr>
<telecom use="WP" value="tel:+1-888-555-1111"/>
<telecom value="mailto:H.Cohen.MD@SFMC.com"/>
<assignedPerson>
<name>
<prefix>Dr.</prefix>
<given>Harry</given>
<given>R</given>
<family>Cohen</family>
</name>
</assignedPerson>
<representedOrganization>
<id root="2.16.840.1.113883.4.6.2649871"/>
<name>St. George Medical Center</name>
</representedOrganization>
<sdtc:patient>
<sdtc:id root="78A150ED-B890-49dc-B716-5EC0027B3983" extension="11224433"/>
```

```
</sdtc:patient>
</assignedEntity>
</performer>
</serviceEvent>
</documentationOf>
```

4.0 Continuity of Care Document Sections

Each section listed below is an **Optional** section per the CCD documentation. The Social Security Administration would like the Healthcare Partner to review each section to see SSA's priority of each listed section. However, priority (**R**, **R2**, **O**) hierarchy under the Continuity of Care Document Sections is as follows: section, element, attribute.

4.1.1 URL of Sections



4.2 ADVANCE DIRECTIVE MODULE

The Advance Directive section is a **Required if Known – (R2)** section by the Social Security Administration.

Section Description: The Advance Directive section contains data defining the patient's advance directives and any reference to supporting documentation. The most recent and up-to-date directives are required, if known, and should be listed in as much detail as possible.

Advance Directive Table

Field Name	XPATH	CCD	SSA
Section templateId	**/component/section/templateId/@root**	**R2**	**R2**
code	**/component/code/@code**	**R**	**R**
component/section/			
Section displayName	**code/@displayName**	**R**	**R**
Vocabulary OID	**code/@codeSystem**		**R2**
Code System Name	**code/@codeSystemName**		**R2**
Title	**title**		**R2**
Content ID	**content/@ID**		**R2**
Text	**content**		**R2**
Entry Type Code	**entry/@typeCode**		**R2**
component/section/entry/observation/			
Observation Class Code	**@classCode**		**R2**
Observation Mood code	**@moodCode**		**R2**
Advance Directive templatedID	**templateId/@root**		**R2**
Observation Id Root	**id/@root**		**R2**
Observation code	**code/@code**		**R2**
Observation Display Name	**code/@displayName**		**R2**
Observation Code system	**code/@codeSystem**		**R2**
Observation Code system name	**code/@codeSystemName**		**R2**
originalText reference value	**code/originalText/refence/@value**		**R2**

Observation effective Time	**effectiveTime**		**R2**
Value type	**Value/@xsi:type**		**R2**
Value code	**value/@code**		**R2**
Value display Name	**value/@displayName**		**R2**
Observation value xsi:type	**value/@xsi:type**		**R2**
Value Code System	**value/@codeSystem**		**R2**
Value Code system Name	**value/@codeSystemName**		**R2**
Observation status code	**statusCode/@code**		**R2**
component/section/entry/observation/participant/			
Observation Participant type Code	**@typeCode**		**R2**
component/section/entry/observation/participant/participantRole/			
class code	**@classCode**		**R2**
Participant	**playingEntity/name**		**R2**
Address use	**addr/@use**		**R2**
Address	**addr**		**R2**
Telecom use	**telecom/@use**		**R2**
Telephone Number	**telecom**		**R2**
component/section/entry/observation/participant/participantRole/playingEntity/			
PlayingEntity Name	**Name**		**R2**

4.2.1 Content of Advance directives

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to access what documentation is available to view all possible content choices for that particular element.

Field Name	Content Values	Reference
Section templateId	2.16.840.1.113883.10.20.1.1	

<table>
<tr><td>LOINC Code</td><td>42348-3</td><td></td></tr>
<tr><td>Section displayName</td><td>Advance directives</td><td></td></tr>
<tr><td>Vocabulary OID</td><td>2.16.840.1.113883.6.1</td><td>http://www.hl7.org/oid/index.cfm</td></tr>
<tr><td>Code System Name</td><td>LOINC</td><td></td></tr>
<tr><td>title</td><td>Advance Directives</td><td></td></tr>
<tr><td>Content ID</td><td>Direct-x</td><td>Reference of ID of Direct-1 to advance directive reference-value</td></tr>
<tr><td>Text</td><td>Advance Directive Text</td><td></td></tr>
<tr><td colspan="3">component/section/entry/</td></tr>
<tr><td>Entry Type Code</td><td>Any of the following can be used:<table><tr><th>Use Code</th><th>Description</th></tr><tr><td>DRIV</td><td>Is derived from</td></tr></table></td><td>HL7v3 – ActRelationshipType</td></tr>
<tr><td colspan="3">component/section/entry/observation/</td></tr>
<tr><td>Observation Class Code</td><td>Any of the following can be used:<table><tr><th>mood code</th><th>Description</th></tr><tr><td>OBS</td><td>An act that is intended to result in new information about a subject.</td></tr></table></td><td>HL7 v3 – ActClass</td></tr>
<tr><td>Observation Mood code</td><td>Any of the following can be used:<table><tr><th>mood code</th><th>Description</th></tr><tr><td>EVN</td><td>Event</td></tr></table></td><td>HL7 v3 – ActMood</td></tr>
<tr><td>CCD v1.0 - Advance Directive templateId</td><td>2.16.840.1.113883.10.20.1.17</td><td></td></tr>
<tr><td>Observation Id Root</td><td></td><td></td></tr>
<tr><td>Observation code</td><td>Any of the following can be used:</td><td>SNOMED CT</td></tr>
</table>

<table>
<tr><td>Observation displayName</td><td>
<table>
<tr><th>Code</th><th>displayName</th></tr>
<tr><td>304251008</td><td>Resuscitation</td></tr>
<tr><td>52765003</td><td>Intubation</td></tr>
<tr><td>225204009</td><td>IV Fluid and Support</td></tr>
<tr><td>89666000</td><td>CPR</td></tr>
<tr><td>281789004</td><td>Antibiotics</td></tr>
<tr><td>78823007</td><td>Life Support</td></tr>
<tr><td>61420007</td><td>Tube Feedings</td></tr>
<tr><td>116859006</td><td>Transfusion of blood product</td></tr>
<tr><td>71388002</td><td>Other Directive</td></tr>
<tr><td></td><td></td></tr>
</table>
</td><td></td></tr>
<tr><td>Vocabulary OID</td><td>2.16.840.1.113883.6.96</td><td></td></tr>
<tr><td>Observation code System Name</td><td>SNOMED CT</td><td></td></tr>
<tr><td colspan="3">component/section/entry/observation/code</td></tr>
<tr><td>originalText reference value</td><td>#Direct-x</td><td></td></tr>
<tr><td colspan="3">component/section/entry/observation/</td></tr>
<tr><td>Observation status code</td><td>Any of the following can be used:
<table>
<tr><th>Code</th><th>Display Name</th></tr>
<tr><td>completed</td><td>Completed</td></tr>
<tr><td>aborted</td><td>Aborted</td></tr>
<tr><td>active</td><td>Active</td></tr>
<tr><td>cancelled</td><td>Cancelled</td></tr>
<tr><td>held</td><td>Held</td></tr>
<tr><td>new</td><td>New</td></tr>
<tr><td>suspended</td><td>Suspended</td></tr>
</table>
</td><td></td></tr>
<tr><td>Observation effective Time - low</td><td>YYYYMMDD</td><td></td></tr>
</table>

<table>
<tr><td>Observation effective Time - high</td><td>YYYYMMDD or UNK</td><td></td></tr>
<tr><td>Value type</td><td>Any of the following can be used:<table><tr><th>type</th><th>Description</th></tr><tr><td>CD</td><td>Concept Descriptor</td></tr><tr><td>CS</td><td>Coded Simple Value</td></tr><tr><td>CO</td><td>Coded Ordinal</td></tr><tr><td>CE</td><td>Coded With Equivalents</td></tr></table></td><td>HL7 v3 - datatypes</td></tr>
<tr><td>Value code</td><td rowspan="2">Any of the following can be used:<table><tr><th>Value code</th><th>Display Name</th></tr><tr><td>304253006</td><td>Do Not Resuscitate</td></tr></table></td><td rowspan="2"></td></tr>
<tr><td>Value display Name</td></tr>
<tr><td>Value code system</td><td>2.16.840.1.113883.6.96</td><td></td></tr>
<tr><td>Value code system name</td><td>SNOMED CT</td><td></td></tr>
<tr><td colspan="3">component/section/entry/observation/participant</td></tr>
<tr><td>Observation Participant type Code</td><td>“see document in Reference column for possible values”</td><td>HL7 v3 – ParticipationType</td></tr>
<tr><td colspan="3">component/section/entry/observation/participant/participantRole</td></tr>
<tr><td>class code</td><td>“see document in Reference column for possible values”</td><td>HL7 v3 - RoleClass</td></tr>
</table>

<table>
<tr><td>Address use</td><td>Any of the following can be used:
<table><tr><th>Use code</th><th>Description</th></tr><tr><td>H</td><td>home address</td></tr><tr><td>HP</td><td>primary home</td></tr><tr><td>WP</td><td>work place</td></tr><tr><td>HV</td><td>vacation home</td></tr></table></td><td>HL7 v3 - datatypes</td></tr>
<tr><td>Telephone use</td><td>Any of the following can be used:
<table><tr><th>Use code</th><th>Description</th></tr><tr><td>H</td><td>home address</td></tr><tr><td>HP</td><td>primary home</td></tr><tr><td>WP</td><td>work place</td></tr><tr><td>HV</td><td>vacation home</td></tr><tr><td>MC</td><td>Mobile contact</td></tr></table></td><td>HL7 v3 – datatypes</td></tr>
<tr><td colspan="3">component/section/entry/observation/participantRole/playingEntity/name</td></tr>
<tr><td>PlayingEntity Name</td><td>EmilyX. Green</td><td></td></tr>
</table>

4.2.2 XML Sample of the Advance directives

```
<component>
<section>
<templateId root="2.16.840.1.113883.10.20.1.1"/>
<code code="42348-3" displayName="Advance directives"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
<title>Advance Directives</title>
<text>
<content ID="Direct-1">Herein I, Jane Mertle Snow write this document as a
 directive regarding my medical care. In the following sections, put the initials of
 your name in the blank spaces by the choices you want. PART 1. My Durable Power
 of Attorney for Health Care _SMT__ I appoint this person to make decisions about
 my medical care if there ever comes a time when I cannot make those decisions
 myself. I want the person I have appointed, my doctors, my family and others to
 be guided by the decisions I have made in the parts of the form that follow. Name:
```

```
Sarah Marie Thompson/Daughter Home telephone:301-555-1415 Work telephone:
301-555-1514 Address: 12 East Main New Market, MD 21774 If the person above
cannot or will not make decisions for me, I appoint this person: Name: Bradley
John Snow/Son Home telephone: 301-555-6677 Work telephone: 301-666-4545
Address: 3453 Hallow Way Baltimore, MD </content>
</text>
<entry typeCode="DRIV">
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.17 "/>

<id root="ec78a751-5994-4910-ada5-ef402937837d"/>
<code code="304251008" displayName="Resuscitation"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">
<originalText>
<reference value="#Direct-1"/>
</originalText>
</code>
<statusCode code="completed"/>
<effectiveTime>
<low value="20050101"/>
<high nullFlavor="UNK"/>
</effectiveTime>
<value xsi:type="CD" code="304253006" displayName="Do Not Resuscitate"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
<participant typeCode="CST">
<participantRole classCode="AGNT">
<addr use="">
<streetAddressLine/>
<city/>
<state/>
<postalCode/>
</addr>
<telecom use="HP" value="tel:+1-301-555-1234"/>
<playingEntity>
<name>
<given>Emily</given>
<given>X.</given>
<family>Green</family>
```

```
<suffix/>
</name>
</playingEntity>
</participantRole>
</participant>
<entryRelationship typeCode="REFR">
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.37"/>
<code code="33999-4" displayName="Status" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
<statusCode code="completed"/>
<value xsi:type="CE" code="425392003" displayName="Current and Verified"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
</observation>
</entryRelationship>
</observation>
</entry>
</section>
</component>
```

4.3 FUNCTIONAL STATUS

The Functional Status section is a **Required if Known – (R2)** section by the Social Security Administration. **Note**: SSA would like to view multiple component elements during the testing phase in order to validate that several functional status that can be sent in the xml payload.

Section Description: The Functional Status section describes the patient's status of normal functioning at the time the CCD was created.

Functional Status Table

Field Name	XPATH	CCD	SSA
Section templateId	**/component/section/templateId/@root**	**O**	**R2**
LOINC Code	**/component/code/@code**	**R**	**R**
Section display Name	**/component/section/displayName/@displayName**	**R**	**R**
Vocabulary OID	**/component/section/displayName/@codeSystem**		**R2**
Code System Name	**/component/section/displayName/@codeSystemName**		**R2**
Title	**/ component/section/title**		**R2**

component/section/entry/organizer/			
Class code	@classCode		R2
Mood Code	@moodCode		R2
templateId	templateID/@root		R2
Id	id/@root		R2
Code	code/@code		R2
Display Name	code/@displayName		R2
Code System	code/@codeSystem		R2
Code system Name	code/@codeSystemName		R2
Status code	statusCode/@code		R2
/organizer/component/observation/			
Class Code	@classCode		R2
moodCode	@moodCode		R2
templateId	templatedId/@root		R2
Id	id		R2
Code	code/@code		R2
Display name	code@displayName		R2
Code system	code/@codeSystem		R2
Code system Name	code/@codeSystemName		R2
Status code	statusCode/@code		R2
effectiveTime	effectiveTime		R2
Value	value		R2
Reference Range	referenceRange/observationRange		R2
/component/section/entry/act/			
Class code	@classCode		R2
moodCode	@moodCode		R2
templateId	templateId/@root		R2
Id	id/@root		R2
Code	code/@nullFlavor		R2
Performer	performer/@typeCode		R2
Time	performer/time		R2
assignedEntity	performer/assignedEntity		R2
id	performer/assignedEntity/id		R2

Code	**performer/assignedEntity/code/@code**		**R2**
Addr	**performer/assignedEntity/addr**		**R2**
Telecom	**performer/assignedEntity/telecom**		**R2**
Assigned Person	**performer/assignedEntity/assignedPerson/name**		**R2**
Id	**performer/assignedEntity/representedOrganization/id/@root**		**R2**
Org. name	**performer/assignedEntity/representedOrganization/name**		**R2**
Entry Relationship	**entryRelationship/@typeCode**		**R2**
component/section/entry/act/entryRelationship/observation/			
Class code	**@classCode**		**R2**
Mood code	**@moodCode**		**R2**
templateId	**templateId/@root**		**R2**
Code	**code/@code**		**R2**
Displayname	**code/@displayName**		**R2**
codeSystem	**code/@codeSystem**		**R2**
Code System Name	**code/@codeSystemName**		**R2**
Status code	**statusCode**		**R2**
effectiveTime	**effectiveTime**		**R2**
Value code	**value/@code**		**R2**
Display Name	**value/@displayName**		**R2**
Code System	**value/@codeSystem**		**R2**
codeSystemName	**value/@codeSystemName**		**R2**
Value	**value/@code**		**R2**
Display Name	**value/@displayName**		**R2**
Code System	**value/@codeSystem**		**R2**
Code system name	**value/@codeSystemName**		**R2**

4.3.1 Content of Functional Status

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to access what documentation is available to view all possible content choices for that particular element.

Field Name	Content Values	Reference
Section templateId	2.16.840.1.113883.10.20.1.5	

<table>
<tr><td>LOINC Code</td><td>47420-5</td><td></td></tr>
<tr><td>Section display Name</td><td>Functional status assessment</td><td></td></tr>
<tr><td>Vocabulary OID</td><td>2.16.840.1.113883.6.1</td><td>http://www.hl7.org/oid/index.cfm</td></tr>
<tr><td>Code System Name</td><td>LOINC</td><td></td></tr>
<tr><td>Title</td><td>Functional Status</td><td></td></tr>
<tr><td colspan="3">component/section/entry/organizer/</td></tr>
<tr><td>Class code</td><td>Any of the following can be used:<table><tr><th>Class Code</th><th>Description</th></tr><tr><td>BATTERY</td><td>A battery specifies a set of observations.</td></tr></table></td><td>HL7 v3 ActClass</td></tr>
<tr><td>Mood Code</td><td>Any of the following can be used:<table><tr><th>mood code</th><th>Description</th></tr><tr><td>EVN</td><td>Event</td></tr></table></td><td>HL7 v3 – ActMood</td></tr>
<tr><td>CCD Result Organizer templateId</td><td>2.16.840.1.113883.10.20.1.32</td><td></td></tr>
<tr><td>Organizer code
Organizer Display Name</td><td>Any of the following can be used:<table><tr><th>Code</th><th>Display Name</th></tr><tr><td>282097004</td><td>Ambulatory</td></tr><tr><td>363871006</td><td>Mental Status</td></tr><tr><td>273547007</td><td>Activities of Daily Living</td></tr><tr><td>4683004</td><td>Home/Living Situation</td></tr><tr><td>284773001</td><td>Ability to Care for Self</td></tr></table></td><td></td></tr>
<tr><td>Vocabulary OID</td><td>2.16.840.1.113883.6.96</td><td></td></tr>
<tr><td>Organizer Code System Name</td><td>SNOMED CT</td><td></td></tr>
<tr><td colspan="3">component/section/entry/organizer/component/observation/</td></tr>
</table>

<table>
<tr><td>Class Code</td><td>Any of the following can be used:<table><tr><th>Class code</th><th>Description</th></tr><tr><td>OBS</td><td>An act that is intended to result in new information about a subject.</td></tr></table></td><td>HL7 v3 ActClass</td></tr>
<tr><td>Mood code</td><td>Any of the following can be used:<table><tr><th>mood code</th><th>Description</th></tr><tr><td>EVN</td><td>Event</td></tr></table></td><td>HL7 v3 – ActMood</td></tr>
<tr><td>CCD Result Observation templateId</td><td>2.16.840.1.113883.10.20.1.31</td><td></td></tr>
</table>

4.3.2 XML Sample of the Functional status

