athenahealth

Health Plan Data Exchange

CCDA Specification Document

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Change Summary

March 2022 Release

- In File Naming convention (page 10), updated supported filename fields under On-Demand Chart File Naming Convention
- In Medications section(page 18) updated the content to include both active and completed medication list.
- In Medications Activity (page 19), updated the description for dose under 'Medications' section
- In Medications Administered section (page 23), updated the description for dose under 'Medications Activity
- In Results section (page 29), note added under ‘Imaging Results’ section
- In Unstructured CCDA Specifications (page 58), note added to indicate the solution for Real-Time service only
- In Reports (page 63), updated the table to reflect supported reports under On-Demand column

April 2022 Release

- In Header section (page 10), updated description for Global Doc ID for On-demand and Real Time

Structured CCDA Specifications

HL7 CCDA 2.1 Version

Document Level Specification

Encounter Summary

Section	Description	Data Level
Header	Document, Patient, and Provider Information	Encounter
Reason for Visit	Symptoms as reported by the patient	Encounter
Chief Complaint	Description of purpose for visit	Encounter
Assessment	Instructions for the patient: clinical instructions, patient decision aids	Encounter
Plan of Treatment	Goals and instructions for the patient.	Encounter
Medications	List of active and completed medications	Patient
Medications Administered	Medications given to the patient during the office visit	Encounter
Vital Signs	List of historical vital signs: height, weight, blood pressure, BMI	Encounter
Results	List of historical lab results	Patient
Allergies	List of active and deactivated allergies	Patient
Problems	List of active, completed, and unknown problems	Patient
Procedures	List of historical procedures	Patient
Vaccines List (Immunizations)	List of vaccines and immunizations	Patient
Social History	Current smoking status and alcohol use	Patient
Encounters	List of encounter dates, encounter providers, and encounter diagnoses	Patient
Past Medical History	List of past medical problems	Patient
History of Present Illness	Description of current illness	Encounter
Payers	List of payer information (e.g., insurance name and ID) for the encounter	Encounter
Review of Systems	Description of the physician’s review of the patient’s systems	Encounter
Physical Exam	Description of the physician’s physical exam of the patient	Encounter
Advance Directive	Describes the patient’s advance directives.	Encounter
Functional Status	List of answers to functional status questions.	Encounter
Family History	Family history for the patient	Encounter
Medical equipment	List of patient's implanted and external health and medical devices and equipment	Patient

Structured CCDA Sections

The Health Plan Data Exchange CCDA (consolidated clinical document architecture) utilizes the HL7 CCDA R2.1 specification.

Clinical data presented within the CCDA sections are based on three factors: 1) the Provider's workflows within athenaClinicals, 2) how clinical information is recorded by Providers within athenaClinicals and 3) date of CCDA generation - if this is greater than the current encounter date, then CCD shall display the latest information available for each section for that encounter. Due to these factors, there could be cases that clinical data presented within the HPDE CCDs may not always have the relevant HL7 identifiers/clinicals codes. In such cases, the alternative options provided by the HL7 2.1 spec are implemented

Athena HPDE services generates two types of Patient Charts based on the service type offering -

- Real time Service
  - Each Patient chart is an encounter summary in HL7 2.1 CCD format. This is applicable for both backfill and real-time patient charts.

- On-Demand Service
  - For a member, an On-Demand patient chart generation is at Provider group level within an athenahealth practice. If there are multiple provider groups a patient is registered within a practice; chart will be generated for each provider group where the member match is found
  - The chart generation is based on the encounters found in the Provider group and could consist of one or more encounters. Hence an On-Demand Patient Chart could consist of multiple CCDs for individual encounters grouped together and batched in reverse chronological order.
  - athenahealth can format an XML wrapper in the Data Export files to include information sent in through the Member Roster.
    - Default Wrapper fields – ID, Roster ID, Tracking ID where ID and RosterID are from the member roster file, Tracking ID is the internal athena EMR ID
    - Configurable Wrapper fields - Any field sent in Member Roster can be configured to include as a wrapper field

See below the skeleton structure of the on-demand patient chart with default wrapper fields and meta tags details before and after each CCD -

```
<PackageMetadata>
 <CCDAS>
  <ccda_0> ---------------Encounter Summary 1---------------------
   <CLINICALDOCUMENT>
  </CLINICALDOCUMENT>
   <ENCOUNTERINFO>
    <DATE>10/07/2020</DATE>
    <ID>1234567</ID>
   </ENCOUNTERINFO>
  </ccda_0>
```

```
<ccda_1>-----------------Encounter Summary 2------------------------
  <CLINICALDOCUMENT>
    </CLINICALDOCUMENT>
  <ENCOUNTERINFO>
   <DATE>01/18/2020</DATE>
   <ID>1234566</ID>
  </ENCOUNTERINFO>
 </ccda_1>
</CCDAS>
<ID>18632498</ID>
<ROSTERID>948b8aa3-d242-4f98-8c78-d59a28088932</ROSTERID>
<TRACKINGID>46337B97-B259-AF71-D967-F31765949DCA</TRACKINGID>
<VENDORID>b0d1066f-c3f3-47ff-8236-743b1bfcb033</VENDORID>
</PackageMetadata>
```


Note: Details on meta tags refer the On-Demand roster file specification in Appendix section

- Hybrid solution –Real time charts are generated using HPDE real-time interfaces and so each Patient chart is an encounter summary in HL7 2.1 CCD format. And Backfill Patient charts are generated using HPDE on-demand interface and so Patient charts shall align to the structure and format of On-Demand charts explained above.

File Naming convention

Real-Time Chart File Naming Convention. The default filename string for Real time solution is [athenaPracticeID]_[MESSAGEID]_[TIMESTAMP].out

Along with a preferred predefined static text, athenahealth can support following fields to be included in the file name:

- Athena Encounter ID or Result ID
- Athena Practice ID
- DATE: The date format (YYYYMMDD)
- DAY: The day (DD)
- DAYYEAR: The number of days since the start of the year, so January 1st is 1 and February 1st is 32. (DDD)
- EURODATE: The European date format (DDMMYYYY)
- HOUR: The Hour (HH)
- MESSAGEID: The ID number of the message/chart generated
- MESSAGETYPE: The type of message
- MINUTE: The Minute (MM)
- MONTH: The Month (MM)
- SECOND: The Second (S(S)). Single S if the second is <10
- SHORTYEAR: The last two digits of the year (YY)
- TIME: Time in HHMMSS
- TIMESTAMP: A time stamp (YYYYMMDDHHMMSS), so January 1st, 2015 at 1pm becomes 20150101130000.
- USDATE: The US date format (MMDDYYYY)
- YEAR: Four-digit Year (YYYY)

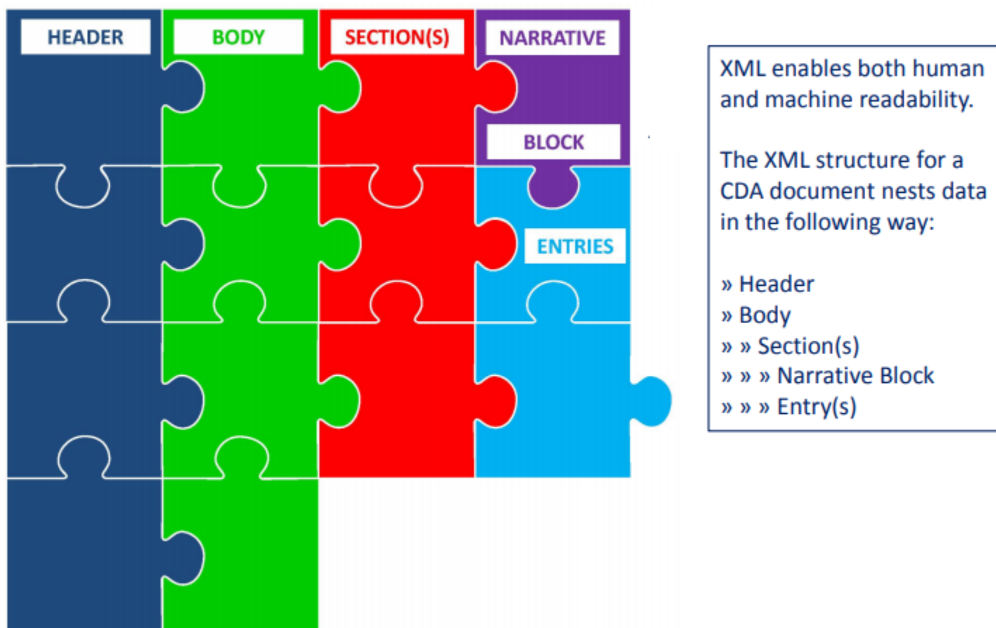
On-Demand Chart File Naming Convention. The default filename string for an On-demand Service is [athenaPracticeID]_[MESSAGEID]_[TIMESTAMP].out

Along with a preferred predefined static text, athenahealth can support following fields to be included in the file name:

- Athena Patient ID
- Athena Practice ID
- DATE: The date format (YYYYMMDD)
- DAY: The day (DD)
- DAYYEAR: The number of days since the start of the year, so January 1st is 1 and February 1st is 32. (DDD)
- EURODATE: The European date format (DDMMYYYY)
- HOUR: The Hour (HH)
- MESSAGEID: The ID number of the message/chart generated
- MESSAGETYPE: The type of message
- MINUTE: The Minute (MM)
- MONTH: The Month (MM)
- SECOND: The Second (S(S)). Single S if the second is <10
- SHORTYEAR: The last two digits of the year (YY)
- TIME: Time in HHMMSS
- TIMESTAMP: A time stamp (YYYYMMDDHHMMSS), so January 1st, 2015 at 1pm becomes 20150101130000.
- USDATE: The US date format (MMDDYYYY)
- YEAR: Four-digit Year (YYYY)
- CHASEID: ID given in the Member Roster file

Section Creation

The CCDA is comprised of 24 sections. Each section is constructed using entries which define and hold clinical data within the XML schema. Located at the top of each section is an entry dedicated to free text. This entry is used to surface all the relevant clinical data from its corresponding section. These values are pulled from the XML structure and wrapped in basic HTML tags. A complete CCDA is used in conjunction with an XSLT stylesheet to read these values and their HTML tags.



XML enables both human and machine readability.

The XML structure for a CDA document nests data in the following way:

» Header
» Body
» » Section(s)
» » » Narrative Block
» » » Entry(s)

Header Section

The Header Section is consistent across all athenahealth CCDA documents. Its purpose is to provide basic information pertaining to the patient, provider, and encounter.

ClinicalDocument

Subject	XPath	Code Set & Mapping	Description
Realm	/ClinicalDocument/realmCode	“US”	
Type	/ClinicalDocument/typeID	root="2.16.840.1.113883.1.3" extension="POCD_HD000040"	HL7 Registered Model
CCDA Template	/ClinicalDocument/templateId	root="2.16.840.1.113883.10.20.22.1.1” root="2.16.840.1.113883.10.20.22.1.2”	Denotes document is a CCDA
Global Doc ID	/ClinicalDocument/id	GUID (On-demand) athenaNet OID (RealTime)	On-demand: Unique document ID Real-Time: athenaNet OID.PracticeID || <PracticeID> || '.5.' || <messageid> || '.0'
Document Code	/ClinicalDocument/code	LOINC code=”34133-9” codeSystem=”2.16.840.1.113883.6.1”	Document Template: ‘Summarization of Episode Note’
Document Title	/ClinicalDocument/title		‘Coordinator for Healthplans - Encounter Summary’
Doc Creation Time	/ClinicalDocument/effectiveTime	US Realm Date/Time	Date the document was created
Confidentiality	/ClinicalDocument/confidentialityCode	HL7 Confidentiality	Found in HL7 Implementation Guide. confidentialityCode = N represents Normal patient. confidentialityCode = R represents Restricted patient.
Language	/ClinicalDocument/languageCode	Language ValueSet	Found in HL7 Implementation Guide

Patient

Subject	XPath	Code Set & Mapping	Description
Patient IDs	/ClinicalDocument/recordTarget/patientRole/id	athenaNet PatientID Patient SSN	‘root’: athenaNet OID.PracticeID ‘extension’: athenaNet PatientID
Patient Address	/ClinicalDocument/recordTarget/patientRole/addr	US Realm Address “HP”	
Patient Phone	/ClinicalDocument/recordTarget/patientRole/telecom	Telecom Use (US Realm Header)	
Patient Name	/ClinicalDocument/recordTarget/patientRole/patient/name	US Realm Patient Name	

Patient Gender	/ClinicalDocument/recordTarget/patientRole/patient/administrativeGenderCode	HL7 V3 Admin. Gender	
Patient DOB	/ClinicalDocument/recordTarget/patientRole/patient/birthtime		Stored as 'YYYYMMDD" e.g. "19800212"
Patient Marital	/ClinicalDocument/recordTarget/patientRole/patient/maritalStatusCode	HL7 Marital Status	
Patient Race	/ClinicalDocument/recordTarget/patientRole/patient/raceCode	CDC Race/Ethnicity	Multiple and specific races supported using "extension"
Patient Ethnicity	/ClinicalDocument/recordTarget/patientRole/patient/ethnicGroupCode	CDC Race/Ethnicity	Stored as either Hispanic/Latino or Not Hispanic/Latino
Patient Language	/ClinicalDocument/recordTarget/patientRole/patient/languageCommunication/languageCode	Language ValueSet	Patient's Preferred Language

Author (athenahealth)
The author captures the creator of the document. This is set to athenahealth for CCDAs.

Subject	XPath	Code Set & Mapping	Description
Timestamp	/ClinicalDocument/author/time	US Realm Date/Time	Found in HL7 Implementation Guide
Author ID	/ClinicalDocument/author/assignedAuthor/id	athenaNet OID	Found in HL7 Implementation Guide
Author Address	/ClinicalDocument/author/assignedAuthor/addr	US Realm Address "WP"	"311 Arsenal St", "Watertown", "MA" "02472", "US"
Author Phone	/ClinicalDocument/author/assignedAuthor/telecom	Telecom Use	"(617) 402-1000"
Author Device - Manufacturer	/ClinicalDocument/author/assignedAuthor/assignedAuthoringDevice/manufacturerModelName		'athenahealth'
Author Device - Software	/ClinicalDocument/author/assignedAuthor/assignedAuthoringDevice/softwareName		'athenahealth'
Represented Organization	/ClinicalDocument/author/assignedAuthor/representedOrganization		TIN, Medical Group name, Practice name and Department name (Displays Medical Group TIN ID tied to department where the Encounter occurred)

Custodian
The custodian is the party responsible for the lifecycle of the document. This is coded to athenahealth for CCDAs.

Subject	XPath	Code Set & Mapping	Description
Custodian ID	/ClinicalDocument/custodian/assignedCustodian/representedCustodianOrganization/id	NPI	Found in HL7 Implementation Guide
Custodian Name	/ClinicalDocument/custodian/assignedCustodian/representedCustodianOrganization/name		Set to athenahealth
Custodian Phone	/ClinicalDocument/custodian/assignedCustodian/representedCustodianOrganization/telecom	Telecom Use	"(617) 402-1000"
Custodian Address	/ClinicalDocument/custodian/assignedCustodian/representedCustodianOrganization/addr	US Realm Address "WP"	"311 Arsenal St", "Watertown", "MA" "02472", "US"

Legal Authenticator
The Legal Authenticator is the Rendering Provider of the encounter.

Subject	XPath	Code Set & Mapping	Description
Timestamp	/ClinicalDocument/legalAuthenticator/time	US Realm Date/Time	Found in HL7 Implementation Guide
Signature Code	/ClinicalDocument/legalAuthenticator/signatureCode	Participationsignature	S = signature on file X = signature not on file or not a provider **NOTE: If "X", then CCDA won't pass HL7 Validation**
Legal Authenticator NPI	/ClinicalDocument/legalAuthenticator/assignedEntity/id	NPI	Root = 2.16.840.1.113883.4.6 Extension = NPI
Legal Authenticator Address	/ClinicalDocument/legalAuthenticator/assignedEntity/addr	US Realm Address "WP"	If not a provider, "NI"
Legal Authenticator Phone	/ClinicalDocument/legalAuthenticator/assignedEntity/telecom	Telecom Use	If not a provider, "NI"
Legal Authenticator Name	/ClinicalDocument/legalAuthenticator/assignedEntity/assignedPerson/name		

DocumentationOf

The Care Team entries will be empty if there are no care team members on the chart. This section only includes care team members with 'relevant' roles (excludes "Test," "Oncologist," "Cardiologist," and "Patient" roles).

Subject	XPath	Code Set & Mapping	Description
Class Code	/ClinicalDocument/documentationOf/serviceEvent	classCode = "PCPR"	classCode PCPR = Care Provision
Created Date	/ClinicalDocument/documentationOf/serviceEvent/effectiveTime		
Performer Type Code	/ClinicalDocument/documentationOf/serviceEvent/performer	typeCode = "PRF"	Clinicians who actually and principally carry out serviceEvent
Performer Template ID	/ClinicalDocument/documentationOf/serviceEvent/performer/templateID	Root = "2.16.840.1.113883.10.20.6.2.1"	
Performer Function	/ClinicalDocument/documentationOf/serviceEvent/performer/functionCode		
Care Team ID	/ClinicalDocument/documentationOf/serviceEvent/performer/assignedEntity/id	NPI Only if Care Team member is a Clinical Provider	Found in HL7 Implementation Guide
Care Team Code	/ClinicalDocument/documentationOf/serviceEvent/performer/assignedEntity/code	NUCC HC Provider Taxonomy	Found in HL7 Implementation Guide
Care Team Address	/ClinicalDocument/documentationOf/serviceEvent/performer/assignedEntity/addr	US Realm Address "WP"	CareTeam section in Health History. Applicable to AS, DP, and SpecReg Clinical Provider Address
Care Team Phone	/ClinicalDocument/documentationOf/serviceEvent/performer/assignedEntity/telecom	Telecom Use	
Care Team Provider	/ClinicalDocument/documentationOf/serviceEvent/performer/assignedEntity/assignedPerson		

Care Team Represented Organization ID	/ClinicalDocument/documentationOf/serviceEvent/performer/assignedEntity/representedOrganization/id	GUID	Organization of treating clinicians
Care Team Represented Organization Name	/ClinicalDocument/documentationOf/serviceEvent/performer/assignedEntity/representedOrganization/name		
Care Team Represented Organization Phone Number	/ClinicalDocument/documentationOf/serviceEvent/performer/assignedEntity/representedOrganization/telecom		
Care Team Represented Organization Address	/ClinicalDocument/documentationOf/serviceEvent/performer/assignedEntity/representedOrganization/addr		

ComponentOf, EncompassingEncounter
The Encounter ID is the unique identifier of an encounter and remains static in subsequent documents to allow for linkage between CCDAs. Referring Provider is not included.

Subject	XPath	Code Set & Mapping	Description
ComponentOf Encounter ID	/ClinicalDocument/componentOf/encompassingEncounter/id	Root = ="2.16.840.1.113883.19	Specific encounter identifier
CompOf Date	/ClinicalDocument/componentOf/encompassingEncounter/effectiveTime		Date of encounter
Encounter Participant typeCode	/ClinicalDocument/componentOf/encompassingEncounter/encounterParticipant	typeCode = "ATND"	
Provider ID	/ClinicalDocument/componentOf/encompassingEncounter/encounterParticipant/assignedEntity/id@extension	NPI	Root = athenaNet OID Extension = provider's NPI
Provider Code	/ClinicalDocument/componentOf/encompassingEncounter/encounterParticipant/assignedEntity/code	NUCC HC Provider Taxonomy	
Provider Address	/ClinicalDocument/componentOf/encompassingEncounter/encounterParticipant/assignedEntity/addr	US Realm Address "WP"	CareTeam section in Health History. Applicable to PCS and SCR Clinical Provider Address for the Most Recent Encounter
Provider Phone	/ClinicalDocument/componentOf/encompassingEncounter/encounterParticipant/assignedEntity/telecom	Telecom Use	
Provider Name	/ClinicalDocument/componentOf/encompassingEncounter/encounterParticipant/assignedEntity/assignedPerson/name		

Reason for Visit Section

This section records the patient's reason for the visit (as documented by the provider).

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateID	Root = "2.16.840.1.113883.10.20.22.2.12"	HL7 Registered Model

Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	Code = "29299-5" Code System = "2.16.840.1.113883.6.1"	LOINC codes used for Reason for Visit section
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		"Reason for Visit"
Reason for Visit	/ClinicalDocument/component/structuredBody/component/section/text/		All checked boxes and free text entered in the "Reason for Visit" section

Chief Complaint Section

The Chief Complaint Section records the patient's chief complaint (the patient's own description).

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateID	Root = "1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	Code = " 10154-3" Code System = "2.16.840.1.113883.6.1"	LOINC codes used for Chief Complaint Section
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		"Chief Complaint"
Chief Complaint	/ClinicalDocument/component/structuredBody/component/section/text/		All free text entered in the "Chief Complaint" section

Assessment Section [Instructions section renamed to Assessment]

The Assessment Section contains a single instructions entry capturing "clinical instructions" added through the discussion note in athenaNet. It also contains any "Patient info" orders given to the patient entered into the assessment note. These are orders for informational pamphlets usually related to a condition, medication, or other clinical situation. Diagnoses notes will be shown only if the provider has the "Include notes for diagnoses in the encounter summary" user preference enabled. ICD-10 codes are included in this section.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "2.16.840.1.113883.10.20.22.2.45"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	LOINC Code = "69730-0" Code System = "2.16.840.1.113883.6.1"	LOINC codes used for Instructions section
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		"Instructions"

XML Data ICD 10 Codes

Entry Act Code	**/ClinicalDocument/component/structuredBody/component/section/entry/act**	**moodCode = "INT" classCode = "ACT"**	
Act Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/act/templateId	Root = 2.16.840.1.113883.10.20.22.2.45	HL7 Registered Model
Act Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/code	codeSystem = '2.16.840.1.113883.6.3"	ICD 10 Code
Status	/ClinicalDocument/component/structuredBody/component/section/entry/act/statusCode		Set to 'Completed'

XML Data Instructions

Entry Act Code	**/ClinicalDocument/component/structuredBody/component/section/entry/act**	**moodCode = "INT" classCode = "ACT"**	
Act Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/act/templateId	Root = "2.16.840.1.113883.10.20.22.4.20"	HL7 Registered Model
Act Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/code	Code = "311401005" codeSystem = "2.16.840.1.113883.6.96"	SNOMED Patient Education
Text	/ClinicalDocument/component/structuredBody/component/section/entry/act/text		Physician instruction notes for each assessment item
Status	/ClinicalDocument/component/structuredBody/component/section/entry/act/statusCode		Set to 'Completed'

Assessment Section [Old Assessment Section Deprecated]

The Assessment section (also referred to as "impression" or "diagnoses" outside of the context of CDA) represents the clinician's conclusions and working assumptions that will guide treatment of the patient. The assessment may be a list of specific disease entities or a narrative block. Display details captured under Assessment and Plan section of athenaClinicals.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "2.16.840.1.113883.10.20.22.2.8"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	Code = "51848-0" Code System = "2.16.840.1.113883.6.1"	LOINC codes used for Assessment section
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		"Assessment"
Text	/ClinicalDocument/component/structuredBody/component/section/text		