```xml
<component>
<section>
<templateId root="2.16.840.1.113883.10.20.1.5"/>
<code code="47420-5" displayName="Functional status assessment"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
<title>Functional Status</title>
<text/>
<entry>
<organizer classCode="BATTERY" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.32"/>
<id root="c6f88322-67ad-11db-bd13-0800200c9a66"/>
<code code=" 273547007 " displayName="Activities of Daily Living (Assessement Scale)"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
<statusCode code="completed"/>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.31"/>
<id root="c6f88322-67ad-11db-bd13-2122422a1b00"/>
```

```
<code code="129002005" displayName="Bathing" codeSystem="2.16.840.1.113883.6.96"
 codeSystemName="SNOMED CT"/>
<statusCode code="completed"/>
<effectiveTime>
<low value="20081002"/>
<high nullFlavor="NA"/>
</effectiveTime>
<value xsi:type="CD" code="Y"/>
<referenceRange>
<observationRange>
<text/>
</observationRange>
</referenceRange>
</observation>
</component>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.31"/>
<id root="c6f88322-67ad-11db-bd13-2122422a1b00"/>
<code code="129003000" displayName="Dressing" codeSystem="2.16.840.1.113883.6.96"
 codeSystemName="SNOMED CT"/>
<statusCode code="completed"/>
<effectiveTime>
<low value="20081002"/>
<high nullFlavor="NA"/>
</effectiveTime>
<value xsi:type="CD" code="Y"/>
<referenceRange>
<observationRange>
<text/>
</observationRange>
</referenceRange>
</observation>
</component>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.31"/>
<id root="c6f88322-67ad-11db-bd13-2122422a1b00"/>
```

```
<code code=" 129004006 " displayName="Toileting" codeSystem="2.16.840.1.113883.6.96"
 codeSystemName="SNOMED CT"/>
<statusCode code="completed"/>
<effectiveTime>
<low value="20081002"/>
<high nullFlavor="NA"/>
</effectiveTime>
<value xsi:type="CD" code="Y"/>
<referenceRange>
<observationRange>
<text/>
</observationRange>
</referenceRange>
</observation>
</component>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.31"/>
<id root="c6f88322-67ad-11db-bd13-2122422a1b00"/>
<code code=" 129005007 " displayName="Transferring"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
<statusCode code="completed"/>
<effectiveTime>
<low value="20081002"/>
<high nullFlavor="NA"/>
</effectiveTime>
<value xsi:type="CD" code="Y"/>
<referenceRange>
<observationRange>
<text/>
</observationRange>
</referenceRange>
</observation>
</component>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.31"/>
<id root="c6f88322-67ad-11db-bd13-2122422a1b00"/>
```

```
<code code=" 129020001 " displayName="Maintaining continence"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
<statusCode code="completed"/>
<effectiveTime>
<low value="20081002"/>
<high nullFlavor="NA"/>
</effectiveTime>
<value xsi:type="CD" code="Y"/>
<referenceRange>
<observationRange>
<text/>
</observationRange>
</referenceRange>
</observation>
</component>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.31"/>
<id root="c6f88322-67ad-11db-bd13-2122422a1b00"/>
<code code=" 129007004 " displayName="Feeding" codeSystem="2.16.840.1.113883.6.96"
 codeSystemName="SNOMED CT"/>
<statusCode code="completed"/>
<effectiveTime>
<low value="20081002"/>
<high nullFlavor="NA"/>
</effectiveTime>
<value xsi:type="CD" code="Y"/>
<referenceRange>
<observationRange>
<text/>
</observationRange>
</referenceRange>
</observation>
</component>
</organizer>
</entry>
<entry>
```

```
<act classCode="ACT" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.27"/>
<id root="ec8a6ff8-ed4b-4f7e-82c3-e98e11z45de7"/>
<code nullFlavor="NA"/>
<performer typeCode="PRF">
<time>
<low value="20081109"/>
<high value="20070510"/>
</time>
<assignedEntity>
<id root="2.16.840.1.113883.4.6.1013905751" extension="Provider ID"/>
<code code="280000000X" displayName="Hospitals"
 codeSystem="2.16.840.1.113883.6.101" codeSystemName="ProviderCodes"/>
<addr use="WP">
<streetAddressLine>33 Medical Way</streetAddressLine>
<streetAddressLine/>
<city>New Market</city>
<state>MA</state>
<postalCode>111111</postalCode>
<country>US</country>
</addr>
<telecom use="WP" value="tel:+1-888-432-1181"/>
<telecom value="mailto:Harry.Cohen.MD@hospitalA.com"/>
<assignedPerson>
<name>
<prefix>Dr.</prefix>
<given>Harry</given>
<given>R</given>
<family>Cohen</family>
</name>
</assignedPerson>
<representedOrganization>
<id root="2.16.840.1.113883.4.6.2649871"/>
<name>St. George Medical Center</name>
</representedOrganization>
</assignedEntity>
</performer>
<entryRelationship typeCode="SUBJ">
```

```
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.28"/>
<code code="55607006" displayName="Problem" codeSystem="2.16.840.1.113883.6.96"
 codeSystemName="SNOMED CT"/>
<text/>
<statusCode code="completed"/>
<effectiveTime value="20060609"/>
<value xsi:type="CD" code="228158008" displayName="Walking Disability"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
<entryRelationship typeCode="REFR">
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.44"/>
<code code="33999-4" displayName="Status" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
<statusCode code="completed"/>
<value xsi:type="CE" code="55561003" displayName="Active"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
</observation>
</entryRelationship>
</observation>
</entryRelationship>
</act>
</entry>
</section>
</component>
```

4.4 SUPPORT MODULE

The Support section is a **Required if Known – (R2)** section by Social Security Administration standards.

Section Description The Support section represents the patient's sources of support such as immediate family, relatives, and guardian at the time the CCD is generated.

"see recordTarget section"

4.5 PROBLEMS MODULE

The Problems section is a **Required if Known – (R2)** section by Social Security Administration standards. **Note**: SSA would like to view multiple Problems elements during the testing phase in order to validate that several problems can be sent in the xml payload.

Section Description: The Problems section list and describes all relevant clinical problems at the time the summary is generated.

Problems Table

Field Name	XPATH	CCD	SSA
Section templateId	templateId/@root	O	R2
LOINC Code	code/@code	R	R
Vocabulary OID	code/@codeSystem	R	R
Display Name	code/@displayName		R2
Code system Name	Code/@codeSystemName		R2
Title	component/section/title		R2
Text ID	component/section/text/content/@ID		R2
Text Content	component/section/text/content		R2
Entry Type Code	entry/@typeCode	R	R
component/section/entry/act/			
classCode	@classCode	R	R
moodCode	@moodCode	R	R
ID	id	R	R
Code	code/@NullFlavor	R	R
Performer Type Code	performer/@typeCode		R2
component/section/entry/act/entryRelationship/observation/			
Code	code@code	R2	
Code System	code@codeSystem	R2	
Code System Name	code@codeSystemName	R2	
Display Name	code@displayName	R2	
Text Reference	Text/reference/@value	R2	
Status Code	statusCode/@code	R	R
Problem Status	value/@xsi:type	R	R
Problem Type	value/@code	R2	R2

Code System	**value/@codeSystem**		**R2**
Code system Name	**value/@CodeSystemName**		**R2**
Display Name	**value/@displayName**		**R2**
Problem Date - low	**effectiveTime/low/@value**	**R2**	**R2**
Problem Date – high	**effectiveTime/high/@value**	**R2**	**R2**
component/section/entry/act/performer/assignedEntity/			
Treating Provider id	**Id/@root**		**R2**
Treating Provider Name	**assignedPerson/name**	**O**	**R2**
Represented Org. ID	**representedOrganization/id/@root**		**R2**
Represented Org.	**representedOrganization/name**		**R2**
MRN	**stdc:patient/stdc:id/@extension**		**R2**

4.5.1 Content of Problems

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to access what documentation is available to view all possible content choices for that particular element.

Field Name	Content Values	Reference
Section templateId	2.16.840.1.113883.10.20.1.11	
LOINC Code	Any of the following can be	

<table>
<tr><td>Display Name</td><td>used:<table><tr><th>CODE</th><th>Display Name</th></tr><tr><td>11450-4</td><td>Problem List</td></tr><tr><td>11348-0</td><td>Resolved</td></tr><tr><td>29299-5</td><td>Reason for Visit</td></tr><tr><td>10154-3</td><td>Chief Complaint</td></tr><tr><td>8646-2</td><td>Admission Diagnosis</td></tr><tr><td>11535-2</td><td>Discharge Diagnosis</td></tr><tr><td>10219-4</td><td>Preoperative Diagnosis</td></tr><tr><td>10218-6</td><td>Postoperative Diagnosis</td></tr></table></td><td></td></tr>
<tr><td>Vocabulary OID</td><td>2.16.840.1.113883.6.1</td><td>http://www.hl7.org/oid/index.cfm</td></tr>
<tr><td>Code System Name</td><td>LOINC</td><td></td></tr>
<tr><td>title</td><td>Problems</td><td></td></tr>
<tr><td>Text ID</td><td>prob-x</td><td></td></tr>
<tr><td>Text Content</td><td>“Text”</td><td></td></tr>
<tr><td>Entry Type Code</td><td>Any of the following can be used:<table><tr><th>Use Code</th><th>Description</th></tr><tr><td>DRIV</td><td>Is derived from</td></tr></table></td><td>HL7v3 – ActRelationshipType</td></tr>
<tr><td colspan="3">component/section/entry/act/</td></tr>
<tr><td>class Code</td><td>Any of the following can be used:<table><tr><th>class Code</th><th>Description</th></tr><tr><td>ACT</td><td>A record of something that is being done, has been done, can be done, or is intended or requested to be</td></tr></table></td><td>HL7 v3 – ActClass</td></tr>
</table>

<table>
<tr><td></td><td><table><tr><td></td><td>done.</td></tr></table></td><td></td></tr>
<tr><td>mood Code</td><td>Any of the following can be used:<table><tr><th>mood code</th><th>Description</th></tr><tr><td>EVN</td><td>Event</td></tr></table></td><td>HL7 v3 – ActMood</td></tr>
<tr><td>code</td><td>UNK – can not be blank</td><td></td></tr>
<tr><td>Performer Type Code</td><td>Any of the following can be used:<table><tr><th>Type Code</th><th>Description</th></tr><tr><td>PRF</td><td>Performer - A person, non-person living subject, organization or device that who actually and principally carries out the action.</td></tr></table></td><td>HL7 v3 - ParticipationType</td></tr>
<tr><td colspan="3">component/section/entry/act/entryRelationship/observation/</td></tr>
<tr><td>Code</td><td>xxxxxxxxx</td><td>Snomed CT code</td></tr>
<tr><td>Display Name</td><td>Diagnosis</td><td></td></tr>
<tr><td>Code System</td><td>2.16.840.1.113883.6.96</td><td></td></tr>
<tr><td>Code System Name</td><td>SNOMED CT</td><td></td></tr>
<tr><td>Text reference</td><td>#prob-x</td><td></td></tr>
<tr><td>Status code</td><td>Any of the following can be used:<table><tr><th>Code</th><th>Display Name</th></tr><tr><td>completed</td><td>Completed</td></tr><tr><td>aborted</td><td>Aborted</td></tr><tr><td>active</td><td>Active</td></tr><tr><td>cancelled</td><td>Cancelled</td></tr><tr><td>held</td><td>Held</td></tr><tr><td>new</td><td>New</td></tr><tr><td>suspended</td><td>Suspended</td></tr></table></td><td></td></tr>
</table>

Problem Status	CD	
Problem Type	xxx.x	
Display Name	Logical name	
Code System	2.16.840.1.113883.6.2	
Code System Name	ICD9	
Problem Date – low	YYYYMMDD	
Problem Date – high	YYYYMMDD or UNK	
component/section/entry/act/performer/assignedEntity/		
Treating Provider id	xxxxxxxxxxxxx…	Number provide by HIE/facility
Treating Provider Name	i.e. Dr. Shirley Jordan	
Represented Org.	i.e. Smith Regional Hospital	
MRN	xxxxxxxx…	Number provide by HIE/facility

4.5.2 XML Sample of the Problems

```
<component>
<section>
<templateId root="2.16.840.1.113883.10.20.1.11"></templateId>
<code code="11450-4" displayName="Problem list" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" />
<title>Problem list</title>
<text></text>
<entry typeCode="DRIV">
<act classCode="ACT" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.27" />
<id root="ec8a6ff8-ed4b-4f7e-82c3-e98e58b45de7" />
<code nullFlavor="UNK" />
<performer typeCode="PRF">
<time>
<low value="20060601" />
<high value="20080924" />
</time>
<assignedEntity>
<id root="78A150ED-B890-49dc-B716-5EC0027B3982" extension="ProviderID" />
<code code="280000000X" displayName="Hospitals"
codeSystem="2.16.840.1.113883.6.101" codeSystemName="ProviderCodes" />
```

```
<addr use="WP">
<streetAddressLine>145  Applecross Road</streetAddressLine>
<streetAddressLine></streetAddressLine>
<city>Southern Pines</city>
<state>NC</state>
<postalCode>28388</postalCode>
</addr>
<assignedPerson>
<name>
<prefix>Dr. </prefix>
<given>Shirley</given>
<given />
<family>Jordan</family>
</name>
</assignedPerson>
<representedOrganization>
<name>Southern Pines Women's Health Center</name>
</representedOrganization>
<sdtc:patient xmlns:sdtc="urn:hl7-org:sdtc">
<sdtc:id root="78A150ED-ZZ23-49dc-B716-5EC0027B3983" extension="33445566" />
</sdtc:patient>
</assignedEntity>
</performer>
<entryRelationship typeCode="SUBJ">
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.28" />
<id root="ab1791b0-5c71-11db-b0de-0800200c9a66" />
<code code="282291009" displayName="Diagnosis"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"></code>
<text>
<reference value="#prob-1" />
</text>
<statusCode code="completed" />
<!--Problem Date-->
<effectiveTime>
<low value="20080915" />
<high nullFlavor="UNK" />
</effectiveTime>
<!--Problem Code-->
```

```
<value xsi:type="CD" code="174.0" displayName="Malignant neoplasm of female breast"
codeSystem="2.16.840.1.113883.6.2" codeSystemName="ICD9"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" />
<entryRelationship typeCode="REFR">
<observation classCode="OBS" moodCode="EVN">
<!--20.1.50 = problem status observation 20.1.57 = conformant status observation-->
<templateId root="2.16.840.1.113883.10.20.1.50"></templateId>
<code code="33999-4" displayName="Status" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" />
<statusCode code="completed" />
<value xsi:type="CE" code="55561003" displayName="Active"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" />
</observation>
</entryRelationship>
</observation>
</entryRelationship>
</act>
</entry>
<entry typeCode="DRIV">
<!--Condition Module-->
<act classCode="ACT" moodCode="EVN">
<!--TemplateId 20.1.27 = CCD Problem Act 11.32.7 = C32 Condition Module-->
<templateId root="2.16.840.1.113883.10.20.1.27" />
<id root="ec8a6ff8-ed4b-4f7e-82c3-e98e58b45de7" />
<code nullFlavor="NA" />
<!--Primary Care Physician-->
<performer typeCode="PRF">
<time>
<low value="20060509"></low>
<high value="20080801" />
</time>
<assignedEntity>
<id root="2.16.840.1.113883.4.6.15597815751" extension="Provider ID" />
<!-- OID is Dr. Orbit's NPI -->
<code code="261QM2500X" displayName="Medical Specialty"
codeSystem="2.16.840.1.113883.6.101" codeSystemName="ProviderCodes" />
<addr use="WP">
<streetAddressLine>155 Memorial Drive</streetAddressLine>
```

```
<streetAddressLine></streetAddressLine>
<city>Ironton</city>
<state>OH</state>
<postalCode>11111</postalCode>
</addr>
<telecom use="WP" value="tel:+1-888-555-5555" />
<assignedPerson>
<name>
<prefix>Dr</prefix>
<given>George</given>
<given>E.</given>
<family>Orbit</family>
</name>
</assignedPerson>
<representedOrganization>
<name>Smith Regional Hospital</name>
</representedOrganization>
<sdtc:patient xmlns:sdtc="urn:hl7-org:sdtc">
<!--The ID is how the doctor identifies the patient's record. Patient's MRN under the
provider producing the CCD/C32-->
<sdtc:id root="78A150ED-ZZ12-49dc-B716-5EC0027B3983" extension="11223344" />
</sdtc:patient>
</assignedEntity>
</performer>
<entryRelationship typeCode="SUBJ">
<observation classCode="OBS" moodCode="EVN">
<!-- Problem observation template -->
<templateId root="2.16.840.1.113883.10.20.1.28" />
<id root="ab1791b0-5c71-11db-b0de-0800200c9a66" />
<!--Problem Type (and description)-->
<code code="418799008" displayName="Symptom"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"></code>
<text>
<reference value="#prob-1" />
</text>
<statusCode code="completed" />
<!--Problem Date-->
<effectiveTime>
<low value="20080910" />
```

```
<high nullFlavor="UNK" />
</effectiveTime>
<value xsi:type="CD" code="198.2" displayName="Skin, Skin of breast"
codeSystem="2.16.840.1.113883.6.2" codeSystemName="ICD9"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" />
<!--Problem Status-->
<entryRelationship typeCode="REFR">
<observation classCode="OBS" moodCode="EVN">
<!--20.1.50 = problem status observation 20.1.57 = conformant status observation-->
<templateId root="2.16.840.1.113883.10.20.1.50"></templateId>
<code code="33999-4" displayName="Status" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" />
<statusCode code="completed" />
<!--Problem Status-->
<value xsi:type="CE" code="55561003" displayName="Active"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" />
</observation>
</entryRelationship>
</observation>
</entryRelationship>
</act>
</entry>
</section>
</component>
```

4.6 FAMILY HISTORY

The Family History section is a **Required if Known – (R2)** section by the Social Security Administration standards. **Note**: SSA would like to view multiple entry elements during the testing phase in order to validate that several family members can be sent in the xml payload.

Section Description: The Family History section contains data defining the patient's genetic relatives in terms of possible or relevant health risk factors that have a potential impact on the patient's healthcare risk profile.

Family History Table

Field Name	XPATH	CCD	SSA
Section OID	templateId/@root	O	R2

LOINC Code	**code/@code**	**R**	**R**
Vocabulary OID	**code/@codeSystem**	**R**	**R**
Code System Name	**code/@codeSystemName**	**R**	**R**
Title	**code/@displayName**	**R**	**R**
Mood code	**entry/act/@moodCode**	**R**	**R**
component/section/entry/organizer/			
Class Code	**@classCode**	**R**	**R**
Organizer templateId	**templateId/@root**		**R**
Status code	**component/observation/statusCode/@code**	**R**	**R**
Class code	**subject/relatedSubject/code/@classCode**		**R2**
Code	**subject/relatedSubject/code/@code**		**R2**
Display Name	**subject/relatedSubject/code/@displayName**		**R2**
Vocabulary OID	**subject/relatedSubject/code/@codeSystem**		**R2**
Code system Name	**subject/relatedSubject/code/@codeSystemName**		**R2**
Addr	**subject/relatedSubject/addr**		**R2**
Name	**subject/relatedSubject/subject/name**		**R2**
Gender Code	**subject/relatedSubject/subject/administrativeGenderCode**		**R2**
birthTime	**subject/relatedSubject/subject/birthTime**		**R2**
Deceased Indicator	**subject/relatedSubject/subject/sdtc:deceasedInd**		**R2**
Deceased Date	**subject/relatedSubject/subject/sdtc:deceasedTime**		**R2**
component/section/entry/organizer/component/observation/			
Date/Time of event	**effectiveTime/@value**	**R**	**R**
Cause of Death	**value/@code**		**R2**
Display Name	**value/@displayName**		**R2**
Value Name	**entryRelationship/observation/value/@code**		**R2**
Display Name	**entryRelationship/observation/value/@displayName**		**R2**
ID	**id**	**R**	**R**

4.6.1 Content of Family History

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to access what documentation is available to view all possible content choices for that particular element.

<table>
<tr><th><u>Field Name</u></th><th><u>Content Values</u></th><th><u>Reference</u></th></tr>
<tr><td>Section templateId</td><td>2.16.840.1.113883.10.20.1.4</td><td></td></tr>
<tr><td>LOINC Code</td><td>10157-6</td><td></td></tr>
<tr><td>Display Name</td><td>History of family member diseases</td><td></td></tr>
<tr><td>Vocabulary OID</td><td>2.16.840.1.113883.6.1</td><td>http://www.hl7.org/oid/index.cfm</td></tr>
<tr><td>Code System Name</td><td>LOINC</td><td></td></tr>
<tr><td>Title</td><td>Family History</td><td></td></tr>
<tr><td colspan="3">component/section/entry/organizer/</td></tr>
<tr><td>Class Code</td><td>“see document in Reference column for possible values”</td><td>HL7 v3 – ActClass</td></tr>
<tr><td>Mood Code</td><td>“see document in Reference column for possible values”</td><td>HL7 v3 – ActMood</td></tr>
<tr><td>Organizer templateID</td><td>2.16.840.1.113883.10.20.1.23</td><td></td></tr>
<tr><td>Status code</td><td>Any of the following can be used:
<table>
<tr><td>Code</td><td>Display Name</td></tr>
<tr><td>completed</td><td>Completed</td></tr>
<tr><td>aborted</td><td>Aborted</td></tr>
<tr><td>active</td><td>Active</td></tr>
<tr><td>cancelled</td><td>Cancelled</td></tr>
<tr><td>held</td><td>Held</td></tr>
<tr><td>new</td><td>New</td></tr>
<tr><td>suspended</td><td>Suspended</td></tr>
</table></td><td></td></tr>
<tr><td colspan="3">subject/relatedSubject/</td></tr>
<tr><td>Class code</td><td>“see document in Reference column for possible values”</td><td>HL7 v3 - RoleClass</td></tr>
<tr><td>Code</td><td rowspan="2">“see document in Reference column for possible values”</td><td rowspan="2">HL7 v3 – RoleCode</td></tr>
<tr><td>Display Name</td></tr>
<tr><td>Code System</td><td>2.16.840.1.113883.5.111</td><td></td></tr>
<tr><td>Code System Name</td><td>SNOMED CT</td><td></td></tr>
<tr><td colspan="3">subject/subject</td></tr>
</table>

<table>
<tr><td>Administrative Gender Code</td><td>Any of the following can be used:<table><tr><th>Code</th><th>DisplayName</th></tr><tr><td>F</td><td>Female</td></tr><tr><td>M</td><td>Male</td></tr><tr><td>UN</td><td>Undifferentiated</td></tr></table></td><td></td></tr>
<tr><td>Vocabulary OID</td><td>2.16.840.1.113883.5.1</td><td></td></tr>
<tr><td>Code System Name</td><td>HL7 AdministrativeGenderCode</td><td></td></tr>
</table>

4.6.2 XML Sample of the Family History

```
<component>
<section>
<templateId root="2.16.840.1.113883.10.20.1.4"/>
<code code="10157-6" displayName="History of family member diseases"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
<title>Family History</title>
<text/>
<entry>
<organizer classCode="CLUSTER" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.23"/>
<statusCode code="completed"/>
<subject>
<relatedSubject classCode="PRS">
<code code="MTH" displayName="Mother" codeSystem="2.16.840.1.113883.5.111"
 codeSystemName="SNOMED CT"/>
<addr>
<streetAddressLine>6544 Saratoga Spring Court</streetAddressLine>
<city>Asheville</city>
<state>NC</state>
<postalCode>28801</postalCode>
<country>US</country>
</addr>
<subject>
<name>
<given>Margaret</given>
<given/>
```

```
<family>Bushell</family>
</name>
<administrativeGenderCode code="F" displayName="Female"
 codeSystem="2.16.840.1.113883.5.1" codeSystemName="HL7
 AdministrativeGenderCode"/>
<birthTime value="19200201"/>
<sdtc:deceasedInd value="1"/>
<sdtc:deceasedTime value="19991130"/>
</subject>
</relatedSubject>
</subject>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.22"/>
<id root="z7g99322-67ad-11db-bd13-0800201d0b77"/>
<code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4"/>
<statusCode code="completed"/>
<effectiveTime value="19991130"/>
<value xsi:type="CD" code="233835003" displayName="Acute widespread myocardial
 infarction" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
<entryRelationship typeCode="CAUS">
<observation classCode="OBS" moodCode="EVN">
<id root="6898fae0-5c8a-11db-b0de-0800200c9a66"/>
<code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4"/>
<statusCode code="completed"/>
<value xsi:type="CD" code="419099009" displayName="Deceased"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
</observation>
</entryRelationship>
</observation>
</component>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.22"/>
<id root="z7g99322-67ad-11db-bd13-9999201d0b77"/>
<code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4"/>
<statusCode code="completed"/>
<effectiveTime>
```

```
<low value="19981228"/>
<high value="19991130"/>
</effectiveTime>
<value xsi:type="CD" code="52448006" displayName="Dementia"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
</observation>
</component>
</organizer>
</entry>
<entry typeCode="DRIV">
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.22"/>
<id root="a13c6160-5c8b-11db-b0de-0800200c9a66"/>
<code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4"/>
<statusCode code="completed"/>
<effectiveTime>
<low value="20070122"/>
</effectiveTime>
<value xsi:type="CD" code="585.6" displayName="End stage renal disease"
 codeSystem="2.16.840.1.113883.6.103" codeSystemName="ICD9"/>
<subject>
<relatedSubject classCode="PRS">
<code code="FTH" displayName="Father" codeSystem="2.16.840.1.113883.5.111"
 codeSystemName="RoleCode"/>
<addr>
<streetAddressLine>262 Blue Bird Road</streetAddressLine>
<city>New Market</city>
<state>MD</state>
<postalCode>20878</postalCode>
<country>US</country>
</addr>
<subject>
<name>
<given>Ben</given>
<given/>
<family>Bushell</family>
</name>
```

```
<administrativeGenderCode code="M" displayName="Male"
 codeSystem="2.16.840.1.113883.5.1" codeSystemName="HL7
 AdministrativeGenderCode"/>
<birthTime value="19190501"/>
<sdtc:deceasedInd value="1"/>
<sdtc:deceasedTime value="20060519"/>
</subject>
</relatedSubject>
</subject>
</observation>
</entry>
</section>
</component>
```

4.7 SOCIAL HISTORY

The Social History section is a **Required if Known – (R2)** section by Social Security Administration standards.

Section Description: The Social History contains data defining the patient's occupational, personal (e.g. lifestyle), social, and environmental history and health risk factors, as well as administrative data such as marital status, race, ethnicity and religious affiliation.

Field Name	XPATH	CCD	SSA
Section templateId	component/section/templateId/@root	O	R2
Code	component/section/code/@code	O	
Display Name	component/section/code/@displayName	O	
Vocabulary OID	component/section/code/@codeSystem	O	
Code System Name	component/section/code/@codeSystemName	O	
Title	component/section/title	O	
Content ID	component/text/content/ID	O	
Content text	component/text/content	O	
Entry type code	Component/entry/@typeCode	O	

4.7.1 Content of Social History

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to

access what documentation is available to view all possible content choices for that particular element.

<table>
<tr><th>Field Name</th><th>Content Values</th><th>Reference</th></tr>
<tr><td>Section templateId</td><td>2.16.840.1.113883.10.20.1.15</td><td></td></tr>
<tr><td>Code</td><td>29762-2</td><td></td></tr>
<tr><td>Display Name</td><td>Social history</td><td></td></tr>
<tr><td>Vocabulary OID</td><td>2.16.840.1.113883.6.1</td><td>http://www.hl7.org/oid/index.cfm</td></tr>
<tr><td>Code System Name</td><td>LOINC</td><td></td></tr>
<tr><td>Title</td><td>Social History</td><td></td></tr>
<tr><td>Content ID</td><td>Socialhistory-x</td><td></td></tr>
<tr><td>Content text</td><td>Text</td><td></td></tr>
<tr><td>Entry Type code</td><td>Any of the following can be used:<table><tr><th>Use Code</th><th>Description</th></tr><tr><td>DRIV</td><td>Is derived from</td></tr></table></td><td>HL7v3 – ActRelationshipType</td></tr>
</table>

4.7.2 XML Sample of the Social History

```
<component>
    <section>
     <templateId root="2.16.840.1.113883.10.20.1.15" />
     <code code="29762-2" displayName="Social history"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
     <title>Social History</title>
     <text>
      <content ID="socialhistory-1">Recently retired as a day care worker.  Immigrated
from China 30 years ago.  Husband passed away in 2003.  3 supportive children.  Denies
current or history of tobacoo, EtOH, illicits.  Exposed to second-hand smoke by
husband.</content>
     </text>
     <entry typeCode="DRIV">
      <observation classCode="OBS" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.1.33" />
       <id root="a13c6991-5c8b-11db-b0de-0800200c9a66" />
```

```
        <code code="14679004" displayName="Occupation"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">
          <originalText>
            <reference value="#socialhistory-1" />
          </originalText>
        </code>
        <statusCode code="completed" />
        <effectiveTime>
          <low value="19971203" />
          <high value="20001203" />
        </effectiveTime>
        <value xsi:type="CD" code=" 112271005 " displayName="Assembly Shipment"
        codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" />
      </observation>
    </entry>
    <entry typeCode="DRIV">
      <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.1.33" />
        <id root="a13c6991-5c8b-11db-b0de-0800200c9a66" />
        <code code="257733005" displayName="Activity"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">
          <originalText>
            <reference value="#socialhistory-2" />
          </originalText>
        </code>
        <statusCode code="completed" />
        <effectiveTime>
          <low value="19990615" />
          <high value="20060615" />
        </effectiveTime>
        <value xsi:type="CD" code="102393008" displayName="Child Care"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" />
```

```
      </observation>
     </entry>
     <entry typeCode="DRIV">
      <observation classCode="OBS" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.1.33" />
       <id root="a13c6991-5c8b-11db-b0de-0800200c9a66" />
       <code code="257733005" displayName="Activity"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">
        <originalText>
         <reference value="#socialhistory-2" />
        </originalText>
       </code>
       <statusCode code="completed" />
       <effectiveTime>
        <low value="19891101" />
        <high value="19960415" />
       </effectiveTime>
       <value xsi:type="CD" code="102393008" displayName="Kitchen Help"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" />
      </observation>
     </entry>
    </section>
   </component>
```

4.8 VITAL SIGNS

The Vital Signs section is a **Required if Known – (R2)** section by the Social Security Administration standards. **Note**: SSA would like to view multiple entry elements during the testing phase in order to validate that several vital signs can be sent in the xml payload.

Section Description: The Vital Signs section contains current and historically relevant vital signs, such as blood pressure, heart rate, respiratory rate, height, weight, body mass index (BMI), head circumference, crown-to-rump length, and pulse oximetry.

Vital Signs Table

Field Name	XPATH	CCD	SSA
Section templateId	templateId/@root	O	R2
Code	code/@code	R	R
Vocabulary OID	code/@codeSystem	R	R
Title	code/@displayName	R	R
entry/organizer/component/			
Effective Time	observation/effectiveTime		R2
Vital code #	observation/code/@code		R2
Vital code Name	observation/code/@displayName		R2
Result Value	observation/value/@value		R2
Result Unit	observation/value/@unit		R2

4.8.1 Content of Vital Signs

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to access what documentation is available to view all possible content choices for that particular element.

Field Name	Content Values	Reference
Section templateId	2.16.840.1.113883.10.20.1.16	
code	8716-3	
Vocabulary OID	2.16.840.1.113883.6.1	http://www.hl7.org/oid/index.cfm
title	Vital Signs	
component/section/entry/organizer/		
Effective Time	YYYYMMDD	

<table>
<tr><td>statusCode</td><td>Any of the following can be used:
<table>
<tr><th>Code</th><th>Display Name</th></tr>
<tr><td>completed</td><td>Completed</td></tr>
<tr><td>aborted</td><td>Aborted</td></tr>
<tr><td>active</td><td>Active</td></tr>
<tr><td>cancelled</td><td>Cancelled</td></tr>
<tr><td>held</td><td>Held</td></tr>
<tr><td>new</td><td>New</td></tr>
<tr><td>suspended</td><td>Suspended</td></tr>
</table></td><td></td></tr>
<tr><td colspan="3">component/section/entry/organizer/component/observation/</td></tr>
<tr><td>classCode</td><td>Any of the following can be used:
<table>
<tr><th>mood code</th><th>Description</th></tr>
<tr><td>OBS</td><td>An act that is intended to result in new information about a subject.</td></tr>
</table></td><td></td></tr>
<tr><td>moodCode</td><td>Any of the following can be used:
<table>
<tr><th>mood code</th><th>Description</th></tr>
<tr><td>EVN</td><td>Event</td></tr>
</table></td><td></td></tr>
<tr><td>templateId</td><td>2.16.840.1.113883.10.20.1.31</td><td></td></tr>
<tr><td>Code & DisplayName</td><td>Any of the following can be used:
<table>
<tr><th>Code</th><th>Display Name</th></tr>
<tr><td>9279-1</td><td>RESPIRATION RATE</td></tr>
<tr><td>8867-4</td><td>HEART BEAT</td></tr>
<tr><td>2710-2</td><td>OXYGEN SATURATION</td></tr>
<tr><td>8480-6</td><td>INTRASCULAR SYSTOLIC</td></tr>
<tr><td>8462-4</td><td>INTRAVASCULAR</td></tr>
</table></td><td></td></tr>
</table>

<table>
<tr><td>Display Name</td><td><table><tr><td></td><td>DIASTOLIC</td></tr><tr><td>8310-5</td><td>BODY TEMPERATURE</td></tr><tr><td>8302-2</td><td>BODY HEIGHT (MEASURED)</td></tr><tr><td>8306-3</td><td>BODY HEIGHT^LYING</td></tr><tr><td>8287-5</td><td>CIRCUMFRENCE.OCCIPITAL-FRONTAL (TAPE MEASURE)</td></tr><tr><td>3141-9</td><td>BODY WEIGHT (MEASURED)</td></tr></table></td><td></td></tr>
<tr><td>Vocabulary OID</td><td>2.16.840.1.113883.6.1</td><td></td></tr>
<tr><td>Code System Name</td><td>LOINC</td><td></td></tr>
<tr><td>Status Code</td><td>Any of the following can be used:<table><tr><th>Code</th><th>Display Name</th></tr><tr><td>completed</td><td>Completed</td></tr><tr><td>aborted</td><td>Aborted</td></tr><tr><td>active</td><td>Active</td></tr><tr><td>cancelled</td><td>Cancelled</td></tr><tr><td>held</td><td>Held</td></tr><tr><td>new</td><td>New</td></tr><tr><td>suspended</td><td>Suspended</td></tr></table></td><td></td></tr>
<tr><td>Effective Time</td><td>YYYYMMDDHHMM</td><td></td></tr>
</table>

4.8.2 XML Sample of the Vital Signs