Plan of Treatment Section [Plan of Care section renamed to Plan of Treatment]

The Plan of Treatment Section contains data that defines pending orders, interventions, encounters, services, and procedures for the patient. It is limited to prospective, unfulfilled, or incomplete orders and requests only, which are indicated by the @moodCode of the entries within this section. All active, incomplete, or pending orders, appointments, referrals, procedures, and services.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "2.16.840.1.113883.10.20.22.2.10"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	Code = “18776-5” Code System = “2.16.840.1.113883.6.1”	LOINC codes used for Plan of Treatment section
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		“Plan of Treatment”

Future Encounter

Subject	XPath	Code Set & Mapping	Description
Encounter Section Code	/ClinicalDocument/component/structuredBody/component/section/entry/encounter	moodCode = “INT” classCode = “ENC”	
Encounter Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/templateId	Root = "2.16.840.1.113883.10.20.22.4.40"	HL7 Registered Model
Encounter Code	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/code	Code = "311401005" CodeSystem = "2.16.840.1.113883.6.96"	SNOMED CT Patient Education
Encounter Date	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/effectiveTime		Date of future encounter
Performer Type Code	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/performer	typeCode = “PRF”	Performer for future encounter
Performer GUID	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/performer/assignedEntity/id	GUID	
Performer Address	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/performer/assignedEntity/addr	US Realm Address “WP”	
Performer Phone Number	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/performer/assignedEntity/atelecom	Telecom Use = “WP”	
Performer Name	/ClinicalDocument/component/structuredBody/component/section/		

	entry/encounter/performer/assignedEntity/assignedPerson/name		

Future Test

Subject	XPath	Code Set & Mapping	Description
Test Section Code	/ClinicalDocument/component/structuredBody/component/section/entry/observation	moodCode = "INT" classCode = "OBS"	
Test Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/obesrvation/templateId	Root = "2.16.840.1.113883.10.20.22.4.44"	HL7 Registered Model
Test GUID	/ClinicalDocument/component/structuredBody/component/section/entry/obesrvation/id	GUID	
Test Code	/ClinicalDocument/component/structuredBody/component/section/entry/obesrvation/code	Code = "311401005" CodeSystem = "2.16.840.1.113883.6.96"	SNOMED CT Patient Education
Test Date	/ClinicalDocument/component/structuredBody/component/section/entry/obesrvation/effectiveTime		Date of future test

XML Data Instructions

Entry Act Code	**/ClinicalDocument/component/structuredBody/component/section/entry/act**	**moodCode = "INT" classCode = "ACT"**	
Act Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/act/templateId	Root = "2.16.840.1.113883.10.20.22.4.20"	HL7 Registered Model
Act Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/code	Code = "311401005" codeSystem = "2.16.840.1.113883.6.96"	SNOMED Patient Education
Text	/ClinicalDocument/component/structuredBody/component/section/entry/act/text		Physician instruction notes
Status	/ClinicalDocument/component/structuredBody/component/section/entry/act/statusCode		Set to 'Completed'

Medications Section

The Medications Section captures a patient's active and completed medication list. It does not include hidden medications, deleted medications. Additional notes at medication item level are provided. **Note:** If the date of CCDA generation is greater than the current encounter date, then the Medication section shall reflect the current status of the active medications listed in this section.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "2.16.840.1.113883.10.20.22.2.1"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	

Section Code	/ClinicalDocument/component/structuredBody/component/section/code	LOINC Code = “10160-0” Code System = “2.16.840.1.113883.6.1”	LOINC codes used for Medications section
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		“Medications”

Medication Activity
A medication activity describes substance administrations that have actually occurred (e.g. pills ingested or injections given) or are intended to occur (e.g. ""take 2 tablets twice a day for the next 10 days""). Medication activities in ""INT"" mood are reflections of what a clinician intends a patient to be taking. Medication activities in ""EVN"" mood reflect actual use.

Medication timing is complex. This template requires that there be a substanceAdministration/effectiveTime valued with a time interval, representing the start and stop dates. Additional effectiveTime elements are optional and can be used to represent frequency and other aspects of more detailed dosing regimens.

Subject	XPath	Code Set & Mapping	Description
Administration	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdmnistration	moodCode = “INT” classCode = “SBADM”	
Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/templateId	Root = “2.16.840.1.113883.10.20.22.4.16”	HL7 Registered Model
Section ID	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/id	GUID	
Sig/Instructions	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/text		Sig/Instructions for the medications
Status	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/statusCode		Set to ‘Completed’
Start/Stop Dates	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/effectiveTime(xsi:type=”IVL_TS”)/	Xsi:type = “IVL_TS”	Medication start/stop dates
Effective Time	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/effectiveTime(xsi:type=”PIVL_TS”)/period	Xsi:type = “PIVL_TS” institutionSpecified = “false”	Medication administration frequency (timing)
Dose	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdminsitration/doseQuantity	Units of Measure Case Sensitive ValueSet	nullFlavor when the doseQuantity is not under UoM ValueSet.
Prescribing Clinician NPI	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdminsitration/performer/assignedEntity/id	Root = “2.16.840.1.113883.4.6” Extension = provider NPI number	Only available when athenaNet provider prescribes medication

Medication Information
The medication can be recorded as a pre-coordinated product strength, product form, or product concentration (e.g., ""metoprolol 25mg tablet"", ""amoxicillin 400mg/5mL suspension""); or not pre-coordinated (e.g., ""metoprolol product"").

Subject	XPath	Code Set & Mapping	Description

Manufactured Product Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/consumable/manufacturedProduct	classCode = "MANU"	
Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/consumable/manufacturedProduct/templateId	Root = "2.16.840.1.113883.10.20.22.4.23"	HL7 Registered Model
Manufactured Material Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdminsitration/consumable/manufacturedProduct/manufacturedMaterial/code	Medication Clinical Drug Name ValueSet	RxCUI is RxNorm's unique identifier for medications
Medication Translation Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdminsitration/consumable/manufacturedProduct/manufacturedMaterial/code/translation	codeSystemName = "NDC" or other codeset	Translations can be used to represent generic product name, etc For NDC code translations, all possible NDC code translations are included if athenaNet unable to provide 1:1 mapping
Medication Name	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdminsitration/consumable/manufacturedProduct/manufacturedMaterial/name		
Prescribing Clinician NPI	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdminsitration/performer/assignedEntity/id	Root = "2.16.840.1.113883.4.6" Extension = provider NPI number	Only available when athenaNet provider prescribes medication

Medication Supply Order
This template records the intent to supply a patient with medications. It includes the Medication Information and Medication Instructions subsections per HL7 validation purposes.
(see above for Medication Instructions description)

Medication Instructions
The Instructions template can be used in several ways, such as to record patient instructions within a Medication Activity or to record fill instructions within a supply order. The act/code defines the type of instruction.

Subject	XPath	Code Set & Mapping	Description
Entry Type Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship	typeCode = "REFR"	
Supply Type Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply	classCode = "SPLY" moodCode = "INT"	
Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/templateID	root = ""2.16.840.1.113883.10.20.22.4.17"	
Section ID	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/id	GUID	

Status Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/statusCode	Code = “completed”	
Prescription Quantity	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/quantity		Size of the prescription
Medication Information			
Manufactured Product Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/product/manufacturedProduct	classCode = “MANU”	
Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/product/manufacturedProduct /templateId	Root = “2.16.840.1.113883.10.20.22.4.23"	HL7 Registered Model
Manufactured Material Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/product/manufacturedProduct /manufacturedMaterial/code	Medication Clinical Drug Name ValueSet	RxCUI is RxNorm’s unique identifier for medications
Medication Translation Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/product/manufacturedProduct /manufacturedMaterial/code/translation	codeSystemName = “NDC” or other codeset	Translations can be used to represent generic product name, etc **For NDC code translations, all possible NDC code translations are included if athenaNet unable to provide 1:1 mapping**
Medication Name	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/product/manufacturedProduct /manufacturedMaterial/name		
Medication Instructions			
Entry Type Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/entryRelationship	typeCode = “SUBJ” inversionInd = “true”	
Act Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/entryRelationship/act	moodCode = “INT” classCode = “ACT”	
Act Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/entryRelationship/act/templateId	Root = "2.16.840.1.113883.10.20.22.4.20”	HL7 Registered Model
Act Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/entryRelationship/act/code	Code = "311401005" CodeSystem = "2.16.840.1.113883.6.96"	SNOMED CT Codes Patient Education
Timing Instructions	/ClinicalDocument/component/structuredBody/component/section/entry/substance		Instructions on when to take medications

	Administration/entryRelationship/supply/entryRelationship/act/text		
Act Status	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/entryRelationship/act/statusCode		Set to 'Completed'

Medications Administered Section

The Medications Administered Section captures medications the patient received during the visit. The medication has to be marked as administered (not just ordered) in a specific encounter for this section to appear. This section excludes deleted, unapproved, and non-prescription orders.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "2.16.840.1.113883.10.20.22.2.38"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	LOINC Code = "29549-3" Code System = "2.16.840.1.113883.6.1"	LOINC codes used for medications
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		"Medications Administered"

Medications Activity

A medication activity describes substance administrations that have actually occurred (e.g. pills ingested, or injections given) or are intended to occur (e.g. ""take 2 tablets twice a day for the next 10 days""). Medication activities in ""INT"" mood are reflections of what a clinician intends a patient to be taking. Medication activities in ""EVN"" mood reflect actual use.

Medication timing is complex. This template requires that there be a substanceAdministration/effectiveTime valued with a time interval, representing the start and stop dates. Additional effectiveTime elements are optional and can be used to represent frequency and other aspects of more detailed dosing regimens.

Subject	XPath	Code Set & Mapping	Description
Administration	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdmnistration	moodCode = "EVN" classCode = "SBADM"	
Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/templateId	Root = "2.16.840.1.113883.10.20.22.4.16"	HL7 Registered Model
Section ID	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/id	GUID	
Sig/Instructions	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/text		Sig/Instructions for the medications
Status	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/statusCode		Set to 'Completed'

Start/Stop Dates	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/effectiveTime/		Start/stop dates of medication
Dose	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdminsitration/doseQuantity	Units of Measure Case Sensitive ValueSet	NullFlavor when doseQuantity is not under UoM valueset
Prescribing Clinician NPI	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdminsitration/performer/assignedEntity/id		

Medication Information
The medication can be recorded as a pre-coordinated product strength, product form, or product concentration (e.g., ""metoprolol 25mg tablet"", ""amoxicillin 400mg/5mL suspension""); or not pre-coordinated (e.g., ""metoprolol product"").

Subject	XPath	Code Set & Mapping	Description
Manufactured Product Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/consumable/manufacturedProduct	classCode = “MANU”	
Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/consumable/manufacturedProduct/templateId	Root = “2.16.840.1.113883.10.20.22.4.23”	HL7 Registered Model
Manufactured material Name	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdminsitration/consumable/manufacturedProduct/manufacturedMaterial/name		Medication List
Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdminsitration/consumable/manufacturedProduct/manufacturedMaterial/code	Medication Clinical Drug Name Value ValueSet	RxCUI is RxNorm’s unique identifier for medications
Medication Translation Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdminsitration/consumable/manufacturedProduct/manufacturedMaterial/code/translation		Translations can be used to represent generic product name, etc **For NDC code translations, all possible NDC code translations are included if athenaNet unable to provide 1:1 mapping**
Prescribing Clinician NPI	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdminsitration/performer/assignedEntity/id	Root = “2.16.840.1.113883.4.6” Extension = provider NPI number	Only available when athenaNet provider prescribes medication

Medication Supply Order
This template records the intent to supply a patient with medications. It includes the Medication Information and Medication Instructions subsections per HL7 validation purposes.
(see above for Medication Information description)

Medication Instructions
The Instructions template can be used in several ways, such as to record patient instructions within a Medication Activity or to record fill instructions within a supply order. The act/code defines the type of instruction.

Subject	XPath	Code Set & Mapping	Description
Entry Type Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship	typeCode = "REFR"	
Supply Type Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply	classCode = "SPLY" moodCode = "INT"	
Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/templateID	root = ""2.16.840.1.113883.10.20.22.4.17"	
Section ID	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/id	GUID	
Status Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/statusCode	Code = "completed"	
Prescription Quantity	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/quantity		Size of the prescription
Medication Information			
Manufactured Product Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/product/manufacturedProduct	classCode = "MANU"	
Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/product/manufacturedProduct /templateId	Root = "2.16.840.1.113883.10.20.22.4.23"	HL7 Registered Model
Manufactured Material Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/product/manufacturedProduct /manufacturedMaterial/code	Medication Clinical Drug Name ValueSet	RxCUI is RxNorm's unique identifier for medications
Medication Translation Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/product/manufacturedProduct /manufacturedMaterial/code/translation	codeSystemName = "NDC" or other codeset	Translations can be used to represent generic product name, etc **For NDC code translations, all possible NDC code translations are included if athenaNet unable to provide 1:1 mapping**
Medication Name	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/product/manufacturedProduct /manufacturedMaterial/name		

Medication Instructions			
Entry Type Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/entryRelationship	typeCode = "SUBJ" inversionInd = "true"	
Act Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/entryRelationship/act	moodCode = "INT" classCode = "ACT"	
Act Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/entryRelationship/act/templateId	Root = "2.16.840.1.113883.10.20.22.4.20"	HL7 Registered Model
Act Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/entryRelationship/act/code	Code = "311401005" CodeSystem = "2.16.840.1.113883.6.96"	SNOMED CT Codes Patient Education
Timing Instructions	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/entryRelationship/act/text		Instructions on when to take medications
Act Status	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/entryRelationship/supply/entryRelationship/act/statusCode		Set to 'Completed'

Vital Signs Section

The Vital Signs Section captures the following if recorded during the encounter: height, weight, calculated body mass index (BMI), BMI Percentile, blood pressure, heart rate, pulse, oxygen saturation, respiration rate, inhaled oxygen concentration, and temperature. The Vital Signs Section is comprised of two entries: the Results Organizer and the Results Observation. The Results Organizer groups vitals by the encounter where they were captured.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "2.16.840.1.113883.10.20.22.2.4.1"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	code="8716-3"Code System = "2.16.840.1.113883.6.1" codeSystemName="LOINC"	SNOMED codes used for vital signs
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		"Vital Signs"

Vitals Organizer

The Vital Signs Organizer groups vital signs, which is similar to the Result Organizer, but with further constraints. An appropriate nullFlavor can be used when the organizer/code or organizer/id is unknown.

Subject	XPath	Code Set & Mapping	Description

Vitals Organizer Type Code	/ClinicalDocument/component/structuredBody/component/section/entry	typeCode = "DRIV"	
Vitals Organizer	/ClinicalDocument/component/structuredBody/component/section/entry/organizer	moodCode = "EVN" classCode = "CLUSTER"	
Vitals Organizer Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/templateId	Root = "2.16.840.1.113883.10.20.22.4.26"	HL7 Registered Model
Vitals Organizer GUID	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/id	GUID	
Vitals Organizer Code	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/code	Code = "46680005" codeSystem = "2.16.840.1.113883.6.96"	SNOMED CT Vital Signs
Status	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/statusCode		Set to 'Completed'
Timestamp	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/effectiveTime		Clinically effective time of the measurement (when the measurement was performed)

Vitals Observation

Vital signs are represented as are other results, with additional vocabulary constraints.

Subject	XPath	Code Set & Mapping	Description
Vital Observation	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation	moodCode = "EVN" classCode = "OBS"	Observation
Vital Observation Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/templateid	Root = "2.16.840.1.113883.10.20.22.4.27"	HL7 Registered Model
Vital Observation GUID	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/id	GUID	
Vital Observation Code	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/code	Code = 3141-9" Code System = "2.16.840.1.113883.6.1"	LOINC code associated with the vital sign being recorded
Notes	/ClinicalDocument/component/structuredBody/component/section/text/table/tbody/tr/td/content		Text Notes
Vital Name	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/code("displayName")		
Vital Status	/ClinicalDocument/component/structuredBody/component/section/entry/statusCode		Set to 'Completed'
Vital Timestamp	/ClinicalDocument/component/structuredBody/component/section/entry/effectiveTime		Last modified date on vital
Vital Value and Units	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/value	Xsi:type = "PQ"	Includes units when applicable

Results Section

The Results Section may contain observations of results generated by laboratories, imaging procedures, and other procedures. These coded result observations are contained within a Results Organizer in the Results Section. The scope includes observations such as hematology, chemistry, serology, virology, toxicology, microbiology, plain x-ray, ultrasound, CT, MRI, angiography, echocardiography, nuclear medicine, pathology, and procedure observations.

The section often includes notable results such as abnormal values or relevant trends and displays all completed results for the historic timeframe of 1-year from the current encounter. **Note:** If the date of CCDA generation is greater than the current encounter date, then the Result section would also include the results linked to that encounter (if available).

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody /component/section/templateId	Root = “2.16.840.1.113883.10.20.22.2.3.1”	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody /component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody /component/section/code	Code = “30954-2” Code System = “2.16.840.1.113883.6.1”	LOINC codes used
Section Title	/ClinicalDocument/component/structuredBody /component/section/title		“Results”

Lab Results Section
The Lab Results Section contains results that is recorded in athenaNet by either receiving an HL7 document or by creating a “Lab Results” document. Only documents in one of the following statuses can be pulled into the CCDA: Final, Corrected, Signed, Completed. Lab Results received via fax will not automatically be pulled into the CCDA document.

Result Organizer
This clinical statement identifies set of result observations. It contains information applicable to all of the contained result observations. Result type codes categorize a result into one of several commonly accepted values (e.g., “Hematology”, “Chemistry”, “Nuclear Medicine”). These values are often implicit in the Organizer/code (e.g., an Organizer/code of “complete blood count” implies a ResultTypeCode of “Hematology”). This template requires Organizer/code to include a ResultTypeCode either directly or as a translation of a code from some other code system.

An appropriate nullFlavor can be used when the organizer/code or organizer/id is unknown.

Subject	XPath	Code Set & Mapping	Description
Result Organizer	/ClinicalDocument/component/structuredBody /component/section/entry/organizer	moodCode = “EVN” classCode = “BATTERY”	
Result Organizer Template ID	/ClinicalDocument/component/structuredBody /component/section/entry/organizer/templateId	Root = "2.16.840.1.113883.10.20.22.4.1”	HL7 Registered Model
Result Organizer GUID	/ClinicalDocument/component/structuredBody /component/section/entry/organizer/id	GUID	
Code	/ClinicalDocument/component/structuredBody /component/section/entry/organizer/code	xsI;type = “CE” Code System = "2.16.840.1.113883.6.1"	LOINC Code for the Lab Order
Result Test Name	/ClinicalDocument/component/structuredBody /component/section/entry/organizer/code(“displayName”)		Name of test for which result was obtained
Status	/ClinicalDocument/component/structuredBody /component/section/entry/organizer/statusCode		Set to ‘Completed’

Date of Result	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/effectiveTime		

Result Observation
This clinical statement represents details of a lab or other study performed on a patient.
The result observation includes a statusCode to allow recording the status of an observation. Only completed Results are sent in the Result Observation element.

Subject	XPath	Code Set & Mapping	Description
Result Observation	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation	moodCode = “EVN” classCode = “OBS”	
Result Observation Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/templateID	Root = "2.16.840.1.113883.10.20.22.4.2"	HL7 Registered Model
Result Observation GUID	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/id	GUID	
Result Observation Name	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/code(displayName)	LOINC	Result observation metric name
Result Code	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/code	LOINC	LOINC code for the lab result
Result Observation Status	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/statusCode	Result Status ValueSet	Completed
Result Observation Time	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/effectiveTime		Clinically effective time of the measurement. This is the test performed on a result (aka analyte) and usually falls on/before Specimen Reported Date
Result Value	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/value	String or QTY Xsi:type = “CD” or “PQ”	Description of the result
Translation	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/value/translation		Numeric value and athena specific units for results with value tag nullFlavored
Interpretation Code	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/interpretationCode	Code System = “2.16.840.1.113883.5.83”	Observation Interpretation
Reference Range	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/referenceRange/observationRange/text		Average range of values for results

Imaging Results Section *(if enabled)*
The Imaging Results Section contains results that is recorded in athenaNet by either receiving an HL7 document or by creating a "Imaging Results" document. Only documents in one of the following statuses can be pulled into the CCDA: Final, Corrected, Signed, Completed.

Note: Imaging Results are enabled only for Chart Attachments feature (Refer 'Unstructured CCDA Specifications' for more details)

Result Organizer
This clinical statement identifies set of result observations. This statement shall contain all the completed Imaging Results of the patient. It contains information applicable to all of the contained result observations. Each Imaging Results shall be sent in separate Result Observation element

Subject	XPath	Code Set & Mapping	Description
Result Organizer	/ClinicalDocument/component/structuredBody /component/section/entry/organizer	moodCode = "EVN" classCode = "BATTERY"	
Result Organizer Template ID	/ClinicalDocument/component/structuredBody /component/section/entry/organizer/templateI d	Root = "2.16.840.1.113883.10.2 0.22.4.1"	HL7 Registered Model
Result Organizer GUID	/ClinicalDocument/component/structuredBody /component/section/entry/organizer/id	GUID	
Code	/ClinicalDocument/component/structuredBody /component/section/entry/organizer/code	xsI;type = "CE" Code System = "2.16.840.1.113883.6.1"	LOINC Code for Radiology Studies
Result Test Name	/ClinicalDocument/component/structuredBody /component/section/entry/organizer/code("dis playName")		Radiology Studies
Status	/ClinicalDocument/component/structuredBody /component/section/entry/organizer/statusCod e		Set to 'Completed'

Result Observation
This clinical statement represents details of a radiology/Imaging test performed on a patient. The result observation includes only Imaging Results with completed status.

Subject	XPath	Code Set & Mapping	Description
Result Observation	/ClinicalDocument/component/structuredBo dy/component/section/entry/organizer/comp onent/observation	moodCode = "EVN" classCode = "OBS"	
Result Observation Template ID	/ClinicalDocument/component/structuredBo dy/component/section/entry/organizer/comp onent/observation/templateID	Root = "2.16.840.1.113883.10.2 0.22.4.2"	HL7 Registered Model
Result Observation GUID	/ClinicalDocument/component/structuredBo dy/component/section/entry/organizer/comp onent/observation/id	GUID	
Result Observation Name	/ClinicalDocument/component/structuredBo dy/component/section/entry/organizer/comp onent/observation/code(displayName)	LOINC	Result observation name
Result Code	/ClinicalDocument/component/structuredBo dy/component/section/entry/organizer/comp onent/observation/code	LOINC	LOINC code for the Imaging result
Result Observation Status	/ClinicalDocument/component/structuredBo dy/component/section/entry/organizer/comp onent/observation/statusCode	Result Status ValueSet	Completed

Result Observation Time	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/effectiveTime		Clinically effective time of the measurement
Result Value	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/value	String Xsi:type = "ED"	Description of the result
Date of Result	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/effectiveTime		
Provider Details	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/author		Details of the place where the Test was conducted

Allergies Section

The Allergies Section captures all active allergies stored in the patient's allergy list. It does not include soft-deleted allergies in the chart but does include NKDA pseudo-allergies (see NKDA note below). Additional notes for allergies are provided.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "2.16.840.1.113883.10.20.22.2.6.1"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	LOINC Code = "48765-2" Code System = "2.16.840.1.113883.6.1"	LOINC codes used for Allergies section
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		"Allergies"

Allergies, Adverse Reactions, Alerts

This section lists and describes any medication allergies, adverse reactions, idiosyncratic reactions, anaphylaxis/anaphylactoid reactions to food items, and metabolic variations or adverse reactions/allergies to other substances (such as latex, iodine, tape adhesives) used to assure the safety of health care delivery. At a minimum, it should list currently active and any relevant historical allergies and adverse reactions.