```
<component>
<section>
<templateId root="2.16.840.1.113883.10.20.1.16"/>
<code code="8716-3" displayName="Vital Signs" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
<title>Vital Signs</title>
<text/>
<entry typeCode="DRIV">
<organizer classCode="CLUSTER" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.35"/>
```

```
<id root="c6f88320-67ad-11db-bd13-0800200c9a66"/>
<statusCode code="completed"/>
<effectiveTime value="200811091030"/>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.31"/>
<id root="c6f88322-67ad-11db-bd13-0800200c9a66"/>
<code code="3141-9" displayName="Body weight" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
<text/>
<statusCode code="completed"/>
<effectiveTime value="200811091030"/>
<value xsi:type="PQ" value="110" unit="[lb_av]"/>
<interpretationCode code="N" displayName="Normal"
 codeSystem="2.16.840.1.113883.5.83" codeSystemName="Observation Interpretation"/>
<referenceRange>
<observationRange>
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</observationRange>
</referenceRange>
</observation>
</component>
<component>
<observation classCode="OBS" moodCode="EVN">
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<templateId root="2.16.840.1.113883.3.88.11.32.15"/>
<id root="c6f88323-67ad-11db-bd13-0800200c9a66"/>
<code code="8480-6" displayName="Systolic BP" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
<text/>
<statusCode code="completed"/>
<effectiveTime value="200811091030"/>
<value xsi:type="PQ" value="116" unit="mm[Hg]"/>
<interpretationCode code="N" displayName="Normal"
 codeSystem="2.16.840.1.113883.5.83" codeSystemName="Observation Interpretation"/>
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</observation>
</component>
<component>
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<templateId root="2.16.840.1.113883.3.88.11.32.15"/>
<id root="c6f88324-67ad-11db-bd13-0800200c9a66"/>
<code code="8462-4" displayName="Diastolic BP" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
<text/>
<statusCode code="completed"/>
<effectiveTime value="200811091030"/>
<value xsi:type="PQ" value="72" unit="mm[Hg]"/>
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 codeSystem="2.16.840.1.113883.5.83" codeSystemName="Observation Interpretation"/>
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</observationRange>
</referenceRange>
</observation>
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<component>
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<code code="8867-4" displayName="Heart Beat" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
<text/>
<statusCode code="completed"/>
<effectiveTime value="200811091030"/>
<value xsi:type="PQ" value="53" unit="1"/>
<interpretationCode code="N" displayName="Normal"
 codeSystem="2.16.840.1.113883.5.83" codeSystemName="Observation Interpretation"/>
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</referenceRange>
</observation>
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<observation classCode="OBS" moodCode="EVN">
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<id root="9d053eb0-bb9f-4397-8e7c-2e7ea252ea05"/>
<code code="9279-1" displayName="Respiration rate"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
<text/>
<statusCode code="completed"/>
<effectiveTime value="200811091030"/>
<value xsi:type="PQ" value="14" unit="1"/>
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 codeSystem="2.16.840.1.113883.5.83" codeSystemName="Observation Interpretation"/>
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</observationRange>
</referenceRange>
</observation>
</component>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.31"/>
<id root="9d053eb0-bb9f-4397-8e7c-9zzea252ea05"/>
<code code="8302-2" displayName="BODY HEIGHT (MEASURED)"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
<text/>
<statusCode code="completed"/>
<effectiveTime value="200811091030"/>
<value xsi:type="PQ" value="54" unit="INCH"/>
<interpretationCode code="N" displayName="Normal"
 codeSystem="2.16.840.1.113883.5.83" codeSystemName="Observation Interpretation"/>
<referenceRange>
<observationRange>
```

```xml
<text/>
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</observation>
</component>
</organizer>
</entry>
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<organizer classCode="CLUSTER" moodCode="EVN">
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<statusCode code="completed"/>
<effectiveTime value="200809180845"/>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.31"/>
<id root="c6f88322-67ad-11db-bd13-0800200c9a66"/>
<code code="3141-9" displayName="Body weight" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
<text/>
<statusCode code="completed"/>
<effectiveTime value="200809180845"/>
<value xsi:type="PQ" value="122" unit="[lb_av]"/>
<interpretationCode code="N" displayName="Normal"
 codeSystem="2.16.840.1.113883.5.83" codeSystemName="Observation Interpretation"/>
<referenceRange>
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<text/>
</observationRange>
</referenceRange>
</observation>
</component>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.31"/>
<id root="c6f88323-67ad-11db-bd13-0800200c9a66"/>
<code code="8480-6" displayName="Systolic BP" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
```

```
<text/>
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<effectiveTime value="200809180845"/>
<value xsi:type="PQ" value="123" unit="mm[Hg]"/>
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 codeSystem="2.16.840.1.113883.5.83" codeSystemName="Observation Interpretation"/>
<referenceRange>
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<text/>
</observationRange>
</referenceRange>
</observation>
</component>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.31"/>
<id root="c6f88324-67ad-11db-bd13-0800200c9a66"/>
<code code="8462-4" displayName="Diastolic BP" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
<text/>
<statusCode code="completed"/>
<effectiveTime value="200809180845"/>
<value xsi:type="PQ" value="81" unit="mm[Hg]"/>
<interpretationCode code="N" displayName="Normal"
 codeSystem="2.16.840.1.113883.5.83" codeSystemName="Observation Interpretation"/>
<referenceRange>
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<text/>
</observationRange>
</referenceRange>
</observation>
</component>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.31"/>
<id root="492f6ad3-db26-42f2-b493-ad17ab85cc9b"/>
<code code="8867-4" displayName="Heart Beat" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
```

```
<text/>
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<effectiveTime value="200809180845"/>
<value xsi:type="PQ" value="59" unit="1"/>
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 codeSystem="2.16.840.1.113883.5.83" codeSystemName="Observation Interpretation"/>
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</referenceRange>
</observation>
</component>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.31"/>
<id root="9d053eb0-bb9f-4397-8e7c-2e7ea252ea05"/>
<code code="9279-1" displayName="Respiration rate"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
<text/>
<statusCode code="completed"/>
<effectiveTime value="200809180845"/>
<value xsi:type="PQ" value="14" unit="1"/>
<interpretationCode code="N" displayName="Normal"
 codeSystem="2.16.840.1.113883.5.83" codeSystemName="Observation Interpretation"/>
<referenceRange>
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<text/>
</observationRange>
</referenceRange>
</observation>
</component>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.31"/>
<id root="9d053eb0-bb9f-4397-8e7c-9zzea252ea05"/>
<code code="8302-2" displayName="BODY HEIGHT (MEASURED)"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
```

```
<text/>
<statusCode code="completed"/>
<effectiveTime value="200809180845"/>
<value xsi:type="PQ" value="54" unit="INCH"/>
<interpretationCode code="N" displayName="Normal"
 codeSystem="2.16.840.1.113883.5.83" codeSystemName="Observation Interpretation"/>
<referenceRange>
<observationRange>
<text/>
</observationRange>
</referenceRange>
</observation>
</component>
</organizer>
</entry>
</section>
</component>
```

4.9 RESULTS

The Results section is a **Required if Known – (R2)** section by the Social Security Administration standards. **Note**: SSA would like to view multiple entry elements during the testing phase in order to validate that several results can be sent in the xml payload.

Section Description: The Results section contains the results of observations generated by laboratories, imaging procedures, and other procedures.

Results Table

Field Name	XPATH	CCD	SSA
Section templateID	templateId/@root		R2
code	code/@code		R2
Code System	code/@codeSystem	R	R
Vocabulary OID	code/@codeSystemName	R	R
Display name	code/@displayName	R	R
Title	component/section/title	R	R
Content ID	text/content/@ID		R2
Content Text	text/content/text		R2

Type code	/entry/@typeCode	R	R
entry/observation/			
classCode	@classCode	R	R
Mood code	@moodCode	R	R
Result ID	id@root	R	R
Code	code@code	R	R
Code System	code/@codeSystem	R	R
Code Display Name	code/@displayname	R	R
Code System Name	code/@codeSystemName	R	R
Value Type	value/xsi:type	R	R
Result's value	value/@value	R	R
Result's unit	value/@unit	R	R
interpretationCode	interpretationCode/@code	R2	R2
Interpretation Code System	interpretationCode/@codeSystem	R2	R2
Interpretation Code System Name	interpretationCode/@codeSystemName	R2	R2
Interpretation Code Display Name	interpretationCode/@displayName	R2	R2
Observation Range	referenceRange/observationRange/text	R2	R2

4.9.1 Content of Results

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to access what documentation is available to view all possible content choices for that particular element.

Field Name	Content Values	Reference
Section templateId	2.16.840.1.113883.10.20.1.14	
Code	30954-2	
Code system	2.16.840.1.113883.6.1	
Code System Name	LOINC	
Display Name	Relevant diagnostic tests	

<table>
<tr><td></td><td>and/or laboratory data</td><td></td></tr>
<tr><td>Vocabulary OID</td><td>2.16.840.1.113883.6.1</td><td>http://www.hl7.org/oid/index.cfm</td></tr>
<tr><td>Code system Name</td><td>LOINC</td><td></td></tr>
<tr><td>title</td><td>Results</td><td></td></tr>
<tr><td>Content ID</td><td>lab-x</td><td></td></tr>
<tr><td>Content text</td><td>text</td><td></td></tr>
<tr><td colspan="3">entry/</td></tr>
<tr><td>typeCode</td><td>Any of the following can be used:<table><tr><th>Use Code</th><th>Description</th></tr><tr><td>DRIV</td><td>Is derived from</td></tr></table></td><td></td></tr>
<tr><td colspan="3">entry/observation/</td></tr>
<tr><td>classCode</td><td>Any of the following can be used:<table><tr><th>mood code</th><th>Description</th></tr><tr><td>OBS</td><td>An act that is intended to result in new information about a subject.</td></tr></table></td><td></td></tr>
<tr><td>Mood code</td><td>Any of the following can be used:<table><tr><th>mood code</th><th>Description</th></tr><tr><td>EVN</td><td>Event</td></tr></table></td><td>HL7 v3 – ActMood</td></tr>
<tr><td>CCD Result templateID</td><td>2.16.840.1.113883.3.88.11.32.16</td><td></td></tr>
<tr><td>Results Module templateID</td><td>2.16.840.1.113883.10.20.1.31</td><td></td></tr>
<tr><td>Code</td><td>NA</td><td></td></tr>
<tr><td>Code System</td><td>LOINC</td><td></td></tr>
<tr><td>Code System Name</td><td>2.16.840.1.113883.6.1</td><td></td></tr>
<tr><td>Display Name</td><td>(i.e. SODIUM)</td><td></td></tr>
<tr><td>Text reference Value</td><td>#lab-x</td><td></td></tr>
</table>

<table>
<tr><td>status Code</td><td>Any of the following can be used:
<table><tr><th>Code</th><th>Display Name</th></tr><tr><td>completed</td><td>Completed</td></tr><tr><td>aborted</td><td>Aborted</td></tr><tr><td>active</td><td>Active</td></tr><tr><td>cancelled</td><td>Cancelled</td></tr><tr><td>held</td><td>Held</td></tr><tr><td>new</td><td>New</td></tr><tr><td>suspended</td><td>Suspended</td></tr></table></td><td></td></tr>
<tr><td>effectiveTime/low/@value</td><td>YYYYMMDD</td><td></td></tr>
<tr><td>Result value type</td><td>XX</td><td></td></tr>
<tr><td>Result value</td><td>XX</td><td></td></tr>
<tr><td>Result unit</td><td>xx/xx</td><td></td></tr>
<tr><td>InterpretationCode code
InterpretationCode display Name</td><td>Any of the following can be used:
<table><tr><th>Code</th><th>Display Name</th></tr><tr><td>B</td><td>Better</td></tr><tr><td>D</td><td>Descreased</td></tr><tr><td>U</td><td>Increased</td></tr><tr><td>W</td><td>Worse</td></tr><tr><td>N</td><td>Normal</td></tr><tr><td>I</td><td>Intermediate</td></tr><tr><td>R</td><td>Resistant</td></tr><tr><td>S</td><td>Susceptible</td></tr><tr><td>VS</td><td>Very susceptible</td></tr><tr><td>A</td><td>Abnormal</td></tr><tr><td>AA</td><td>Abnormal alert</td></tr><tr><td>HH</td><td>High alert</td></tr><tr><td>LL</td><td>Low alert</td></tr><tr><td>H</td><td>High</td></tr></table></td><td>HL7 v3 - ObservationInterpretation</td></tr>
<tr><td>InterpretationCode Code</td><td>2.16.840.1.113883.5.83</td><td></td></tr>
</table>

System		
InterpretationCode code system Name	Observation Interpretation	
Observation Range	Text (i.e. 136-145)	

4.9.2 XML Sample of the Results

```
<component>
<section>
<templateId root="2.16.840.1.113883.10.20.1.14"/>
<code code="30954-2" displayName="Relevant diagnostic tests and/or laboratory data"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
<title>Results</title>
<text>
<content ID="lab-1">Patient has normal cholesteral</content>
<content ID="lab-2">Yellow</content>
</text>
<entry typeCode="DRIV">
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.31"/>
<id root="57d07056-bd97-4c90-891d-eb716d3170c8"/>
<code code="2093-3" displayName="Cholesterol" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
<text>
<reference value="#lab-1"/>
</text>
<statusCode code="completed"/>
<effectiveTime>
<low value="20071022"/>
</effectiveTime>
<value xsi:type="PQ" value="98" unit="mg/dL"/>
<interpretationCode code="N" displayName="Normal"
 codeSystem="2.16.840.1.113883.5.83" codeSystemName="Observation Interpretation"/>
<referenceRange>
<observationRange>
<text>55 - 115 mg/dL</text>
</observationRange>
```

```xml
</referenceRange>
</observation>
</entry>
<entry>
<organizer classCode="BATTERY" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.32"/>
<id root="zzz12320-67ad-11db-bd13-0800200c9a66"/>
<code code="24356-8" displayName="Urinalysis Panel"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
<statusCode code="completed"/>
<effectiveTime value="20080918"/>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.31"/>
<id root="2a7cdfe6-13f5-4e36-92f0-9e174837eec1"/>
<code code="86192007" displayName="COLOR OF URINE"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
<text>
<reference value="#lab-2"/>
</text>
<statusCode code="completed"/>
<value xsi:type="CV" nullFlavor="NA"/>
<interpretationCode code="N" codeSystem="2.16.840.1.113883.5.83"
 codeSystemName="Observation Interpretation" displayName="Normal"/>
</observation>
</component>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.31"/>
<id root="8616ca32-7b5c-4f1c-819a-3336dd61c8b4"/>
<code code="365828000" displayName="SPECIFIC GRAVITY URINE"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
<statusCode code="completed"/>
<value xsi:type="PQ" value="1.01" unit="g/ml"/>
<interpretationCode code="N" codeSystem="2.16.840.1.113883.5.83"
 codeSystemName="Observation Interpretation" displayName="Normal"/>
<referenceRange>
<observationRange>
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```xml
<text>1.003-1.030</text>
</observationRange>
</referenceRange>
</observation>
</component>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.31"/>
<id root="329a9130-3ba8-4306-b72f-a58678b8c452"/>
<code code="365723003" displayName="PH URINE" codeSystem="2.16.840.1.113883.6.96"
 codeSystemName="SNOMED CT"/>
<statusCode code="completed"/>
<value xsi:type="PQ" value="6.0"/>
<interpretationCode code="N" codeSystem="2.16.840.1.113883.5.83"
 codeSystemName="Observation Interpretation" displayName="Normal"/>
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<text>5.0-8.0</text>
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</referenceRange>
</observation>
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<component>
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<templateId root="2.16.840.1.113883.3.88.11.32.16"/>
<id root="8215896c-4f99-4e74-91ac-e52201c06a8d"/>
<code code="365799007" displayName="PROTEIN" codeSystem="2.16.840.1.113883.6.96"
 codeSystemName="SNOMED CT"/>
<text>
<reference value="#lab-82"/>
</text>
<statusCode code="completed"/>
<value xsi:type="CV" nullFlavor="NA"/>
<interpretationCode code="N" codeSystem="2.16.840.1.113883.5.83"
 codeSystemName="Observation Interpretation" displayName="Normal"/>
<referenceRange>
<observationRange>
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```

```
</observationRange>
</referenceRange>
</observation>
</component>
<component>
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<code code="365811003" displayName="GLUCOSE" codeSystem="2.16.840.1.113883.6.96"
 codeSystemName="SNOMED CT"/>
<text>
<reference value="#lab-83"/>
</text>
<statusCode code="completed"/>
<value xsi:type="CV" nullFlavor="NA"/>
<interpretationCode code="N" codeSystem="2.16.840.1.113883.5.83"
 codeSystemName="Observation Interpretation" displayName="Normal"/>
<referenceRange>
<observationRange>
<text>NEG</text>
</observationRange>
</referenceRange>
</observation>
</component>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.3.88.11.32.16"/>
<id root="1ddd48a3-2969-4293-9c25-2e0feefbe3a3"/>
<code code="365658008" displayName="KETONE" codeSystem="2.16.840.1.113883.6.96"
 codeSystemName="SNOMED CT"/>
<text>
<reference value="#lab-84"/>
</text>
<statusCode code="completed"/>
<value xsi:type="CV" nullFlavor="NA"/>
<interpretationCode code="N" codeSystem="2.16.840.1.113883.5.83"
 codeSystemName="Observation Interpretation" displayName="Normal"/>
<referenceRange>
```

```
<observationRange>
<text>NEG</text>
</observationRange>
</referenceRange>
</observation>
</component>
<component>
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.3.88.11.32.16"/>
<id root="a4f500b5-7309-405d-8432-c2269abf3487"/>
<code code="275778006" displayName="BILI" codeSystem="2.16.840.1.113883.6.96"
 codeSystemName="SNOMED CT"/>
<text>
<reference value="#lab-85"/>
</text>
<statusCode code="completed"/>
<value xsi:type="CV" nullFlavor="NA"/>
<interpretationCode code="N" codeSystem="2.16.840.1.113883.5.83"
 codeSystemName="Observation Interpretation" displayName="Normal"/>
<referenceRange>
<observationRange>
<text>NEG</text>
</observationRange>
</referenceRange>
</observation>
</component>
</organizer>
</entry>
</section>
</component
```

4.10 PROCEDURES

The Procedures section is a **Required if Known – (R2)** section by the Social Security Administration standards. **Note**: SSA would like to view multiple procedures elements during the testing phase in order to validate that several procedures can be sent in the xml payload.