Subject	XPath	Code Set & Mapping	Description
Act Class Code	/ClinicalDocument/component/structuredBody/component/section/entry/act	classCode = "ACT" moodCode = "EVN"	
Act Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/act/templateId	Root = "2.16.840.1.113883.10.20.22.4.30"	HL7 Registered Model
Act GUID	/ClinicalDocument/component/structuredBody/component/section/entry/act/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/code	LOINC Code = "48765-2"	LOINC codes used for Allergies section

		Code System = "2.16.840.1.113883.6.1"	"Allergies, adverse reactions, alerts"
Status	/ClinicalDocument/component/structuredBody/component/section/entry/act/statusCode	ProblemAct statusCode ValueSet	If no deactivation date = "Active" If deactivation date is not blank = "Completed"
Act Effective Time	/ClinicalDocument/component/structuredBody/component/section/entry/act/effectiveTime/low		Date/time added to the chart If active, effectiveTime contains 'low' If completed, effectiveTime contains 'high'

Assertion
This clinical statement represents that an allergy or adverse reaction exists or does not exist. The agent that is the cause of the allergy or adverse reaction is represented as a manufactured material participant playing entity in the allergy observation. While the agent is often implicit in the alert observation (e.g. ""allergy to penicillin""), it should also be asserted explicitly as an entity. The manufactured material participant is used to represent natural and non-natural occurring substances.

Note: The agent responsible for an allergy or adverse reaction is not always a manufactured material (for example, food allergies), nor is it necessarily consumed. The following constraints reflect limitations in the base CDA R2 specification and should be used to represent any type of responsible agent.

Subject	XPath	Code Set & Mapping	Description
Entry Type Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/	typeCode = "SUBJ"	
Observation Class Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation	classCode = "OBS" moodCode = "EVN"	Observation Event
Observation Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/templateId	Root = "2.16.840.1.113883.10.20.22.4.7"	HL7 Registered Model
Observation GUID	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/id	GUID	
Sub-Section Header	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/code	CodeSystem = "2.16.840.1.113883.5.4"	"ASSERTION"
Entry Status	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/statusCode		Set to 'Completed'
Onset Date	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/effectiveTime		If onset date is unknown, effectiveTime contains low/@nullFlavor = "UNK" If allergy is no longer a concern, effectiveTime may contain 'high'
Entry Value	**/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/value**	**Code = "CD" codeSystem="2.16.840.1.113883.6.96"**	**"Allergy to Substance"**

Participant

Subject	XPath	Code Set & Mapping	Description
Type Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/participant	typeCode = “CSM”	Consumable
Participant Class Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/participant/participantRole	classCode = “MANU”	Manufactured Product
Playing Entity	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/participant/participantRole/playingEntity	classCode = “MMAT”	Manufactured Material
Playing Entity Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/participant/participantRole/playingEntity/code	RxNorm Code System = “2.16.840.1.113883.6.88”	RxNorm codes used for Allergies
Allergy Substance	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/participant/participantRole/playingEntity/code(displayName)	ValueSet	Allergy substance name
Translation	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/participant/participantRole/playingEntity/code/translation		

Reaction Observation

This clinical statement represents an undesired symptom, finding, etc., due to an administered or exposed substance. A reaction can be defined with respect to its severity and can have been treated by one or more interventions.

Subject	XPath	Code Set & Mapping	Description
Entry Type Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/entryRelationship	typeCode = “MFST” inversionInd = “true”	Is Manifestation Of
Observation Class Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/entryRelationship/observation	classCode = “OBS” moodCode = “EVN”	Observation Event
Observation Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/entryRelationship/observation/templateId	Root ="2.16.840.1.113883.10.20.22.4.9"	HL7 Registered Model
Observation GUID	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/entryRelationship/observation/id	GUID	
Observation Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/entryRelationship/observation/code	codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"	Problem Type SNOMED ValueSet
Status	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelation		Set to ‘Completed’

	ship/observation/entryRelationship/observation/statusCode		
Reaction	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship(typeCode="MFST")/observation/entryRelationship/observation/value(displayName)	SNOMED Xsi:type = "CD" Problem ValueSet	See list below.

Severity Observation
This clinical statement represents the gravity of the problem, such as allergy or reaction, in terms of its actual or potential impact on the patient. The Severity Observation can be associated with an Allergy Observation, Reaction Observation, or both. When the Severity Observation is associated directly with an Allergy it characterizes the Allergy. When the Severity Observation is associated with a Reaction Observation it characterizes a Reaction. A person may manifest many symptoms in a reaction to a single substance, and each reaction to the substance can be represented. However, each reaction observation can have only one severity observation associated with it. For example, someone may have a rash reaction observation as well as an itching reaction observation, but each can have only one level of severity.

Subject	XPath	Code Set & Mapping	Description
Entry Type Code	/ClinicalDocument/component/structuredBody/comopnent/section/entry/act/entryRelationship/observation/entryRelationship	typeCode = "SUBJ" inversionInd = "true"	Has Subject
Observation Class Code	/ClinicalDocument/component/structuredBody/comopnent/section/entry/act/entryRelationship/observation/entryRelationship/observation	classCode = "OBS" moodCode = "EVN"	Observation
Observation Template ID	/ClinicalDocument/component/structuredBody/comopnent/section/entry/act/entryRelationship/observation/entryRelationship/observation/templateId	Root = "2.16.840.1.113883.10.20.22.4.8"	HL7 Registered Model
Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/entryRelationship/observation/code	HL7 Act Code Code = "SEV" Code System ="2.16.840.1.113883.5.4"	HL7 Act Code used for Severity
Status	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/entryRelationship/observation/statusCode		Set to 'Completed'
Severity	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship(typeCode="SUBJ")/observation/entryRelationship/observation/value	Xsi:type = "CD" Observation Interpretation ValueSet SNOMED	A provider must choose to turn on an internal setting to display severity.

Supported List of Reactions and Severities

Reaction			Severity
Anaphylaxis	Dizziness	Nausea	Mild
Angioedema	Headache	Other	Mild to moderate
Arthralgia (joint pain)	Hives	Photosensitivity	Moderate
Chest pain	Irregular Heart rate	Rash	Moderate to Severe

Cough	Itching	Respiratory distress	Severe
Diarrhea	Myalgia (muscle pain)	Vomiting	Fatal

NKDA Behavior

Checking the “NKDA” box in athenaNet creates an entry with values set to the null flavor “UNK.” If the user doesn’t check the NKDA box or indicate any allergies, we send the null flavor “NI.”

No Known Allergies Entry

athenaNet allows for a “No Known Allergy” entry to be added to the allergy list. This indicated that there are no known allergies of any kind and is separate from NKDA (which refers to drug allergies only). This is considered an ‘active’ absence of allergies and is treated as any other active allergy.

Problems Section

The Problems Section captures a patient’s active and completed problem list. This section appears even if the “No Known Problems Checked” flag is selected. Additional notes for problems are provided.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody /component/section/templateId	Root = “2.16.840.1.113883.10.20 .22.2.5.1”	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody /component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody /component/section/code	Code = “11450-4” Code system: “2.16.840.1.113883.6.1"	LOINC
Section Title	/ClinicalDocument/component/structuredBody /component/section/title		“Problems”

Problem Concern Act (Condition)

Observations of problems or other clinical statements captured at a point in time are wrapped in a ""Concern"" act, which represents the ongoing process tracked over time. This allows for binding related observations of problems. For example, the observation of ""Acute MI"" in 2004 can be related to the observation of ""History of MI"" in 2006 because they are the same concern. The conformance statements in this section define an outer ""problem act"" (representing the ""Concern"") that can contain a nested ""problem observation"" or other nested clinical statements.

Subject	XPath	Code Set & Mapping	Description
Act Code	/ClinicalDocument/component/structuredBody /component/section/entry/act	moodCode = “EVN” classCode = “ACT”	
Act Template ID	/ClinicalDocument/component/structuredBody /component/section/entry/act/templateId	Root = "2.16.840.1.113883.10.20 .22.4.3"	HL7 Registered Model
Act GUID	/ClinicalDocument/component/structuredBody /component/section/entry/act/id	GUID	
Problem Concern Status (Act)	/ClinicalDocument/component/structuredBody /component/section/entry/act/statusCode	Active or Completed if end date indicated	If the problem is marked hidden, the status is completed; otherwise, active
Problem Concern Code	/ClinicalDocument/component/structuredBody /component/section/entry/act/code	Code = “CONC” CodeSystem = "2.16.840.1.113883.5.6"	Concern
Act Start Date	/ClinicalDocument/component/structuredBody /component/section/entry/act/effectiveTime/lo w		Start date the concern was active on the Problem List

Act Completed Date	/ClinicalDocument/component/structuredBody/component/section/entry/act/effectiveTime/high	Date the concern was stopped on the Problem List

Problem Observation

A problem is a clinical statement that a clinician has noted. In healthcare it is a condition that requires monitoring or diagnostic, therapeutic, or educational action. It also refers to any unmet or partially met basic human need.
A Problem Observation is required to be wrapped in an act wrapper in locations such as the Problem Section, Allergies Section, and Hospital Discharge Diagnosis Section, where the type of problem needs to be identified or the condition tracked.

A Problem Observation can be a valid ""standalone"" template instance in cases where a simple problem observation is to be sent.

The negationInd attribute, if true, specifies that the problem indicated was observed to not have occurred (which is subtly but importantly different from having not been observed). NegationInd='true' is an acceptable way to make a clinical assertion that something did not occur, for example, 'no diabetes'.

Subject	XPath	Code Set & Mapping	Description
Entry Type Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship	typeCode = “SUBJ” inversionInd = “false”	
Observation Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation	moodCode = “EVN” classCode = “OBS”	negationInd = “true” if problem was not observed
Observation Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/templateId	Root = "2.16.840.1.113883.10.20.22.4.4”	HL7 Registered Model
Observation GUID	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/id	GUID	
Observation Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/code	Code = "55607006" CodeSystem = "2.16.840.1.113883.6.96"	Problem Type ValueSet SNOMED CT
Problem Status (Observation)	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/statusCode	Completed	Set to “Completed” indicating the observation is complete
Onset Date	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/effectiveTime/low		Onset date in problem list
Completed Date	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/effectiveTime/high		Resolution date in problem list
Problem Value	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/value	Xsi:type = “CD” Problem ValueSet :2.16.840.1.113883.3.88.12.3221.7.4	Diagnosis or Problem List
Author Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/author/templateId	Root = “2.16.840.1.113883.10.20.22.4.119”	HL7 Registered Model
Author Time	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/author/time		Time the Problem was added by the author
Assigned Author Extension	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/author/assignedAuthor/extension	NPI	Extension = NPI
Assigned Author Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/author/assignedAuthor/code	codeSystem="2.16.840.1.113883.6.101	Taxonomy Code (optional)

Assigned Author Address	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/author/assignedAuthor/addr	US Realm Address "WP"	If not a provider, "NI"
Assigned Author Phone	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/author/assignedAuthor/telecom	Telecom Use	If not a provider, "NI"
Assigned Author Name	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/observation/author/assignedAuthor/name		Given name, Family name and/or Suffix

Problem Note

Subject	XPath	Code Set & Mapping	Description
Entry Type Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship	typeCode = "SUBJ"	
ACT Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act	moodCode = "EVN" classCode = "ACT"	
ACT Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act/templateId	Root = "2.16.840.1.113883.10.20.22.4.64"	HL7 Registered Model
Note Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act/code	LOINC Code = "48767-8" CodeSystem = "2.16.840.1.113883.6.1"	"Annotation Comment"
Note	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act/text		

Procedures Section

The Procedures Section displays all historical procedures ordered as either "Surgery/Px" or "Imaging" within athenaNet. When a CPT code is mapped, this code is captured and sent. This section displays all completed imaging procedures for the historic timeframe of 1 year from the current encounter.