Section Description: The Procedures section defines all interventional, surgical, diagnostic, or therapeutic procedures or treatments pertinent to the patient historically at the time the document is generated.

Procedures Table

Field Name	XPATH	CCD	SSA
Section OID	templateId/@root	O	R2
Code	code/@code	R	R
Display Name	code/@displayName	R	R
Vocabulary OID	code/@codeSystem	R	R
Code System Name	Code/@codeSystemName	R	R
Title	title		R2
Content ID	Text/content/@ID		R2
Content text	Text/content/@text		R2
ClinicalDocument/component/structuredBody/component/section/entry/			
Type Code	@typeCode	R	R
Class code	procedure/@classCode	R	R
Mood code	procedure/@moodCode	R	R
Id	procedure/id	R	R
Status code	procedure/statusCode	R	R
Procedure Code	procedure/code/@code	R	R
Display Name	procedure/code/@displayName	R	R
Code System OID	procedure/code/@codeSystem	R	R
Code System Name	procedure/code/@codeSystemName	R	R
ClinicalDocument/component/structuredBody/component/section/entry/procedure/reference/			
Unique Document ID	externalDocument/id/@root		R
Document code	externalDocument/code/@code		R
Doc. Displayname	externalDocument/code/@displayName		R
Doc. code System	externalDocument/code/@codeSystem		R
Doc. Code system Name	externalDocument/code/@codeSystemName		R
Document Text	externalDocument/text		R
Performing Physician	entry/procedure/performer/assignedEntity/assignedPerson/name		R

4.10.1 Content of Procedures

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to access what documentation is available to view all possible content choices for that particular element.

<table>
<tr><th>Field Name</th><th>Content Values</th><th>Reference</th></tr>
<tr><td>Section OID</td><td>2.16.840.1.113883.10.20.1.12</td><td></td></tr>
<tr><td>code</td><td>47519-4</td><td></td></tr>
<tr><td>Vocabulary OID</td><td>2.16.840.1.113883.6.1</td><td>HL7 v3 – codeSystem</td></tr>
<tr><td>Code System Name</td><td>LOINC</td><td></td></tr>
<tr><td>Code/@displayName</td><td>History of procedures</td><td></td></tr>
<tr><td>title</td><td>Procedures</td><td></td></tr>
<tr><td>content ID</td><td>proc-x</td><td></td></tr>
<tr><td>Text content</td><td>#text</td><td></td></tr>
<tr><td colspan="3">ClinicalDocument/component/structuredBody/component/section/entry/</td></tr>
<tr><td>typeCode</td><td>Any of the following can be used:<table><tr><th>Use Code</th><th>Description</th></tr><tr><td>DRIV</td><td>Is derived from</td></tr></table></td><td>HL7 v3 - ActRelationshipType</td></tr>
<tr><td colspan="3">ClinicalDocument/component/structuredBody/component/section/entry/procedure/</td></tr>
<tr><td>classCode</td><td>PROC</td><td>HL7 v3 - ActClass</td></tr>
<tr><td>moodCode</td><td>Any of the following can be used:<table><tr><th>mood code</th><th>Description</th></tr><tr><td>EVN</td><td>Event</td></tr></table></td><td>HL7 v3 - moodClass</td></tr>
<tr><td>Procedure activity template Id</td><td>2.16.840.1.113883.10.20.1.29</td><td></td></tr>
<tr><td>id</td><td></td><td></td></tr>
<tr><td>Code</td><td>xxx</td><td></td></tr>
<tr><td>codeSystemName</td><td>2.16.840.1.113883.6.104</td><td></td></tr>
<tr><td>displayName</td><td>ICD9 Procedures</td><td></td></tr>
<tr><td>statusCode code</td><td>completed</td><td></td></tr>
<tr><td>effectiveTime - low</td><td>YYYYMMDDHHMM</td><td></td></tr>
</table>

effectiveTime - high	**YYYYMMDDHHMM**	
ClinicalDocument/component/structuredBody/component/section/entry/procedure/targetSiteCode		
Code	**Xxxxxxx**	
Displayname		
codeSystem	**2.16.840.1.113883.6.96**	Snomed CT
CodeSystemName	**SNOMED CT**	
ClinicalDocument/component/structuredBody/component/section/entry/procedure/code/originalText/		
Reference **value**	#proc-x	

4.10.2 XML Sample of the Procedures

```
<component>
    <section>
      <templateId root="2.16.840.1.113883.10.20.1.12" />
      <code code="47519-4" displayName="History of procedures"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
      <title>Procedures</title>
      <entry typeCode="DRIV">
        <procedure classCode="PROC" moodCode="EVN">
          <templateId root="2.16.840.1.113883.10.20.1.29" />
          <id root="d512g451-9999-22ec-0gf2-1911311d0b77" />
          <code code="V58.11" displayName="Encounter for antineoplastic chemotherapy
&#xD;&#xA; &#xD;&#xA;" codeSystem="2.16.840.1.113883.6.104" codeSystemName="ICD9
Procedures">
            <originalText>
              <reference value="#proc-3" />
            </originalText>
          </code>
          <text></text>
          <statusCode code="completed" />
          <effectiveTime>
            <low value="20070211" />
            <high value="200609211030" />
```

```
        </effectiveTime>
        <!--Site where procedure was performed-->
        <targetSiteCode code="302540006" displayName="Entire thumb"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"></targetSiteCode>
          <time>
            <low value="200702011000" />
            <high value="200702011200" />
          </time>
          <assignedEntity>
            <id root="78A150ED-B890-49dc-B716-5EC0027B3982" extension="ProviderID" />
            <code code="280000000X" displayName="Hospitals"
codeSystem="2.16.840.1.113883.6.101" codeSystemName="ProviderCodes" />
            <addr use="WP">
              <streetAddressLine>145 Applecross Road</streetAddressLine>
              <streetAddressLine></streetAddressLine>
              <city>Southern Pines</city>
              <state>NC</state>
              <postalCode>28388</postalCode>
            </addr>
            <assignedPerson>
              <name>
                <prefix>Dr. </prefix>
                <given>Susan</given>
                <given />
                <family>Saltz</family>
              </name>
            </assignedPerson>
            <representedOrganization>
              <name>Southern Pines Women's Health Center</name>
            </representedOrganization>
            <sdtc:patient xmlns:sdtc="urn:hl7-org:sdtc">
              <sdtc:id root="78A150ED-ZZ23-49dc-B716-5EC0027B3983"
extension="33445999" />
            </sdtc:patient>
```

```
        </assignedEntity>
      </performer>
      <!--Operative Report-->
    </procedure>
  </entry>
  <entry typeCode="DRIV">
    <procedure classCode="PROC" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.1.29" />
      <id root="d512g451-9999-22ec-0gf2-1911311d0b77" />
      <code code="V58.11" displayName="Encounter for antineoplastic chemotherapy
&#xD;&#xA; &#xD;&#xA;" codeSystem="2.16.840.1.113883.6.104" codeSystemName="ICD9
Procedures">
        <originalText>
          <reference value="#proc-3" />
        </originalText>
      </code>
      <statusCode code="completed" />
      <effectiveTime>
        <low value="20060921000" />
        <high value="200609211030" />
      </effectiveTime>
      <targetSiteCode code="302540006" displayName="Entire thumb"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"></targetSiteCode>
        <time>
          <low value="200701211000" />
          <high value="200701211200" />
        </time>
        <assignedEntity>
          <id root="78A150ED-B890-49dc-B716-5EC0027B3982" extension="ProviderID" />
          <code code="280000000X" displayName="Hospitals"
codeSystem="2.16.840.1.113883.6.101" codeSystemName="ProviderCodes" />
          <addr use="WP">
            <streetAddressLine>145 Applecross Road</streetAddressLine>
            <streetAddressLine></streetAddressLine>
```

```
                <city>Southern Pines</city>
                <state>NC</state>
                <postalCode>28388</postalCode>
              </addr>
              <assignedPerson>
                <name>
                  <prefix>Dr. </prefix>
                  <given>Susan</given>
                  <given />
                  <family>Saltz</family>
                </name>
              </assignedPerson>
              <representedOrganization>
                <name>Southern Pines Women's Health Center</name>
              </representedOrganization>
              <sdtc:patient xmlns:sdtc="urn:hl7-org:sdtc">
                <sdtc:id root="78A150ED-ZZ23-49dc-B716-5EC0027B3983"
extension="33445999" />
              </sdtc:patient>
            </assignedEntity>
          </performer>
        </procedure>
      </entry>
      <entry typeCode="DRIV">
        <procedure classCode="PROC" moodCode="EVN">
          <templateId root="2.16.840.1.113883.10.20.1.29" />
          <id root="d512g451-9999-22ec-0gf2-1911311d0b77" />
          <code code="V58.11" displayName="Encounter for antineoplastic chemotherapy
&#xD;&#xA; &#xD;&#xA;" codeSystem="2.16.840.1.113883.6.104" codeSystemName="ICD9
Procedures">
            <originalText>
              <reference value="#proc-3" />
            </originalText>
          </code>
```

```
            <statusCode code="completed" />
            <effectiveTime>
              <low value="200612291000" />
              <high value="200612291030" />
            </effectiveTime>
            <targetSiteCode code="302540006" displayName="Entire thumb"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"></targetSiteCode>
              <time>
                <low value="200702011000" />
                <high value="200702011200" />
              </time>
              <!--Treating Physician-->
              <assignedEntity>
                <id root="78A150ED-B890-49dc-B716-5EC0027B3982" extension="ProviderID" />
                <code code="280000000X" displayName="Hospitals"
codeSystem="2.16.840.1.113883.6.101" codeSystemName="ProviderCodes" />
                <addr use="WP">
                  <streetAddressLine>145 Applecross Road</streetAddressLine>
                  <streetAddressLine></streetAddressLine>
                  <city>South Pine</city>
                  <state>NC</state>
                  <postalCode>55555</postalCode>
                </addr>
                <assignedPerson>
                  <name>
                    <prefix>Dr. </prefix>
                    <given>Susan</given>
                    <given />
                    <family>Saltz</family>
                  </name>
                </assignedPerson>
                <representedOrganization>
                  <name>Southern Pines Women's Health Center</name>
                </representedOrganization>
```

```
                <sdtc:patient xmlns:sdtc="urn:hl7-org:sdtc">
                  <sdtc:id root="78A150ED-ZZ23-49dc-B716-5EC0027B3983"
extension="33445999" />
                </sdtc:patient>
              </assignedEntity>
            </performer>
          </procedure>
        </entry>
```

4.11 ENCOUNTERS

The Encounters section is a **Required if Known – (R2)** section by the Social Security Administration standards. **Note**: SSA would like to view multiple encounter elements during the testing phase in order to validate that several encounters can be sent in the xml payload. The Healthcare Providers will find several examples of different encounter notes in the xml payload section of Encounters.

Section Description: The Encounters section is used to list and describe any healthcare encounters pertinent to the patient's current health status or historical health history. An encounter can be a hospitalization (acute, rehab, nursing facility, or long-term care), office or clinic visit, emergency room visit, home health visit, or any treatment or therapy (physical, occupational, respiratory, or other), or any interaction, even non fact-to-face, between the patient and the healthcare system or a healthcare provider.

Field Name	XPATH	CCD	SSA
Section templateId	**component/section/templateId/@root**	**O**	**R2**
LOINC Code	**component/section/code/@code**	**R**	**R2**
Vocabulary OID	**component/section/code/@codeSystem**		**R2**
Code System Name	**component/section/code/@codeSystemName**		**R2**
Display Name	**component/section/code/@displayName**		**R2**
Title	**component/section/title**		**R2**
ClinicalDocument/component/structuredBody/component/section/text/			
Content id	**content/@ID**		**R2**
Content text	**content/#text**		**R2**
ClinicalDocument/component/structuredBody/component/section/entry/			
Type Code	**@typeCode**	**R**	**R**

ClinicalDocument/component/structuredBody/component/section/entry/encounter/			
Class code	**@classCode**	**R**	**R**
Mood Code	**@moodCode**	**R**	**R**
ID	**entry/encounters/id/@root**	**R**	**R**
code	**entry/code/@nullFlavor**		**R2**
Encounter Type code	**code/@code**		**R2**
codeSystem	**code/@codeSystem**		**R2**
codeSystemName	**code/@codeSystemName**		**R2**
displayName	**code/@displayName**		**R2**
Reference value	**code/originalText/reference/@value**	**R**	**R2**
Date/time Encounter	**effectiveTime**	**R**	**R2**
MRN	**performer/assignedEntity/sdtc:patient/sdtc:id/@extension**		**R2**
Encounter Provider	**performer/assignedEntity/assignedPerson/name**		**R2**
ClinicalDocument/component/structuredBody/component/section/entry/encounter/participant/			
typeCode	**@typeCode**	**R**	**R**
templateId	**templateId/@root**		**R2**
Participant Role	**participantRole/classCode**	**R**	**R2**
Playing entity	**participantRole/playingEntity/@classCode**	**R**	**R2**
Participant address	**participantRole/addr**		**R2**
Participant Name	**participantRole/playingEntity/name**		**R2**
ClinicalDocument/component/structuredBody/component/section/entry/encounter/reference/			
Unique Document ID	**externalDocument/id/@root**		**R2**
Document code	**externalDocument/code/@code**		**R2**
Document displayName	**externalDocument/code/@displayName**		**R2**
codeSystem	**externalDocument/code/@codeSystem**		**R2**
codeSystemName	**externalDocument/code/@codeSystemName**		**R2**
Document Text	**externalDocument/text**		**R2**
Content Id	**text/content/@ID**		**R2**

4.11.1 Content of Encounters

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to

access what documentation is available to view all possible content choices for that particular element.

<table>
<tr><th>Field Name</th><th>Content Values</th><th>Reference</th></tr>
<tr><td>Section templated ID</td><td>2.16.840.1.113883.10.20.1.3</td><td></td></tr>
<tr><td>LOINC Code</td><td>46240-8</td><td></td></tr>
<tr><td>Vocabulary OID</td><td>2.16.840.1.113883.6.1</td><td></td></tr>
<tr><td>Code System Name</td><td>LOINC</td><td></td></tr>
<tr><td>Section Display Name</td><td>History of encounters</td><td></td></tr>
<tr><td>Title</td><td>Encounters</td><td></td></tr>
<tr><td colspan="3">ClinicalDocument/component/structuredBody/component/section/text/</td></tr>
<tr><td>Content ID</td><td>Note-x</td><td></td></tr>
<tr><td>Content text</td><td>text</td><td></td></tr>
<tr><td colspan="3">ClinicalDocument/component/structuredBody/component/section/entry</td></tr>
<tr><td>Type Code</td><td>Any of the following can be used:<table><tr><th>Use Code</th><th>Description</th></tr><tr><td>DRIV</td><td>Is derived from</td></tr></table></td><td></td></tr>
<tr><td colspan="3">ClinicalDocument/component/structuredBody/component/section/entry/encounter</td></tr>
<tr><td>Class code</td><td>ENC</td><td></td></tr>
<tr><td>Mood Code</td><td>Any of the following can be used:<table><tr><th>mood code</th><th>Description</th></tr><tr><td>EVN</td><td>Event</td></tr></table></td><td></td></tr>
<tr><td>Encounter Module templateId</td><td>2.16.840.1.113883.3.88.11.32.17</td><td></td></tr>
<tr><td>Encounter Actvities templateId</td><td>2.16.840.1.113883.10.20.1.21</td><td></td></tr>
<tr><td>ID</td><td></td><td></td></tr>
<tr><td>Code</td><td>GENRL</td><td></td></tr>
<tr><td>codeSystem</td><td>General</td><td></td></tr>
<tr><td>codeSystemName</td><td>2.16.840.1.113883.1.11.13955</td><td></td></tr>
<tr><td>displayName</td><td>HL7 ActCode</td><td></td></tr>
<tr><td>Reference value</td><td>#encounter-x</td><td></td></tr>
<tr><td>Date/Time Encounter – low</td><td>YYYYMMDDHHMM</td><td></td></tr>
</table>