The common notion of ""procedure"" is broader than that specified by the HL7 Version 3 Reference Information Model (RIM). Therefore, procedure templates can be represented with various RIM classes: act (e.g., dressing change), observation (e.g., EEG), procedure (e.g. splenectomy).

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "2.16.840.1.113883.10.20.22.2.7.1"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	Code = "47519-4" Code System = "2.16.840.1.113883.6.1"	LOINC Codes used for Procedure section History of Procedures
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		"Procedures"

Procedure Activity Procedure

This clinical statement represents procedures whose immediate and primary outcome (post-condition) is the alteration of the physical condition of the patient. Examples of these procedures are an appendectomy, hip replacement, and a creation of a gastrostomy.

Subject	XPath	Code Set & Mapping	Description
Procedure Activity Procedure	/ClinicalDocument/component/structuredBody/component/section/entry/procedure	moodCode = "EVN" classCode = "PROC"	
Procedure Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/procedure/templateId	Root = "2.16.840.1.113883.10.20.22.4.14"	HL7 Registered Model
Procedure GUID	/ClinicalDocument/component/structuredBody/component/section/entry/procedure/id	GUID	
Procedure Code	/ClinicalDocument/component/structuredBody/component/section/entry/procedure/code	CPT or SNOMED when available through charge integration, otherwise null Code System = 2.16.840.1.113883.6.12 for CPT code Code System = 2.16.840.1.113883.6.96 for SNOMED code	If a surgery or procedure is ordered, it's captured using a Procedure Activity Procedure. Imaging Procedures are represented by Procedure Activity Observation entries.
Procedure Name	/ClinicalDocument/component/structuredBody/component/section/entry/procedure/code (displayName)		Name of Procedure
Status	/ClinicalDocument/component/structuredBody/component/section/entry/procedure/statusCode	ProcedureAct statusCode ValueSet	'Active' or 'Completed'
Date of Procedure	/ClinicalDocument/component/structuredBody/component/section/entry/procedure/effectiveTime		Perform Date

Procedure Activity Observation

This clinical statement represents procedures that result in new information about the patient that cannot be classified as a procedure according to the HL7 RIM. Examples of these procedures are diagnostic imaging procedures, EEGs and EKGs.

Subject	XPath	Code Set & Mapping	Description
Procedure Activity Observation	/ClinicalDocument/component/structuredBody/component/section/entry/observation	classCode = "OBS" moodCode = "EVN"	
Procedure Observation Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/observation/templateId	**Root** = "2.16.840.1.113883.10.20.22.4.13"	HL7 Registered Model
Procedure Observation GUID	/ClinicalDocument/component/structuredBody/component/section/entry/observation/id	GUID	
Procedure Observation Code	/ClinicalDocument/component/structuredBody/component/section/entry/observation/code		CPT-4code if available.

Procedure Observation Status	/ClinicalDocument/component/structuredBody/component/section/entry/observation/statusCode	ProcedureAct StatusCode ValueSet	
Date of Procedure Observation	/ClinicalDocument/component/structuredBody/component/section/entry/observation/effectiveTime		Procedure performed date
Performer	/ClinicalDocument/component/structuredBody/component/section/entry/observation/performerassignedEntity		Provider or Organization that receives the order
Performer Address	/ClinicalDocument/component/structuredBody/component/section/entry/observation/performer/assignedEntity/addr		Address of the receiving provider
Performer Phone Number	/ClinicalDocument/component/structuredBody/component/section/entry/observation/performer/assignedEntity/telecom		Phone number of the receiving provider
Represented Organization	/ClinicalDocument/component/structuredBody/component/section/entry/observation/performer/assignedEntity/representedOrganization		Organization of the receiving provider (if applicable)
Author Time	/ClinicalDocument/component/structuredBody/component/section/entry/observation/author/time		Date when the imaging result was received or created in Athena EMR In case of Imaging procedures performed in in-house labs, this date would represent when the Result was created in the EMR system
Author Represented Organization	/ClinicalDocument/component/structuredBody/component/section/entry/observation/author/assignedAuthor/respresentedOrganisation		Address of the EMR vendor-athenaHealth

Procedure Note

Subject	XPath	Code Set & Mapping	Description
Entry Type Code	/ClinicalDocument/component/structuredBody/component/section/entry/procedure/entryRelationship	typeCode = “SUBJ”	
ACT Code	/ClinicalDocument/component/structuredBody/component/section/entry/procedure/entryRelationship/act	moodCode = “EVN” classCode = “ACT”	
ACT Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/procedure/entryRelationship/act/templateId	Root = "2.16.840.1.113883.10.20.22.4.64”	HL7 Registered Model
Note Code	/ClinicalDocument/component/structuredBody/component/section/entry/procedure/entryRelationship/act/code	LOINC Code = "48767-8" CodeSystem = "2.16.840.1.113883.6.1”	“Annotation Comment”
Note	/ClinicalDocument/component/structuredBody/component/section/entry/procedure/entryRelationship/act/text		

Templates athenahealth does not send
These optional templates contained in the Procedures section are not included in athenahealth's offering:

- Procedure Activity Act

Immunizations Section

The Immunizations Section includes both historical vaccinations and those administered during the visit. This section also includes vaccines which were prescribes but not administered. Deleted and refused vaccines are not included. Additional notes for immunizations are provided.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "2.16.840.1.113883.10.20.22.2.2.1"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	LOINC Code = "11369-6" Code System = "2.16.840.1.113883.6.1"	LOINC codes used for immunizations
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		"Vaccine List"
Substance Administration Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration	moodCode = "EVN" classCode = "SBADM" negationInd = "false"	negationInd = "true" indicates the immunization was not given
Entry Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/templateId	Root = "2.16.840.1.113883.10.20.22.4.52"	HL7 Registered Model
Entry GUID	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/id	GUID	
Status	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/statusCode		'Active' or 'Completed'
Effective Time	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/effectiveTime		Administered Date
Dose	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/doseQuantity	Units of Measure Case Sensitive ValueSet	Includes units, if applicable
Manufactured Product Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/consumable/manufacturedProduct	classCode = "MANU"	Manufactured Product
Manufactured Product Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/consumable/manufacturedProduct/templateId	Root = "2.16.840.1.113883.10.20.22.4.54"	HL7 Registered Model
Manufactured Material Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/consumable/manufacturedProduct/manufacturedMaterial/code	CVX CodeSystem = "2.16.840.1.113883.12.292"	For 'Unknown' Immunizations, "SNOMED CT" code="787859002" will be sent in translation
Vaccine Name	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/consumable/manufacturedPro		Name of vaccine provided

	duct/manufacturedMaterial/code(displayName)		
Vaccine NDC Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/consumable/manufacturedProduct/manufacturedMaterial/code/translation	CodeSystem = "2.16.840.1.113883.6.69" Code = NDC code	NDC code of the vaccine provided (if available)
Lot Number	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/consumable/manufacturedProduct/manufacturedMaterial/lotNumberText		
Manufacturer Organization Code	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/consumable/manufacturedProduct/manufacturedOrganization	classCode = "ORG"	
Manufacturer Organization Name	/ClinicalDocument/component/structuredBody/component/section/entry/substanceAdministration/consumable/manufacturedProduct/manufacturedMaterial/manufacturedOrganization/name		

Social History Section

The Social History Section captures all the questions a patient is asked during the encounter in the human readable part of the section. Additional notes for social history are provided.

The XML part captures patient's more recently indicated smoking and alcohol use status.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "2.16.840.1.113883.10.20.22.2.17"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	Code = "29762-2" Code System = "2.16.840.1.113883.6.1"	LOINC codes used for Smoking Status
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		"Social History"

Smoking Status Observation
This clinical statement represents a patient's current smoking status. The smoking status value set includes a special code to communicate if the smoking status is unknown which is different from how Consolidated CDA generally communicates unknown information.

Subject	XPath	Code Set & Mapping	Description
Smoking Status Observation Code	/ClinicalDocument/component/structuredBody/component/section/entry/observation	moodCode = "EVN" classCode = "OBS"	
Observation Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/observation/templateId	Root = "2.16.840.1.113883.10.20.22.4.78"	HL7 Registered Model

Observation GUID	/ClinicalDocument/component/structuredBody/component/section/entry/observation/id	GUID	
Observation Code	/ClinicalDocument/component/structuredBody/component/section/entry/observation/code	Code = "ASSERTION" Code System = "2.16.840.1.113883.5.4"	Assertion
Status	/ClinicalDocument/component/structuredBody/component/section/entry/observation/statusCode		Set to 'Completed'
Observation Code	/ClinicalDocument/component/structuredBody/component/section/entry/observation/code	SNOMED Smoking Status	See Smoking Status mapping table below
Code System	/ClinicalDocument/component/structuredBody/component/section/entry/observation/code(codeSystem)	SNOMED	
Effective Time	/ClinicalDocument/component/structuredBody/component/section/entry/observation/effectiveTime		Author Timestamp
Smoking Status	/ClinicalDocument/component/structuredBody/component/section/entry/observation/value(displayName)	Xsi:type = "CD"	Smoking Status ValueSet
Author Timestamp	/ClinicalDocument/component/structuredBody/component/section/entry/observation/author/time		
Assigned Author Code	/ClinicalDocument/component/structuredBody/component/section/entry/observation/author/assignedAuthor	classCode = "ASSIGNED"	
Assigned Author ID	/ClinicalDocument/component/structuredBody/component/section/entry/observation/author/id		
Assigned Author Address	/ClinicalDocument/component/structuredBody/component/section/entry/observation/author/addr		
Assigned Author Name	/ClinicalDocument/component/structuredBody/component/section/entry/observation/author/name		

Smoking Status Mapping Table
athenaNet maps smoking status and the number of cigarettes smoked to one of 8 bolded SNOMED values in the table below.

athenaNet Smoking Status Value	athenaNet "How Much" Value	SNOMED Code	SNOMED Description
Current Every day Smoker	(blank)	449868002	Current every day smoker
Current Some Day Smoker	(blank)	428041000124106	Current some day smoker
Former Smoker	(blank)	8517006	Former smoker
Never Smoker	(blank)	266919005	Never smoker (Never Smoked)
Smoker, Current Status Unknown	(blank)	77176002	Smoker, current status unknown
Unknown if ever smoked	(blank)	266927001	Unknown if ever smoked
Current Every day Smoker	1 PPD, 1 ½ PPD, 2 PPD, 3+ PPD	428071000124103	Heavy Tobacco Smoker
Current Every day Smoker	¼ PPW, ½ PPW,1 PPW, 2 PPW	428061000124105	Light Tobacco Smoker

Alcohol Use

Subject	XPath	Code Set & Mapping	Description
Social History Observation Code	/ClinicalDocument/component/structuredBody/component/section/entry/observation	moodCode = "EVN" classCode = "OBS"	
Observation Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/observation/templateId	Root = "2.16.840.1.113883.10.20.22.4.38"	HL7 Registered Model
Observation GUID	/ClinicalDocument/component/structuredBody/component/section/entry/observation/id	GUID	
Observation Code – Alcohol Use	/ClinicalDocument/component/structuredBody/component/section/entry/observation/code	Code = "160573003" Code System = "2.16.840.1.113883.6.96"	Alcohol use SNOMED code (static)
Status	/ClinicalDocument/component/structuredBody/component/section/entry/observation/statusCode		Set to 'Completed'
Observation Value	/ClinicalDocument/component/structuredBody/component/section/entry/observation/value	"NONE", "OCCASIONAL", "MODERATE", "HEAVY", xsi:type = "ST"	

Encounters Section [Past Encounters section renamed to Encounters]

The Encounters Section lists and describes any healthcare encounters pertinent to the patient's current health status or historical health history. This section also contains an "Encounter Diagnosis" (ICD-10) entry, which defines the diagnosis associated with a specific encounter. The CCDA document captures encounter types of "visit." Deleted encounters are excluded. Current and past encounters for last month are included. Individual order groups are not considered encounters.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "2.16.840.1.113883.10.20.22.2.22"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	LOINC Code = "46240-8" Code System = "2.16.840.1.113883.6.1"	LOINC code used for Past Encounters
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		"Encounters"

Encounter Activities

This clinical statement describes the interactions between the patient and clinicians. Interactions include in-person encounters, telephone conversations, and email exchanges.

Subject	XPath	Code Set & Mapping	Description

Entry Code	/ClinicalDocument/component/structuredBody/component/section/entry/encounter	moodCode = “EVN” classCode = “ENC”	Code used for entry
Entry Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/templateId	Root = "2.16.840.1.113883.10.20.22.4.49"	HL7 Registered Model
Entry GUID	/ClinicalDocument/component/structuredBody/component/section/entry/id	GUID	‘extension’: Clinical Encounter ID
Entry Code	/ClinicalDocument/component/structuredBody/component/section/entry/code	EncounterTypeCode Value Set	
Effective Time	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/effectiveTime		Date/time of the encounter

Performer, Location

Subject	XPath	Code Set & Mapping	Description
Performer Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/performer/assignedEntity/id	NPI Root="2.16.840.1.113883.4.6"	HL7 Registered Model Extension = NPI
Performer Code	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/performer/assignedEntity/code	CodeSystem = "2.16.840.1.113883.6.101"	NUCC Health Care Provider Taxonomy code is chosen based on provider specialty
Performer Department	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/performer/assignedEntity/code	NUCC HC Provider Taxonomy	
Performer Address	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/performer/assignedEntity/addr	US Realm Address “WP”	
Performer Phone Number	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/performer/assignedEntity/telecom	Telecom use	
Performer Name	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/performer/assignedEntity/assignedPerson/name		Provider for the encounter

Participant

This clinical statement represents the location of a service event where an act, observation or procedure took place.

Subject	XPath	Code Set & Mapping	Description
Participant Type Code	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/participant/	typeCode = “LOC”	Location
Participant Class Code	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/participant/participantRole	classCode = “SDLOC”	Service Delivery Location
Participant Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/participant/participantRole/templateId	Root = "2.16.840.1.113883.10.20.22.4.32"	HL7 Registered Model
Participant Code	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/participant/participantRole/code	CodeSystem = "2.16.840.1.113883.6.259"	Healthcare Service Location
Participant Address	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/participant/participantRole/addr		
Participant Phone Number	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/participant/participantRole/telecom		

Location Name	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/participant/participantRole/playingEntity/name	classCode = "PLC"	Name of the department the encounter occurred at

Encounter Diagnosis
This template wraps relevant problems or diagnoses at the close of a visit or that need to be followed after the visit. If the encounter is associated with a Hospital Discharge, the Hospital Discharge Diagnosis must be used. This entry requires at least one Problem Observation entry.

Subject	XPath	Code Set & Mapping	Description
Entry Type Code	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/entryRelationship	typeCode = "SUBJ"	
Act Code	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/entryRelationship/act	moodCode = "EVN" classCode = "ACT"	
Act Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/entryRelationship/act/templateId	Root = "2.16.840.1.113883.10.20.22.4.80"	HL7 Registered Model
Act Code	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/entryRelationship/act/code	Code = "29308-4" CodeSystem = "2.16.840.1.113883.6.1"	Encounter Diagnosis
Act Entry Type	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/entryRelationship/act/entryRelationship/	typeCode = "SUBJ"	
Observation Code	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/entryRelationship/act/entryRelationship/observation	classCode = "OBS" moodCode = "EVN"	Observation Event
Observation Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/entryRelationship/act/entryRelationship/observation/templateId	Root = "2.16.840.1.113883.10.20.22.4.4"	HL7 Registered Model
Observation GUID	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/entryRelationship/act/entryRelationship/observation/id	GUID	
Observation Code	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/entryRelationship/act/entryRelationship/observation/code	Code = "282291009" CodeSystem = "2.16.840.1.113883.6.96"	Diagnosis
Observation Status	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/entryRelationship/act/entryRelationship/observation/statusCode		Set to 'Completed'
Observation Onset Date	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/entryRelationship/act/entryRelationship/observation/effectiveTime		Low = Onset Date High = Resolution Date
Encounter Diagnosis (SNOMED)	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/entryRelationship/act/entryRelationship(typeCode="SUBJ")/observation/value	Xsi:type = "CD" codeSystem="2.16.840.1.113883.6.96" Value Set: Problem urn:oid:2.16.840.1.113883.3.88.12.3221.7.4	SNOMED codes for Diagnosis or Problem list are sent
Encounter Diagnosis	/ClinicalDocument/component/structuredBody/component/section/entry/encounter/entryRel	ICD code with CodeSystem =	ICD-10 codes appear in the translation tag

Translation (ICD)	ationship/act/entryRelationship(typeCode="SUBJ")/observation/value/translation	"2.16.840.1.113883.6.3" [ICD-10 when available] OR "2.16.840.1.113883.6.103" [ICD-9]	

Past Medical History Section

The Past Medical History Section describes the history related to the patient's past complaints, problems, or diagnoses. For female patients OBG Gyn history is also listed (if available). It records these details up until, and possibly pertinent to, the patient's current complaint or reason for seeking medical care. All answered questions (Y or N response) will appear in the narrative part of the CCDA. Additional notes for past medical history are provided.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "2.16.840.1.113883.10.20.22.2.20"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	LOINC Code = "11348-0" Code System = "2.16.840.1.113883.6.1"	LOINC code used for Past Medical History
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		"Past Medical History"

Past Medical History

Subject	XPath	Code Set & Mapping	Description
Entry Code	/ClinicalDocument/component/structuredBody/component/section/entry/encounter observation	moodCode = "EVN" classCode = "OBS"	Code used for entry
Entry Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/observation/templateId	Root = " 2.16.840.1.113883.10.20.22.4.4"	HL7 Registered Model
Entry GUID	/ClinicalDocument/component/structuredBody/component/section/entry/observation/id	GUID	
Entry Code	/ClinicalDocument/component/structuredBody/component/section/entry/observation/code	SNOMED CT Code System = 2.16.840.1.113883.6.96	SNO Med Code for the complaint, problem, or diagnosis
Entry Status Code	/ClinicalDocument/component/structuredBody/component/section/entry/observation/statuscode	Code = "completed"	
Effective Time	/ClinicalDocument/component/structuredBody/component/section/entry/observation/effectiveTime		
Entry Value	/ClinicalDocument/component/structuredBody/component/section/entry/observation/value	xsi:type="CD"	

History of Present Illness Section

The History of Present Illness Section describes symptoms and historical information pertinent to the patient's current illness, if applicable. This section only contains a single text element.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "1.3.6.1.4.1.19376.1.5.3.1.3.4"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	LOINC Code = “10164-2” Code System = “2.16.840.1.113883.6.1”	LOINC codes used for History of Present Illness section
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		“History of Present Illness”
History of Present Illness	/ClinicalDocument/component/structuredBody/component/section/text		Entered as free text
Physician Notes	/ClinicalDocument/component/structuredBody/component/section/text		Test notes for elements noted in history of present illness

Note:

Refer Appendix for details on exclusion of HTML tags to make free text legible.

Payers Section

The Payers Section contains data on the patient’s payers for that specific encounter and is used to define which entity is the responsible fiduciary for the financial aspects of a patient’s care.

Each unique instance of a payer and all the pertinent data needed to contact, bill to, and collect from that payer should be included. Authorization information that can be used to define pertinent referral, authorization tracking number, procedure, therapy, intervention, device, or similar authorizations for the patient or provider, or both should be included. At a minimum, the patient’s pertinent current payment sources should be listed.

The sources of payment are represented as a Coverage Activity, which identifies all the insurance policies or government or other programs that cover some or all of the patient's healthcare expenses. The policies or programs are sequenced by preference. The Coverage Activity has a sequence number that represents the preference order (e.g. 1-Primary, 2-Secondary). Each policy or program identifies the covered party with respect to the payer, so that the identifiers can be recorded. Payers in the active status as of date of service are included and deactivated/cancelled are excluded.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "2.16.840.1.113883.10.20.22.2.18"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	LOINC Code = “48768-6” Code System = “2.16.840.1.113883.6.1”	LOINC codes used for Payers Section
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		“Payers”

Coverage Activity

A Coverage Activity groups the policy and authorization acts within a Payers Section to order the payment sources. A Coverage Activity contains one or more policy activities, each of which contains zero or more authorization activities. The Coverage Activity ID is the ID from the patient's insurance card. The sequenceNumber/@value shows the policy order of preference.

Subject	XPath	Code Set & Mapping	Description
Entry Act Code	/ClinicalDocument/component/structuredBody/component/section/entry/act	moodCode = "ACT" classCode = "EVN"	
Entry Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/act/templateId	Root = "2.16.840.1.113883.10.20.22.4.60"	HL7 Registered Model
Entry GUID	/ClinicalDocument/component/structuredBody/component/section/entry/act/id	GUID	
Entry Act Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/code	Code: "48768-6" Code System: "2.16.840.1.113883.6.1"	LOINC code used for Payment Sources
Act Status Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/statuscode		Set to 'Completed'
Entry Relationship	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship	typeCode = "COMP"	HL7ActRelationshipType
Entry Sequence Number	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/sequenceNumber	Value = x	Sequence number that represents the preference order.

Policy Activity

A policy activity represents the policy or program providing the coverage. The person for whom payment is being provided (i.e., the patient) is the covered party. The subscriber of the policy or program is represented as a participant that is the holder the coverage. The payer is represented as the performer of the policy activity.