<table>
<tr><td>Date/Time Encounter – high</td><td>YYYYMMDDHHMM</td><td></td></tr>
<tr><td colspan="3">ClinicalDocument/component/structuredBody/component/section/entry/encounter/performer</td></tr>
<tr><td>MRN</td><td>xxxxxxxxx</td><td></td></tr>
<tr><td>Encounter Provider</td><td>Dr. Barry Blacksmith</td><td></td></tr>
<tr><td colspan="3">ClinicalDocument/component/structuredBody/component/section/entry/encounter/participant</td></tr>
<tr><td>typeCode</td><td>LOC</td><td></td></tr>
<tr><td>Part. Location templateId</td><td>2.16.840.1.113883.10.20.1.45</td><td></td></tr>
<tr><td>Participant Role classCode</td><td>SDLOC</td><td>HL7 v3 - roleclass</td></tr>
<tr><td>Code</td><td>PC</td><td></td></tr>
<tr><td>displayName</td><td>Primary Care Clinic</td><td></td></tr>
<tr><td>codeSystem</td><td>2.16.840.1.113883.5.111</td><td></td></tr>
<tr><td>codeSystemName</td><td>RoleCode</td><td>HL7 v3 - rolecode</td></tr>
<tr><td>Playing entity class code</td><td>PLC</td><td></td></tr>
<tr><td>Playing entity name</td><td>Name of Hospital</td><td></td></tr>
<tr><td>Participant address use</td><td>Any of the following can be used:
<table>
<tr><th>Code</th><th>Description</th></tr>
<tr><td>H</td><td>home address</td></tr>
<tr><td>HP</td><td>primary home</td></tr>
<tr><td>WP</td><td>work place</td></tr>
<tr><td>HV</td><td>vacation home</td></tr>
</table></td><td>HL7 v3 - datatypes</td></tr>
<tr><td colspan="3">ClinicalDocument/component/structuredBody/component/section/entry/encounter/reference</td></tr>
<tr><td>typdeCode</td><td>SUBJ</td><td></td></tr>
<tr><td>Unique Document Id</td><td></td><td></td></tr>
<tr><td>Document code</td><td rowspan="2">“see document in Reference column for possible values”</td><td rowspan="2">CDA r2 – section 3.2.2</td></tr>
<tr><td>Document displayName</td></tr>
<tr><td>codeSystem</td><td>2.16.840.1.113883.6.1</td><td></td></tr>
<tr><td>codeSystemName</td><td>LOINC</td><td></td></tr>
<tr><td>Document Text</td><td>text</td><td></td></tr>
</table>

4.11.2 XML Sample of the Encounters Section - Emergency

```
<section>
<templateId root="2.16.840.1.113883.10.20.1.3"/>
<code code="46240-8" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 displayName="History of encounters"/>
<title>Encounters</title>
<text>
<content ID="note-1">Name:   SNOW, JANE    Service Date: DOB:   03/29/1975
Sex:    F      Age:      33      Billing #:    112121212    Date of Adm: 12/18/2007
CLINICAL DIAGNOSIS: This is an echocardiogram ordered.
<br/><br/> Name:   SNOW, JANE    Service Date: DOB:   03/29/1975
<br/><br/></content><content ID="note-2"> Name:   SNOW, JANE    Service Date:
 DOB:   03/29/1975   Sex:    F      Age:      33      Billing #:    112121212    Date of
 Adm: 02/08/2008
DISCHARGE SUMMARY     ADMISSION DIAGNOSES: 1.  Diabetes type 2. 2.
 Hypertension.
<br/><br/></content><content ID="note-3">"> Name:   SNOW, JANE    Service Date:
 DOB:   03/29/1975   Sex:    F      Age:      33      Billing #:    112121212    Date of
 Adm: 05/16/2008      OPERATIVE REPORT      PROCEDURE:  Upper endoscopy.
 INDICATION:  Anemia, history of heartburn. </content>
</text>
<entry typeCode="DRIV">
<encounter classCode="ENC" moodCode="EVN">
<templateId root="2.16.840.1.113883.3.88.11.32.17"/>
<templateId root="2.16.840.1.113883.10.20.1.21"/>
<id root="8e6184b6-2321-4800-97e5-ccb487a104ff"/>
<code code="EMER" codeSystem="2.16.840.1.113883.5.4" codeSystemName="HL7
 ActCode" displayName="Emergency"/>
<effectiveTime>
<low value="20080910"/>
<high nullFlavor="UNK"/>
</effectiveTime>
<performer typeCode="PRF">
<time>
<low value="20080910"/>
<high nullFlavor="UNK"/>
</time>
```

```
<assignedEntity>
<id extension="568a4e00-11e0-4194-8052-971e797080e2"
 root="2.16.840.1.113883.4.6.1013905751"/>
<code code="280000000X" codeSystem="2.16.840.1.113883.6.101"
 codeSystemName="ProviderCodes" displayName="Hospitals"/>
<addr/>
<assignedPerson>
<name>
<family>Smith</family>
<given>John</given>
</name>
</assignedPerson>
<representedOrganization>
<id root="2.16.840.1.113883.3.190"/>
<name>Community Medical Center</name>
</representedOrganization>
<sdtc:patient>
<sdtc:id root="2.16.840.1.113883.3.190" extension="92709368"/>
</sdtc:patient>
</assignedEntity>
</performer>
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<participantRole classCode="SDLOC">
<code code="PC" codeSystem="2.16.840.1.113883.5.111" codeSystemName="RoleCode"
 displayName="Primary Care Clinic"/>
<playingEntity classCode="PLC">
<name>Community Medical Center</name>
</playingEntity>
</participantRole>
</participant>
</encounter>
</entry>
</section>
```

4.11.3 XML Sample of the Encounters Section - Inpatient

```
<section>
<templateId root="2.16.840.1.113883.10.20.1.3"/>
<code code="46240-8" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 displayName="History of encounters"/>
<title>Encounters</title>
<text>
<content ID="note-1">Name:   SNOW, JANE    Admitted: 03/27/2009 MR #:
 123456789 DOB:   03/29/1975    Account#: 000012345678910  Age:      33
 Physician:  Smith, Jonnie, MD Location: 12-ee-12   HISTORY OF PRESENT ILLNESS:
 This is a 33-year-old smoking female with a~long-standing history of asthma,
 polycystic ovarian disease, and suspected~cervical cancer, currently being worked
 up. The patient reports that she~took Advair for the first time today, but also took
 a couple of other~medications today and had eaten. She then developed some
 tightness in her~chest and shortness of breath. She was concerned that she was
 having an~anaphylactic type reaction and came into the ED. In the ED, the
 patient~was not moving air very well. She was given 3 nebulizer treatments and
 a~dose of Solu-Medrol, after which although she improved, she continued to~have
 some difficulty breathing. Currently, she is breathing much more~relaxed. She
 denies headache, vision changes, chest pain, or~palpitations. Her shortness of
 breath has improved. She is having a~cough, nonproductive of sputum. No
 nausea, vomiting, constipation,~hematemesis, or hematochezia. No new
 rashes.~~PAST MEDICAL HISTORY:~1. Polycystic ovarian disease.~2. Possible
 cervical cancer.~3. Asthma.~4. Hypertension.~5. Chronic lower extremity
 edema.~6. Suspected diabetes.~~MEDICATIONS:~1. Vicodin on a daily basis.~2.
 Advair 250/50.~3. Birth control pills.~4. Lisinopril 20 mg daily.~5. Prozac 40 mg
 daily.~6. Cipro 500 mg b.i.d. for bronchitis.~7. Xanax 0.5 mg daily.~8. Restoril 30
 mg daily.~9. Spironolactone 50 mg b.i.d.~10. Bentyl 20 mg 4 times a
 day.~~ALLERGIES: BACTRIM, LEVAQUIN, and SEAFOOD.~~SOCIAL HISTORY: She
 smokes 1-1/2 packs of cigarettes a day. Does not~drink alcohol. She is
 unemployed.~~FAMILY HISTORY: Significant for mother with diabetes.~~REVIEW
 OF SYSTEMS:~HEENT: No headache, vision changes, ear pain, or sore
 throat.~CARDIOVASCULAR: No chest pain or palpitations.~RESPIRATORY: Positive
 shortness of breath, but improved. A mild cough,~nonproductive of
 sputum.~ABDOMEN: No nausea, vomiting, constipation, hematemesis,
 or~hematochezia.~EXTREMITIES: No new edema.~~PHYSICAL
 EXAMINATION:~VITAL SIGNS: Temperature is 98.2. Pulse 100. Blood pressure
 132/79.~Respiratory rate 20. O2 saturation 96% on room air.~GENERAL: Obese
```

```
female, in no acute distress, lying in bed. She appears~comfortable.~HEENT:
Sclerae are anicteric. Mucous membranes are moist. Pharynx
is~_________.~NECK: There is no lymphadenopathy.~CARDIOVASCULAR: Slightly
tachycardic. No murmurs, rubs, or gallops.~RESPIRATORY: Expiratory wheezes
noted bilaterally, but improved air~movement.~ABDOMEN: Bowel sounds are
positive. Nontender and nondistended. No~hepatosplenomegaly.~EXTREMITIES:
Trace bilateral lower extremity edema.~~LABORATORY DATA: Sodium 136,
potassium 4.2, chloride 102, bicarbonate 21,~BUN 19, creatinine 1.2, glucose 327.
White blood cell count 16.5. Please~note the patient has been on steroids.
Hemoglobin 12.1, hematocrit 38.3,~and platelets 338, with granulocytes 93%.
CPK is 99. Cardiac enzymes~negative x1.~~ASSESSMENT:~1. Acute asthma
exacerbation, possibly set off by food or some other~allergen.~2.
Hypertension.~3. Diabetes versus steroid-induced hyperglycemia.~~PLAN: At this
time, will start IV Solu-Medrol, jet nebulizers, and~Singulair. Will start sliding
scale insulin. Check a TSH and a hemoglobin~A1c, as well as a lipid panel. At this
point, I am going to go ahead and~continue her Cipro. Will obtain Physical
Therapy and Occupational Therapy~consults. Will provided gastrointestinal and
deep venous thrombosis~prophylaxis.~~
<br/><br/> Name:   SNOW, JANE    Service Date: DOB:   03/29/1975
<br/><br/></content><content ID="note-2"> Name:   SNOW, JANE    Service Date:
DOB:   03/29/1975   Sex:   F     Age:     33     Billing #:    112121212    Date of
Adm: 02/08/2008
DISCHARGE SUMMARY     ADMISSION DIAGNOSES: 1.  Diabetes type 2. 2.
Hypertension.
<br/><br/></content><content ID="note-3">"> Name:   SNOW, JANE    Service Date:
DOB:   03/29/1975    Sex:   F     Age:     33     Billing #:    112121212    Date of
Adm: 05/16/2008      OPERATIVE REPORT     PROCEDURE:  Upper endoscopy.
INDICATION:  Anemia, history of heartburn. </content>
</text>
<entry typeCode="DRIV">
<encounter classCode="ENC" moodCode="EVN">
<templateId root="2.16.840.1.113883.3.88.11.32.17"/>
<templateId root="2.16.840.1.113883.10.20.1.21"/>
<id root="8e6184b6-2321-4800-97e5-ccb487a104ff"/>
<code code="IMP" codeSystem="2.16.840.1.113883.5.4" codeSystemName="HL7 ActCode"
displayName="Inpatient encounter"/>
<originalText>
<reference value="#note-1"/>
</originalText>
```

```xml
<effectiveTime>
<low value="20080910"/>
<high nullFlavor="UNK"/>
</effectiveTime>
<performer typeCode="PRF">
<time>
<low value="20080910"/>
<high nullFlavor="UNK"/>
</time>
<assignedEntity>
<id extension="568a4e00-11e0-4194-8052-971e797080e2"
 root="2.16.840.1.113883.4.6.1013905751"/>
<code code="280000000X" codeSystem="2.16.840.1.113883.6.101"
 codeSystemName="ProviderCodes" displayName="Hospitals"/>
<addr/>
<assignedPerson>
<name>
<family>Smith</family>
<given>John</given>
</name>
</assignedPerson>
<representedOrganization>
<id root="2.16.840.1.113883.3.190"/>
<name>Community Medical Center</name>
</representedOrganization>
<sdtc:patient>
<sdtc:id root="2.16.840.1.113883.3.190" extension="92709368"/>
</sdtc:patient>
</assignedEntity>
</performer>
<participant typeCode="LOC">
<templateId root="2.16.840.1.113883.10.20.1.45"/>
<participantRole classCode="SDLOC">
<code code="PC" codeSystem="2.16.840.1.113883.5.111" codeSystemName="RoleCode"
 displayName="Primary Care Clinic"/>
<playingEntity classCode="PLC">
<name>Community Medical Center</name>
</playingEntity>
```

```
</participantRole>
</participant>
</encounter>
</entry>
</section>
```

4.12 PLAN OF CARE

The Plan of Care section is a **Required if Known – (R2)** section by the Social Security Administration standards.

Section Description: The Plan of Care section contains data defining pending orders, interventions, encounters, services, and procedures for the patient.

Plan of Care Table

Field Name	XPATH	CCD	SSA
Section templateId	templateId/@root		R2
LOINC Code	Code/@code		
Section display Name	code/@displayName	R	R

4.12.1 Content of Plan of Care

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to access what documentation is available to view all possible content choices for that particular element.

Field Name	Content Values	Reference
Section templateId	2.16.840.1.113883.10.20.1.10	
LOINC Code	18776-5	
Section display Name	Treatment plan	

4.13 (ALERTS) ALLERGY/DRUG SENSITIVITY

The Allergy section is a **Required if Known – (R2)** section by the Social Security Administration standards. **Note**: SSA would like to view multiple entry elements within the allergy section during the testing phase in order to validate that several allergies and/or adverse reactions can be sent in the xml payload.

Section Description: This section is used to list and describe any allergies, adverse reactions, and alerts that are pertinent to the patient's current or past medical history.

Allergy/Drug Sensitivity Table

Field Name	XPATH	CCD	SSA
Section templateID	component/section/templateId/@root	O	R2
LOINC Code	component/section/code/@code	R	R2
Vocabulary OID	component/section/code/@codeSystem	R	R
Section Display Name	component/section/code/@displayName		R2
Code System Name	component/section/Code/@codeSystemName		R2
Title	component/section/title		R2
Content id	component/section/text/content/@ID		R2
Content text	component/section/text/content/text		R2
component/section/			
Type code	entry/@typeCode		R2
component/section/entry/act/			
Class Code	@classCode	R	R
Mood Code	@moodCode	R	R
templateId	templatedId/@root	R	R
Id	Id/@root		R2
component/section/entry/act/entryRelationship/			
Type code	@typeCode		R2
component/section/entry/act/entryRelationship/observation/			
Class code	@classCode	R	R
moodCode	@moodCode	R	R
Template Id	templateId/@root	R	R
Id	Id/@root		R2
component/section/entry/act/entryRelationship/observation/participant/participantRole/			

Playing Entity	**playing Entity**	**R**	**R**
Participant Role	**@classCode**	**R**	**R**
Playing Entity	**playingEntity/@classCode**	**R**	**R**
Code #	**playingEntity/code/@code**	**R**	**R2**
Code display name	**playingEntity/code/@displayName**		**R2**
Code system	**playingEntity/code/@codeSystem**		**R2**
Code system Name	**playingEntity/code/@codeSystemName**		**R2**
Act templateId	**entry/act/templateId@root**	**R**	**R**
Act code	**entry/act/code**	**R**	**R**
Allergen Name	**playingEntity/name**	**R**	**R**
component/section/entry/act/entryRelationship/observation/entryRelationship/observation			
Reaction code	**value/@code**	**R2**	**R2**
Reaction Name	**value/@displayName**		**R2**
Severity code	**value/@code**	**R2**	**R2**
Severity Name	**value/@displayName**		**R2**
entryRelationship Type code	**entryRelationship/@typeCode**	**R**	**R**
Class Code	**classCode**	**R**	**R**

4.13.1 Content of Allergy/Drug Sensitivity

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to access what documentation is available to view all possible content choices for that particular element.

Field Name	Content Values	Reference
Section TemplateID	**2.16.840.1.113883.10.20.1.2**	
LOINC Code	**48765-2**	
Vocabulary OID	**2.16.840.1.113883.6.1**	
Section Display Name	**Allergies, adverse reactions, alerts**	
Code System Name	**LOINC**	
Title	**Allergies and Adverse Reactions**	
Content id	**Allergy_comment-x**	

<table>
<tr><td colspan="3">component/section/</td></tr>
<tr><td>Type Code</td><td>Any of the following can be used:<table><tr><th>Use Code</th><th>Description</th></tr><tr><td>DRIV</td><td>Is derived from</td></tr></table></td><td>HL7v3 – ActRelationshipType</td></tr>
<tr><td colspan="3">component/section/entry/act/</td></tr>
<tr><td>Class Code</td><td>ACT</td><td>HL7 v3 – ActClass</td></tr>
<tr><td>Mood Code</td><td>Any of the following can be used:<table><tr><th>mood code</th><th>Description</th></tr><tr><td>EVN</td><td>Event</td></tr></table></td><td>HL7 v3 – ActMood</td></tr>
<tr><td>Templated Id root</td><td>2.16.840.1.113883.10.20.1.27</td><td></td></tr>
<tr><td colspan="3">component/section/entry/act/entryRelationship/</td></tr>
<tr><td>Type code</td><td>SUBJ</td><td>HL7v3 – ActRelationshipType</td></tr>
<tr><td colspan="3">component/section/entry/act/entryRelationship/observation/</td></tr>
<tr><td>Class code</td><td>Any of the following can be used:<table><tr><th>mood code</th><th>Description</th></tr><tr><td>OBS</td><td>An act that is intended to result in new information about a subject.</td></tr></table></td><td>HL7 v3 – ActClass</td></tr>
<tr><td>Mood Code</td><td>Any of the following can be used:<table><tr><th>mood code</th><th>Description</th></tr><tr><td>EVN</td><td>Event</td></tr></table></td><td>HL7 v3 – ActMood</td></tr>
<tr><td>templateId</td><td>2.16.840.1.113883.10.20.1.18</td><td></td></tr>
<tr><td>Code
Display Name</td><td>Any of the following can be used:<table><tr><th>Code</th><th>Display Name</th></tr><tr><td>4200134006</td><td>Propensity to adverse reactions</td></tr><tr><td>418038807</td><td>Propensity to adverse</td></tr></table></td><td></td></tr>
</table>

<table>
<tr><td></td><td><table>
<tr><td></td><td>reactions to substance</td></tr>
<tr><td>419511003</td><td>Propensity to adverse reactions to drug</td></tr>
<tr><td>418471000</td><td>Propensity to adverse reactions to food</td></tr>
<tr><td>419199007</td><td>Allergy to substance</td></tr>
<tr><td>416098002</td><td>Drug allergy</td></tr>
<tr><td>414285001</td><td>Food allergy</td></tr>
<tr><td>59037007</td><td>Drug intolerance</td></tr>
<tr><td>235719002</td><td>Food intolerance</td></tr>
</table></td><td></td></tr>
<tr><td>Vocabulary OID</td><td>2.16.840.1.113883.6.96</td><td></td></tr>
<tr><td>Code System Name</td><td>SNOMED CT</td><td></td></tr>
<tr><td colspan="3">component/section/entry/act/entryRelationship/observation/originalText/</td></tr>
<tr><td>Reference value</td><td>#alert-x</td><td></td></tr>
<tr><td colspan="3">component/section/entry/act/entryRelationship/observation/</td></tr>
<tr><td>Status Code</td><td>Any of the following can be used:<table>
<tr><th>Code</th><th>Display Name</th></tr>
<tr><td>completed</td><td>Completed</td></tr>
<tr><td>aborted</td><td>Aborted</td></tr>
<tr><td>active</td><td>Active</td></tr>
<tr><td>cancelled</td><td>Cancelled</td></tr>
<tr><td>held</td><td>Held</td></tr>
<tr><td>new</td><td>New</td></tr>
<tr><td>suspended</td><td>Suspended</td></tr>
</table></td><td></td></tr>
<tr><td colspan="3">component/section/entry/act/entryRelationship/observation/participant</td></tr>
</table>

<table>
<tr><td>Type Code</td><td>CSM</td><td>HL7 v3 – ParticipationType</td></tr>
<tr><td colspan="3">component/section/entry/act/entryRelationship/observation/participant/participantRole/</td></tr>
<tr><td>Class code</td><td>MANU</td><td>HL7 v3 – RoleClass</td></tr>
<tr><td colspan="3">component/section/entry/act/entryRelationship/observation/participant/participantRole/playingEntity</td></tr>
<tr><td>Class code</td><td>MMAT</td><td>HL7 v3 – EntityClass</td></tr>
<tr><td colspan="3">component/section/entry/act/entryRelationship/observation/entryRelationship</td></tr>
<tr><td>Type Code</td><td>SUBJ</td><td>HL7 v3 – ParticipationType</td></tr>
<tr><td>Inversion ind</td><td>true</td><td></td></tr>
<tr><td colspan="3">component/section/entry/act/entryRelationship/observation/entryRelationship/observation</td></tr>
<tr><td>Class code</td><td>Any of the following can be used:<table><tr><th>mood code</th><th>Description</th></tr><tr><td>OBS</td><td>An act that is intended to result in new information about a subject.</td></tr></table></td><td>HL7 v3 – ActClass</td></tr>
<tr><td>Mood Code</td><td>Any of the following can be used:<table><tr><th>mood code</th><th>Description</th></tr><tr><td>EVN</td><td>Event</td></tr></table></td><td>HL7 v3 – ActMood</td></tr>
<tr><td>entryRelationship Type code</td><td>“see document in Reference column for possible values”</td><td>HL7 v3 – ActRelationshipType</td></tr>
</table>

4.13.2 XML Sample of the Allergy/Drug Sensitivity

```
<component>
<section>
<templateId root="2.16.840.1.113883.10.20.1.2"/>
<code code="48765-2" displayName="Allergies, adverse reactions, alerts"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
<title>Allergies and Adverse Reactions</title>
<text>
<content ID="allergy_comment-1">No known allergies. </content>
</text>
<entry typeCode="DRIV">
```

```
<act classCode="ACT" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.27"/>
<templateId root="2.16.840.1.113883.3.88.11.32.6"/>
<id root="36e3e930-7b14-11db-9fe1-0800200c9a66"/>
<code nullFlavor="NA"/>
<entryRelationship typeCode="SUBJ" inversionInd="true">
<act classCode="ACT" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.40"/>
<templateId root="2.16.840.1.113883.3.88.11.32.12"/>
<code code="48767-8" displayName="Annotation Comment"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
<text>
<reference value="#allergy_comment-1"/>
</text>
<statusCode code="completed"/>
<author>
<time value="20080101"/>
<assignedAuthor>
<id root="2.16.840.1.113883.4.6.1013905751"/>
<assignedPerson>
<name>
<prefix>Dr.</prefix>
<given>Randall</given>
<family>Ford</family>
</name>
</assignedPerson>
</assignedAuthor>
</author>
</act>
</entryRelationship>
</act>
</entry>
</section>
</component>
```

4.14 MEDICATION MODULE

The Medications section is a **Required if Known – (R2)** section by the Social Security Administration standards. **Note**: SSA would like to view multiple entry elements within the medication section during the testing phase in order to validate that several medications can be sent in the xml payload.

Section Description: This section defines a patient's current medications and pertinent medication history.

Medication Table

Field Name	XPATH	CCD	SSA
Component templateId	component/section/templateId/@root		R2
Medication ID #	code/@code	R	R
Display Name	Code/@displayName	R	R
Vocabulary OID	code/@codeSystem	R	R
Code System Name	Code/@codeSystemName	R	R
Title	Section/@title	R	R
component/section/			
Type code	entry/@typeCode	R	R
component/section/entry/			
Class Code	substanceAdministration/@classCode	R	R
Mood code	substanceAdministration/@moodCode	R	R
Template id	substanceAdministration/templateId/@root	R	R
Id	substanceAdministration/id	R	R
Text Reference	substanceAdministration/text/reference/@value		R2
Status Code	substanceAdministration/statusCode/@code		R2
Effective time - type	substanceAdministration/effectiveTime/@xsi:type		R2
Effective time – nullFlavor	substanceAdministration/effectiveTime/@nullFlavor		R2
Period value	substanceAdministration/effectiveTime/period/@value		R2
Period unit	substanceAdministration/effectiveTime/period/@unit		R2
Dose Quantity value	substanceAdministration/doseQuantity/@value	O	R2
Dose Quantity unit	substanceAdministration/doseQuantity/@unit	O	R2
Product Name code	substanceAdministration/consumable/manufacturedProduct/Manufa	R2	R2

	cturedMaterial/code/@code		
Product Name displayName	**substanceAdministration/consumable/manufacturedProduct/ManufacturedMaterial/code/@displayName**		**R2**
Product Name codeSystem	**substanceAdministration/consumable/manufacturedProduct/ManufacturedMaterial/code/@codeSystem**		**R2**
Product Name codeSystem Name	**substanceAdministration/consumable/manufacturedProduct/ManufacturedMaterial/code/@codeSystemName**		**R2**
Product Text	**substanceAdministration/consumable/manufacturedProduct/ManufacturedMaterial/code/originalText/reference/@value**	**R**	**R**
Type of Medication	**substanceAdministration/entryRelationship/observation/value**	**R2**	**R2**
Order Date/Time	**substanceAdministration/entryRelationship/supply/author/time/@value**		**R**

4.14.1 Content of Medication

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to access what documentation is available to view all possible content choices for that particular element.

Field Name	Content Values	Reference
Component templateId	2.16.840.1.113883.10.20.1.8	
Medication ID #	10160-0	
Display Name	History of medication use	
Vocabulary OID	2.16.840.1.113883.6.1	
Code System Name	LOINC	
Title	Medication	
component/section/entry		

<table>
<tr><td>Type Code</td><td>Any of the following can be used:<table><tr><th>Use Code</th><th>Description</th></tr><tr><td>DRIV</td><td>Is derived from</td></tr></table></td><td>HL7v3 – ActRelationshipType</td></tr>
<tr><td colspan="3">component/section/entry/substanceAdministration</td></tr>
<tr><td>Class code</td><td>SBADM</td><td>HL7 v3 – ActClass</td></tr>
<tr><td>Mood code</td><td>Any of the following can be used:<table><tr><th>mood code</th><th>Description</th></tr><tr><td>EVN</td><td>Event</td></tr></table></td><td>HL7 v3 – ActMood</td></tr>
<tr><td>templateId</td><td>2.16.840.1.113883.10.20.1.24</td><td></td></tr>
<tr><td>templateId</td><td>2.16.840.1.113883.3.88.11.32.8</td><td>Medication activity template</td></tr>
<tr><td>Text reference</td><td>#sig-1</td><td></td></tr>
<tr><td>status code</td><td>Any of the following can be used:<table><tr><th>Code</th><th>Display Name</th></tr><tr><td>completed</td><td>Completed</td></tr><tr><td>aborted</td><td>Aborted</td></tr><tr><td>active</td><td>Active</td></tr><tr><td>cancelled</td><td>Cancelled</td></tr><tr><td>held</td><td>Held</td></tr><tr><td>new</td><td>New</td></tr><tr><td>suspended</td><td>Suspended</td></tr></table></td><td></td></tr>
<tr><td colspan="3">component/section/entry/substanceAdministration/effectiveTime (Indicate Medication Stopped)</td></tr>
<tr><td>XSI Type</td><td>Any of the following can be used:<table><tr><th>Code</th><th>Display Name</th></tr><tr><td>IVL_TS</td><td>Interval Point in Time</td></tr><tr><td>PIVL_TS</td><td>Periodic Interval of</td></tr></table></td><td>HL7 v3 – datatypes</td></tr>
</table>

<table>
<tr><td></td><td><table><tr><td></td><td>Time – Point in Time</td></tr><tr><td>EIVL_TS</td><td>Event-Related Periodic Interval of Time – Point in Time</td></tr></table></td><td></td></tr>
<tr><td>nullFlavor</td><td>UNK</td><td></td></tr>
<tr><td colspan="3">component/section/entry/substanceAdministration/effectiveTime (Administration Timing)</td></tr>
<tr><td>type</td><td>Any of the following can be used:<table><tr><td>Code</td><td>Display Name</td></tr><tr><td>IVL_TS</td><td>Interval Point in Time</td></tr><tr><td>PIVL_TS</td><td>Periodic Interval of Time – Point in Time</td></tr><tr><td>EIVL_TS</td><td>Event-Related Periodic Interval of Time – Point in Time</td></tr></table></td><td>HL7 v3 – datatypes</td></tr>
<tr><td>institution Specified</td><td>True</td><td></td></tr>
<tr><td>Timing operator</td><td>A</td><td></td></tr>
<tr><td>period value</td><td>XX</td><td></td></tr>
<tr><td>Timing period unit</td><td>h</td><td></td></tr>
<tr><td colspan="3">component/section/entry/substanceAdministration/routeCode</td></tr>
<tr><td>routeCode</td><td>“see document in Reference</td><td>http://www.fda.gov/oc/datacouncil/splncicodes.html</td></tr>
</table>

displayName	column for possible values”	
Code system	2.16.840.1.113883.3.26.1.1	
Code System Name	NCI Thesaurus	
component/section/entry/substanceAdministration/approachSiteCode		
Code	21082005	
displayName	Mouth	
Vocabulary OID	2.16.840.1.113883.6.96	
Code system Name	SNOMED CT	
component/section/entry/substanceAdministration/doseQuanity		
value	X	
unit		
component/section/entry/substanceAdministration/maxDoseQuantity		
xsi:type	RTO_PQ_PQ	
component/section/entry/substanceAdministration/maxDoseQuantity/numerator		
value	X	
component/section/entry/substanceAdministration/maxDoseQuantity/denominator		
value	X	
component/section/entry/substanceAdministration/administrationUnitCode/		
Code	“see document in Reference column for possible values”	http://www.fda.gov/oc/datacouncil/splncicodes.html
displayName		
Code System	2.16.840.1.113883.3.26.1.1	
Code System Name	NCI Thesaurus	

4.14.2 XML Sample of the Medication

```
<component>
<section>
<templateId root="2.16.840.1.113883.10.20.1.8"/>
<code code="10160-0" displayName="History of medication use"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
<title>Medication</title>
```

```
<text/>
<entry typeCode="DRIV">
<substanceAdministration classCode="SBADM" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.24"/>
<templateId root="2.16.840.1.113883.3.88.11.32.8"/>
<id root="cdbd5b05-6cde-11db-9fe1-0800200c9a66"/>
<text>
<reference value="#sig-1"/>
</text>
<statusCode code="completed"/>
<effectiveTime xsi:type="IVL_TS" nullFlavor="UNK"/>
<effectiveTime xsi:type="PIVL_TS" institutionSpecified="true" operator="A">
<period value="12" unit="h"/>
</effectiveTime>
<routeCode code="C38288" displayName="Oral"
 codeSystem="2.16.840.1.113883.3.26.1.1" codeSystemName="NCI Thesaurus"/>
<approachSiteCode code=" 21082005 " displayName="Mouth"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
<doseQuantity value="1" unit="{INHALATION}"/>
 <maxDoseQuantity xsi:type="RTO_PQ_PQ">
<numerator value="6"/>
<denominator value="1"/>
</maxDoseQuantity>
<administrationUnitCode code="C38216" displayName="Tablet"
 codeSystem="2.16.840.1.113883.3.26.1.1" codeSystemName="NCI Thesaurus"/>
<consumable>
<manufacturedProduct classCode="MANU">
<templateId root="2.16.840.1.113883.10.20.1.53"/>
<templateId root="2.16.840.1.113883.3.88.11.32.9"/>
<manufacturedMaterial classCode="MMAT">
<code code="51947-0696" displayName="Levothyroxine"
 codeSystem="2.16.840.1.113883.6.69" codeSystemName="NDC">
<originalText>
<reference value="#medication-1"/>
</originalText>
<translation code="PLACE_HOLDER" displayName="PLACE_HOLDER"
 codeSystem="2.16.840.1.113883.6.88" codeSystemName="PLACE_HOLDER"/>
</code>
```

```
<name>Levothyroxine</name>
</manufacturedMaterial>
<manufacturerOrganization>
<name>GlaxoC3POKline</name>
</manufacturerOrganization>
</manufacturedProduct>
</consumable>
<participant typeCode="CSM">
<participantRole classCode="MANU">
<code code="N0000006601" displayName="Lactose"
 codeSystem="2.16.840.1.113883.4.209" codeSystemName="NDF-RT"/>
<playingEntity classCode="MMAT">
<code/>
<name/>
</playingEntity>
</participantRole>
</participant>
<entryRelationship typeCode="SUBJ">
<observation classCode="OBS" moodCode="EVN">
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 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
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</entryRelationship>
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<entry typeCode="DRIV">
<substanceAdministration classCode="SBADM" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.24"/>
<templateId root="2.16.840.1.113883.3.88.11.32.8"/>
<id root="cdbd5b05-6cde-11db-9fe1-0800200c9a66"/>
<text>
<reference value="#sig-1"/>
</text>
<statusCode code="completed"/>
<effectiveTime xsi:type="IVL_TS" nullFlavor="UNK"/>
<effectiveTime xsi:type="PIVL_TS" institutionSpecified="true" operator="A">
<period value="6" unit="h"/>
</effectiveTime>
<routeCode code="C38288" displayName="Oral"
 codeSystem="2.16.840.1.113883.3.26.1.1" codeSystemName="NCI Thesaurus"/>
<approachSiteCode code=" 21082005 " displayName="Mouth"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
<doseQuantity value="1" unit="aerosol"/>
<maxDoseQuantity xsi:type="RTO_PQ_PQ">
<numerator value="1"/>
<denominator value="1"/>
</maxDoseQuantity>
<administrationUnitCode code="C38216" displayName="Inhaler"
 codeSystem="2.16.840.1.113883.3.26.1.1" codeSystemName="NCI Thesaurus"/>
<consumable>
```

```
<manufacturedProduct classCode="MANU">
<templateId root="2.16.840.1.113883.10.20.1.53"/>
<templateId root="2.16.840.1.113883.3.88.11.32.9"/>
<manufacturedMaterial classCode="MMAT">
<code code="51947-0696" displayName="Ipratropium Bromide"
 codeSystem="2.16.840.1.113883.6.69" codeSystemName="NDC">
<originalText>
<reference value="#medication-1"/>
</originalText>
<translation code="PLACE_HOLDER" displayName="PLACE_HOLDER"
 codeSystem="2.16.840.1.113883.6.88" codeSystemName="PLACE_HOLDER"/>
</code>
<name>Ipratropium Bromide</name>
</manufacturedMaterial>
<manufacturerOrganization>
<name>Atrovent</name>
</manufacturerOrganization>
</manufacturedProduct>
</consumable>
<participant typeCode="CSM">
<participantRole classCode="MANU">
<code code="N0000006601" displayName="Lactose"
 codeSystem="2.16.840.1.113883.4.209" codeSystemName="NDF-RT"/>
<playingEntity classCode="MMAT">
<code/>
<name/>
</playingEntity>
</participantRole>
</participant>
<entryRelationship typeCode="SUBJ">
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.3.88.11.32.10"/>
<code code="73639000" displayName="Prescription Drug"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
</observation>
</entryRelationship>
<entryRelationship typeCode="REFR">
```

```
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.47"/>
<code code="33999-4" displayName="Status" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
<value xsi:type="CE" code="55561003" displayName="Active"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
</observation>
</entryRelationship>
<entryRelationship typeCode="RSON">
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.28"/>
<code code=" 312453004 " displayName="Inhaler - currently active"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
<text>
<reference value="#indication-1"/>
</text>
<statusCode code="completed"/>
</observation>
</entryRelationship>
<entryRelationship typeCode="SUBJ">
<act classCode="ACT" moodCode="INT">
<templateId root="2.16.840.1.113883.10.20.1.49"/>
<code nullFlavor="UNK"/>
<text>
<reference value="#patient-instruction-1"/>
</text>
</act>
</entryRelationship>
<entryRelationship typeCode="CAUS">
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.54"/>
<code nullFlavor="UNK"/>
<text>
<reference value="#reaction-1"/>
</text>
<statusCode code="completed"/>
</observation>
</entryRelationship>
```

```
<entryRelationship typeCode="REFR">
<supply classCode="SPLY" moodCode="INT">
<templateId root="2.16.840.1.113883.3.88.11.32.11"/>
<id root="14ED7742-2428-4e2c-9446-A9B0D0075272"
 extension="20097864565331453252"/>
<effectiveTime value="20081109"/>
<repeatNumber value="2"/>
<quantity value="1"/>
<author>
<time value="20081109"/>
<assignedAuthor>
<id root="2.16.840.1.113883.4.6.1013905751" extension="Provider ID"/>
<assignedPerson>
<name>
<prefix>Dr.</prefix>
<given>John</given>
<given/>
<family>Lee</family>
</name>
</assignedPerson>
</assignedAuthor>
</author>
<entryRelationship typeCode="SUBJ" inversionInd="true">
<act classCode="ACT" moodCode="INT">
<templateId root="2.16.840.1.113883.10.20.1.43"/>
<code/>
<text>
<reference value="#fulfillment-instruction1"/>
</text>
</act>
</entryRelationship>
</supply>
</entryRelationship>
<entryRelationship typeCode="REFR">
<sequenceNumber value="1"/>
<supply classCode="SPLY" moodCode="EVN">
<id root="14ED7742-2428-4e2c-9446-A9B0D0075272" extension="321654-77468161-
```

```
 80"/>
<statusCode code="completed"/>
<effectiveTime value="20081109"/>
<quantity value="1" unit="Tablespoon"/>
<performer>
<assignedEntity>
<id root="2.16.840.1.113883.4.6.1013905751"/>
<addr use="WP">
<streetAddressLine>885 Washington Street</streetAddressLine>
<streetAddressLine/>
<city>New Market</city>
<state>MD</state>
<postalCode>01111</postalCode>
</addr>
<assignedPerson>
<name>
<prefix>Dr.</prefix>
<given>John</given>
<given/>
<family>Lee</family>
</name>
</assignedPerson>
<representedOrganization>
<id root="2.16.840.1.113883.4.6.2649871"/>
<name>South Comm. Health Center</name>
</representedOrganization>
</assignedEntity>
</performer>
</supply>
</entryRelationship>
<precondition>
<criterion/>
</precondition>
</substanceAdministration>
</entry>
</section>
</component>
```

4.15 MEDICAL EQUIPMENT MODULE

The Medical Equipment section is a **Required if Known – (R2)** section by the Social Security Administration standards. Note: SSA would like to view multiple entry elements within the medical equipment section during the testing phase in order to validate that several medical equipment entries can be sent in the xml payload.

Section Description: The Medical Equipment section defines a patient's implanted and external medical devices and equipment that their health status depends on, as well as any pertinent equipment or device history.

Medical Equipment Table

Field Name	XPATH	CCD	SSA
Section templateID	component/section/templateId/@root	O	R2
Code	component/section/code/@code	R	R
Vocabulary OID	component/section/code/@codeSystem	R	R
Display Name	component/section/code/@displayName		R2
title	component/section/title		R2
Supply class code	component/section/entry/supply/@classCode		R2
Supply mood code	component/section/entry/supply/@moodCode		R2
Time of Use	component/section/entry/supply/effectiveTime/@value		R2
Time of Use	component/section/entry/supply/effectiveTime/low/@value		R2
Product Name code	component/section/entry/supply/product/manufacturedProduct/manufacturedMaterial/code/@code		R2
Product Name Name	entry/supply/product/manufacturedProduct/manufacturedMaterial/code/@displayName		R2
Status	entryRelationship/observation/value/@code		R2
Status	entryRelationship/observation/value/@codeSystem		R2
Facility	performer/assignedEntity/representedOrganization/name		R2
Prescriber's Name	entry/supply/author/assignedAuthor/assignedPerson/name		R2

4.15.1 Content of Medical Equipment

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to

access what documentation is available to view all possible content choices for that particular element.

Field Name	Content Values	Reference
Section templateId	**2.16.840.1.113883.10.20.1.7**	
Code	**46264-8**	
Vocabulary OID	**2.16.840.1.113883.6.1**	http://www.hl7.org/oid/index.cfm
Display Name	**History of medical device use**	
title	**Medical Equipment**	
Supply class code	**SPLY**	HL7 v3 – ActClass
Supply mood code	Any of the following can be used: **mood code** / **Description** **EVN** / Event	HL7 v3 – ActMood
Supply Activity template	**2.16.840.1.113883.10.20.1.34**	

4.15.2 XML Sample of the Medical Equipment

```
<component>
<section>
<templateId root="2.16.840.1.113883.10.20.1.7"/>
<code code="46264-8" displayName="History of medical device use"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
<title>Medical Equipment</title>
<text/>
<entry>
<supply classCode="SPLY" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.34"/>
<id root="g3453452-vs345v001-whj34112a-h56742"/>
<statusCode code="completed"/>
<effectiveTime value="20081109"/>
<quantity value="1"/>
<expectedUseTime>
<low value="20061109"/>
<high value="20081109"/>
</expectedUseTime>
```

```
<product>
<manufacturedProduct classCode="MANU">
<templateId root="2.16.840.1.113883.10.20.1.53"/>
<manufacturedMaterial>
<code code=" 334947002 " displayName="Nebulizer"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">
<originalText>
<reference value="#medequip-1"/>
</originalText>
</code>
<name>Nebulizer</name>
</manufacturedMaterial>
<manufacturerOrganization>
<name>Omcron</name>
</manufacturerOrganization>
</manufacturedProduct>
</product>
<performer typeCode="PRF">
<time value="20050509"/>
<assignedEntity>
<id root="2.16.840.1.113883.4.6.1013905751" extension="Provider ID"/>
<code code="280000000X" displayName="Hospitals"
 codeSystem="2.16.840.1.113883.6.101" codeSystemName="ProviderCodes"/>
<addr use="WP">
<streetAddressLine>20 Breakfast Avenue</streetAddressLine>
<streetAddressLine/>
<city>New Market</city>
<state>MA</state>
<postalCode>11111</postalCode>
</addr>
<addr use="WP">
<streetAddressLine>123 West Cookie Alley</streetAddressLine>
<streetAddressLine>Suite #2</streetAddressLine>
<city>New Market</city>
<state>MA</state>
<postalCode>11111</postalCode>
</addr>
<telecom use="WP" value="tel:+1-888-555-1181"/>
```

```
<telecom value="mailto:Harry.Cohen.MD@HospitalA.com"/>
<assignedPerson>
<name>
<prefix>Dr.</prefix>
<given>Harry</given>
<given>R</given>
<family>Cohen</family>
</name>
</assignedPerson>
<representedOrganization>
<id root="2.16.840.1.113883.4.6.2649871"/>
<name>St. Francis Medical Center</name>
</representedOrganization>
<sdtc:patient>
<sdtc:id root="78A150ED-B890-49dc-B716-5EC0027B3983" extension="11224433"/>
</sdtc:patient>
</assignedEntity>
</performer>
<author>
<time value="20061015"/>
<assignedAuthor>
<id root="2.16.840.1.113883.4.6.1013905751" extension="Provider ID"/>
<code code="280000000X" displayName="Hospitals"
 codeSystem="2.16.840.1.113883.6.101" codeSystemName="ProviderCodes"/>
<addr use="WP">
<streetAddressLine>20 Breakfast Avenue </streetAddressLine>
<streetAddressLine/>
<city>New Market</city>
<state>MA</state>
<postalCode>11111</postalCode>
</addr>
<telecom use="WP" value="tel:+1-888-555-1181"/>
<telecom value="mailto:Harry.Cohen.MD@HospitalA.com"/>
<assignedPerson>
<name>
<prefix>Dr.</prefix>
<given>Harry</given>
<given>R</given>
```

```
<family>Cohen</family>
</name>
</assignedPerson>
<representedOrganization>
<id root="2.16.840.1.113883.4.6.2649871"/>
<name>St. Francis Medical Center</name>
</representedOrganization>
</assignedAuthor>
</author>
<participant typeCode="LOC">
<participantRole>
<code code="PC" displayName="Primary Care Clinic"
 codeSystem="2.16.840.1.113883.5.111" codeSystemName="RoleCode"/>
<addr use="WP">
<streetAddressLine>123 Wellness Lane</streetAddressLine>
<streetAddressLine>Suite #12</streetAddressLine>
<city>New Market</city>
<state>MA</state>
ostalCode>11111</postalCode>
</addr>
</participantRole>
</participant>
<entryRelationship typeCode="REFR">
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.47"/>
<code code="33999-4" displayName="Status" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
<statusCode code="completed"/>
<value xsi:type="CE" code="73425007" displayName="No Longer Active"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"/>
</observation>
</entryRelationship>
</supply>
</entry>
</section>
</component>
```

4.16 IMMUNIZATION MODULE

The Immunization section is a **Required if Known – (R2)** section by the Social Security Administration standards.

Section Description: The Immunizations section defines a patient's current immunization status and pertinent immunization history.

Immunization Table

Field Name	XPATH	CCD	SSA
Section OID	templateId/@root="2.16.840.1.113883.10.20.1.6"	O	R2
Code	code/@code="11369-6"	R	R
Vocabulary OID	code/@codeSystem	R	R
title	code/@displayName ="History of immunizations"	R	R
Entry Type Code	Entry/typeCode	O	
Administered Date	entry/substanceAdministration/effectiveTime/@value		R2
Immunization Performer	entry/substanceAdministration/performer/assignedEntity/assignedPerson/name		R2
Medication	entry/substanceAdministration/consumable/manufacturedMaterial/code/@displayName		R2

4.16.1 Content of Immunization

This section will help the user identify the needed content (text) and/or all possible content available. The reference column, if populated will provide the user with the reference link to access what documentation is available to view all possible content choices for that particular element.

Field Name	Content Values	Reference
Section templateId	2.16.840.1.113883.10.20.1.6	
Code	11369-6	
Display Name	History of immunizations	
Vocabulary OID	2.16.840.1.113883.6.1	http://www.hl7.org/oid/index.cfm
Code System Name	LOINC	
title	Immunizations	
component/section/entry/		

<table>
<tr><td>Type Code</td><td>Any of the following can be used:<table><tr><th>Use Code</th><th>Description</th></tr><tr><td>DRIV</td><td>Is derived from</td></tr></table></td><td>HL7v3 – ActRelationshipType</td></tr>
<tr><td colspan="3">component/section/entry/sustanceAdministration/</td></tr>
<tr><td>Class code</td><td>Any of the following can be used:<table><tr><th>Class Code</th><th>Description</th></tr><tr><td>SBADM</td><td>Substance administration – the act of introducing or otherwise applying a substance to the subject.</td></tr></table></td><td>HL7 v3 - ActClass</td></tr>
<tr><td>Mood code</td><td>Any of the following can be used:<table><tr><th>Use Code</th><th>Description</th></tr><tr><td>EVN</td><td>Is derived from</td></tr></table></td><td>HL7 v3 – ActMood</td></tr>
<tr><td>negationInd</td><td>False</td><td></td></tr>
<tr><td>templateId</td><td>2.16.840.1.113883.10.20.1.24</td><td></td></tr>
<tr><td>Status code</td><td>Any of the following can be used:<table><tr><th>Code</th><th>Description</th></tr><tr><td>completed</td><td>Completed</td></tr><tr><td>aborted</td><td>Aborted</td></tr><tr><td>active</td><td>Active</td></tr><tr><td>cancelled</td><td>Cancelled</td></tr><tr><td>held</td><td>Held</td></tr><tr><td>new</td><td>New</td></tr><tr><td>suspended</td><td>Suspended</td></tr></table></td><td></td></tr>
<tr><td>Effective time</td><td>YYYYMMDD</td><td></td></tr>
<tr><td colspan="3">component/section/entry/sustanceAdministration/manufacturedProduct/</td></tr>
</table>

<table>
<tr><td>Class code</td><td>Any of the following can be used:<table><tr><th>Code</th><th>Description</th></tr><tr><td>MANU</td><td>Manufactured product</td></tr></table></td><td>HL7 v3 - RoleClass</td></tr>
<tr><td>templateId</td><td>2.16.840.1.113883.10.20.1.53</td><td></td></tr>
<tr><td colspan="3">component/section/entry/sustanceAdministration/manufacturedProduct/manufacturedMaterial</td></tr>
<tr><td>Class code</td><td>Any of the following can be used:<table><tr><th>Code</th><th>Display Name</th></tr><tr><td>MMAT</td><td>Manufactured material</td></tr></table></td><td>HL7 v3 - EntityClass</td></tr>
<tr><td>determinerCode</td><td>Any of the following can be used:<table><tr><th>Code</th><th>Description</th></tr><tr><td>KIND</td><td>described – The described determiner is used to indicate that the given Entity is taken as a general description of a king of thing that can be taken in whole.</td></tr></table></td><td>HL7 v3 – EntityDeterminer</td></tr>
<tr><td colspan="3">component/section/entry/sustanceAdministration/consumable/manufacturedProduct/manufacturedMaterial/code/</td></tr>
<tr><td>Code</td><td>Xx</td><td></td></tr>
<tr><td>Display Name</td><td></td><td></td></tr>
<tr><td>Code system</td><td>2.16.840.1.113883.6.59</td><td></td></tr>
<tr><td>Code system Name</td><td>CVX</td><td></td></tr>
<tr><td>Name text</td><td></td><td></td></tr>
<tr><td>Lot number text</td><td></td><td></td></tr>
<tr><td colspan="3">component/section/entry/sustanceAdministration/consumable/manufacturedProduct/manufacturerOrganization/name</td></tr>
<tr><td>text</td><td></td><td></td></tr>
</table>

component/section/entry/sustanceAdministration/performer/		
Type code	Any of the following can be used: **Type Code** | **Description** **PRF** | **Performer** - A person, non-person living subject, organization or device that who actually and principally carries out the action.	HL7 v3 - ParticipationType
Time – low	**YYYYMMDD**	
component/section/entry/sustanceAdministration/performer/assignedEntity/		
Addr Use	Any of the following can be used: **Code** | **Description** **H** | home address **HP** | primary home **WP** | work place **HV** | vacation home	
Addr		
Telecom value		
Assigned Person		
representedOrganization Name		

4.16.2 XML Sample of the Immunization Section

```
<component>
<section>
<templateId root="2.16.840.1.113883.10.20.1.6"/>
<code code="11369-6" displayName="History of immunizations"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
<title>Immunizations</title>
```

```
<text/>
<entry typeCode="DRIV">
<substanceAdministration classCode="SBADM" moodCode="EVN" negationInd="false">
<templateId root="2.16.840.1.113883.3.88.11.32.14"/>
<id root="cevv5b05-6zae-11wq-0ve1-0822202c9a76"/>
<statusCode code="completed"/>
<effectiveTime value="20080108"/>
<approachSiteCode/>
<doseQuantity/>
<consumable>
  <manufacturedProduct classCode="MANU">
<templateId root="2.16.840.1.113883.10.20.1.53"/>
<templateId root="2.16.840.1.113883.3.88.11.32.9"/>
<manufacturedMaterial classCode="MMAT" determinerCode="KIND">
<code code="16" displayName="Influenza Virus Vaccine"
 codeSystem="2.16.840.1.113883.6.59" codeSystemName="CVX">
<originalText/>
</code>
<name>TIV</name>
<lotNumberText>A1234-ddz</lotNumberText>
</manufacturedMaterial>
<manufacturerOrganization>
<name> GlaxoC3POKline Biologicals</name>
</manufacturerOrganization>
</manufacturedProduct>
</consumable>
<performer typeCode="PRF">
<time>
<low value="20070506"/>
</time>
<assignedEntity>
<id root="2.16.840.1.113883.4.6.332789877" extension="Provider ID"/>
<addr use="WP">
<streetAddressLine>227 Medical Court</streetAddressLine>
<streetAddressLine/>
<city>Annapolis</city>
<state>MD</state>
<postalCode>20497</postalCode>
```

```
<country>US</country>
</addr>
<telecom value="TEL:+1-301-555-7654"/>
<assignedPerson>
<name>
<prefix>Dr</prefix>
<given>Sarah</given>
<given/>
<family>Silvarmen</family>
</name>
</assignedPerson>
<representedOrganization>
<name>Orthopedic Associates of Annapolis</name>
</representedOrganization>
</assignedEntity>
</performer>
<entryRelationship typeCode="SUBJ">
<observation classCode="OBS" moodCode="EVN">
<code nullFlavor="NA"/>
<text/>
<statusCode/>
<value xsi:type="INT" value="1"/>
</observation>
</entryRelationship>
<entryRelationship typeCode="CAUS">
<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.1.54"/>
<code nullFlavor="NA"/>
<text>
<reference value="#reaction"/>
</text>
<statusCode code="completed"/>
</observation>
</entryRelationship>
</substanceAdministration>
</entry>
</section>
```

```
</component>
```