Subject	XPath	Code Set & Mapping	Description
Entry Act	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act	moodCode = "ACT" classCode = "EVN"	
Entry Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act/templateid	Root = "2.16.840.1.113883.10.20.22.4.61"	HL7 Registered Model
Entry ID	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act/id	GUID	Unique identifier for the policy or program providing the coverage
Entry Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act/code/		Health Insurance Type Value Set
Entry Status Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act/statuscode	Completed	
Performer	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act/performer	TypeCode = PRF	
Performer Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act/performer/templateID	Root = "2.16.840.1.113883.10.20.22.4.87"	
Assigned Entity	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/performer/assignedentity		Payer

Assigned Entity ID	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/performer/assignedentity/id		Health Plan Insurance Information Source ID
Assigned Entity Code	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/performer/assignedentity/code		
Assigned Entity Address	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/performer/assignedentity/addr		Health Plan Insurance Information Source Address
Assigned Entity Telecom	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/performer/assignedentity/telecom		Health Plan Insurance Information Source Phone Email
Assigned Entity Represented Organization ID	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/performer/assignedentity/representedorganization/id		
Assigned Entity Represented Organization Name	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/performer/assignedentity/representedorganization/name		Health Plan Insurance Information Source Name
Assigned Entity Represented Organization Telecom	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/performer/assignedentity/representedorganization/telecom		Health Plan Insurance Information Source Phone Email URL
Assigned Entity Represented Organization Address	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/performer/assignedentity/representedorganization/addr		
Assigned Entity Performer	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/performer/	typeCode = PRF	
Assigned Entity Performer Template ID	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/performer/templateID	Root = "2.16.840.1.113883.10.20.22.4.88"	
Assigned Entity ID	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/performer/assignedentity/id		
Assigned Entity Code	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/performer/assignedentity/code	Code = GUAR	
Assigned Entity Address	**/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/performer/assignedentity/addr**		Financial Responsibility Party Address
Assigned Entity Telecom	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/performer/assignedentity/telecom		Financially Responsibility Party Phone Email URL
Assigned Entity Assigned Person	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/performer/assignedentity/assignedPerson		Member Information
Participant	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/participant	TypeCode = COV	

Participant Template ID	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/participant/templateid	Root = “2.16.840.1.113883.10.20.22.4.89"	
Participant Time	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/participant/time		
Participant Role ID	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/participant/participantrole/id		
Participant Code	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/participant/participantrole/code		
Participant Playing Entity	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/participant/participantrole/playingentity/name		
Participant Playing DOB	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/participant/participantrole/playingentity/sdtc:birthtime		
Participant	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act/participant	typeCode = HLD	Patient
Participant Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act/participant/templateid	Root = “"2.16.840.1.113883.10.20.22.4.90"	
Participant Role ID	/ClinicalDocument/component/structuredBody/component/section/entry//act/entryRelationship/act/participant/participantrole/id		Subscriber Information
Participant Role Address	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act/participant/participantrole/addr		Subscriber Address
Entry Relationship	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act/entryRelationship	typeCode = REFR	Health Plan
Entry Relationship Act	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act/entryRelationship/act	Class Code = ACT Mood Code = DEF	
Entry Relationship ID	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act/entryRelationship/act/id		

Review of Systems Section

The Review of Systems Section describes the physician’s review of the patient’s body as documented during the encounter. This section only contains a single text element.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "1.3.6.1.4.1.19376.1.5.3.1.3.18"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	

Section Code	/ClinicalDocument/component/structuredBody/component/section/code	LOINC Code = “10187-3” Code System = “2.16.840.1.113883.6.1”	LOINC codes used for Review of Systems section
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		“Review of Systems”
Review of Systems	/ClinicalDocument/component/structuredBody/component/section/text		Entered as free text

Note:

Refer Appendix for details on exclusion of HTML tags to make free text legible.

Physical Exam Section

The Physical Exam Section captures the physician's notes from the physical exam of the patient during an encounter. This section only contains a single text element.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "2.16.840.1.113883.10.20.2.10"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	Code = “29545-1” Code System = “2.16.840.1.113883.6.1”	LOINC codes used for Physical Exam section
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		“Physical Exam”
Physical Exam	/ClinicalDocument/component/structuredBody/component/section/text		Entered as free text
Physician Notes	/ClinicalDocument/component/structuredBody/component/section/text		Physician notes for physical exam section

Note:

Refer Appendix for details on exclusion of HTML tags to make free text legible.

Advance Directives

The Advance Directives section contains data defining the patient's advance directives as recorded in the Clinicals' Social History Section and any reference to supporting documentation. The most recent and up-to-date directives are required, if known.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "2.16.840.1.113883.10.20.22..2.21"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	Code = “42348-3” Code System = “2.16.840.1.113883.6.1”	LOINC codes used for Advance Directives section

Section Title	/ClinicalDocument/component/structuredBody /component/section/title		"Advance Directives"
Observation Class Code	/ClinicalDocument/component/structuredBody /component/section/entry/observation	classCode = "OBS" moodCode = "EVN"	Observation Event
Observation Template ID	/ClinicalDocument/component/structuredBody /component/section/entry/observation/templateId	Root = "2.16.840.1.113883.10.20.22.4.48"	
Observation GUID	/ClinicalDocument/component/structuredBody /component/section/entry/observation/id	GUID	
Observation Code	/ClinicalDocument/component/structuredBody /component/section/entry/observation/code	CodeSystem = "2.16.840.1.113883.6.96"	SNOMED-CT
Status	/ClinicalDocument/component/structuredBody /component/section/entry/observation/statusCode		"Yes"/ "No"
Effective Time	/ClinicalDocument/component/structuredBody /component/section/entry/observation/effectiveTime		

Functional Status

The Functional Status section contains responses to the five specific questions from Clinicals' Social History Section. If any of these questions are checked "yes" the impairment is captured in this section as a text string. If one or more are checked "no" and nothing is checked "yes", then "No Impairment" is displayed. If nothing is checked, "No Information" is displayed. This section only contains text element and a practice must choose to activate this functionality.

The five questions tied to Functional Status are:

1. Deaf or serious difficulty hearing?
2. Blind or serious difficulty seeing?
3. Difficulty walking or climbing stairs?
4. Difficulty dressing or bathing?
5. Difficulty doing errands alone?

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "2.16.840.1.113883.10.20.22.2.14"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	Code = "47420-5" Code System = "2.16.840.1.113883.6.1"	LOINC codes used for Physical Exam section
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		"Functional Status"
Table	/ClinicalDocument/component/structuredBody/component/section/text/table		Table with answers

Family History

The Family History Section captures data regarding the relationship, problem, onset and termination dates. Additional notes for family history are provided.

Note – In Athena EMR, a Patient's Family History may also contain the history of Procedures, Allergies or any clinical events of their family members (if recorded).

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateId	Root = "2.16.840.1.113883.10.20.22.2.15"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id	GUID	
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	Code = "10157-6" Code System = "2.16.840.1.113883.6.1"	LOINC codes used for Family History section
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		"Family History"
Family History Table	/ClinicalDocument/component/structuredBody/component/section/text		

Family History Organizer
The Family History organizer associates a set of observations with a particular family member.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/templateId	Root = "2.16.840.1.113883.10.20.22.4.45"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/id	GUID	
Status Code	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/statusCode	Code = "completed"	
Relation	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/subject/relatedSubject/code	"HL7RoleCode" CodeSystem="2.16.840.1.113883.5.111"	"Family History"
Relation Gender	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/subject/relatedSubject/subject/administrativeGenderCode	CodeSystem="2.16.840.1.113883.5.1"	

Family History Observation
The Family History observation details the problems and diagnosis of the family member defined in the organizer.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/templateID	Root = "2.16.840.1.113883.10.20.22.4.46"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/id	GUID	
Code	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/code	Code = "NI"	athenaNet does not populate this field.
Status Code	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/statusCode	Code="completed"	

Effective Time	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/effectiveTime		Time the observation was recorded in athenaNet.
Problem/ Diagnosis	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/value	SNOMED CT CodeSystem="2.16.840.1.113883.6.96"	Problem Type SNOMED ValueSet

Family History Age Observation

In the Family History Age observation, the age at which the family member was diagnosed with the particular problem is recorded.

entryRelationship typeCode= “SUBJ” inversionInd= “true”
observation classCode= “OBS” moodCode= “EVN”

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/entryRelationship/observation/templateID	Root = "2.16.840.1.113883.10.20.22.4.31"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/entryRelationship/observation/id	GUID	
Code	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/entryRelationship/observation/code	Code = “445518008”	SNOMED CT code referring to “Age”
Status Code	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/entryRelationship/observation/statusCode	Code=”completed”	
Onset Age	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/entryRelationship/observation/value		

Family History Death Observation

In the Family History Death observation, the age at which the family member passed is recorded.

entryRelationship typeCode= “CAUS”
observation classCode= “OBS” moodCode= “EVN”

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/entryRelationship/observation/templateID	Root = "2.16.840.1.113883.10.20.22.4.47"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/entryRelationship/observation/id	GUID	
Code	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/entryRelationship/observation/code	Code = “ASSERTION”	HL7 Act Code
Status Code	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/entryRelationship/observation/statusCode	Code=”completed”	
Onset Age	/ClinicalDocument/component/structuredBody/component/section/entry/organizer/component/observation/entryRelationship/observation/value	Code="419099009"	SNOMED CT code referring to “Dead”

Family History Note

Subject	XPath	Code Set & Mapping	Description
Entry Type Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship	typeCode = "SUBJ"	
ACT Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act	moodCode = "EVN" classCode = "ACT"	
ACT Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act/templateId	Root = "2.16.840.1.113883.10.20.22.4.64"	HL7 Registered Model
Note Code	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act/code	LOINC Code = "48767-8" CodeSystem = "2.16.840.1.113883.6.1"	"Annotation Comment"
Note	/ClinicalDocument/component/structuredBody/component/section/entry/act/entryRelationship/act/text		

Medical Equipment

The Medical Equipment section defines a patient's implanted and external health and medical devices and equipment. This section lists any pertinent durable medical equipment (DME) used to help maintain the patient's health status. All equipment relevant to the diagnosis, care, or treatment of a patient should be included.
Devices applied to, or placed in, the patient are represented with the Procedure Activity Procedure (V2) template. Durable Medical Equipment (DME) is represented with the Non-Medicinal Supply Activity (V2) template.

Subject	XPath	Code Set & Mapping	Description
Template ID	/ClinicalDocument/component/structuredBody/component/section/templateID	Root = "2.16.840.1.113883.10.20.22.2.23"	HL7 Registered Model
Global Doc ID	/ClinicalDocument/component/structuredBody/component/section/id		
Section Code	/ClinicalDocument/component/structuredBody/component/section/code	LOINC Code = "46264-8" Code System = "2.16.840.1.113883.6.1"	History of medical device use
Section Title	/ClinicalDocument/component/structuredBody/component/section/title		"Medical Equipment"

Procedure Activity Procedure
The common notion of "procedure" is broader than that specified by the HL7 Version 3 Reference Information Model (RIM). Therefore procedure templates can be represented with various RIM classes: act (e.g., dressing change), observation (e.g., EEG), procedure (e.g., splenectomy).

The Procedure Activity Procedure template represents procedures whose immediate and primary outcome (post-condition) is the alteration of the physical condition of the patient. Examples of these procedures are an appendectomy, hip replacement, and a creation of a gastrostomy.
This template can be used with a contained Product Instance template to represent a device in or on a patient. In this case, targetSiteCode is used to record the location of the device in or on the patient's body. Equipment supplied to the patient (e.g., pumps, inhalers, wheelchairs) is represented by the Non-Medicinal Supply Activity (V2) template.

Subject	XPath	Code Set & Mapping	Description
Procedure Activity Procedure	/ClinicalDocument/component/structuredBody/component/section/entry/procedure	moodCode = "EVN" classCode = "PROC"	
Procedure Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/procedure/templateId	Root = "2.16.840.1.113883.10.20.22.4.14"	HL7 Registered Model
Procedure GUID	/ClinicalDocument/component/structuredBody/component/section/entry/procedure/id	GUID	
Procedure Code	/ClinicalDocument/component/structuredBody/component/section/entry/procedure/code	CPT when available through charge integration, otherwise null Code = "73140" Code System = "2.16.840.1.113883.6.12	If a surgery or procedure is ordered, it's captured using a Procedure Activity Procedure. Note: Imaging Procedures are represented by Procedure Activity Observation entries.
Procedure Name	/ClinicalDocument/component/structuredBody/component/section/entry/procedure/code (displayName)		Name of Procedure
Status	/ClinicalDocument/component/structuredBody/component/section/entry/procedure/statusCode	ProcedureAct statusCode ValueSet	'Active' or 'Completed'
Date of Procedure	/ClinicalDocument/component/structuredBody/component/section/entry/procedure/effectiveTime		Perform Date

Non-Medicinal Supply Activity

The Non-Medicinal Supply Activity template represents equipment supplied to the patient (e.g., pumps, inhalers, wheelchairs).

Subject	XPath	Code Set & Mapping	Description
Non-Medicinal Supply	/ClinicalDocument/component/structuredBody/component/section/entry/supply	moodCode = "EVN" classCode = "SPLY"	
Supply Template ID	/ClinicalDocument/component/structuredBody/component/section/entry/supply/templateId	Root = "2.16.840.1.113883.10.20.22.4.50"	HL7 Registered Model
Supply GUID	/ClinicalDocument/component/structuredBody/component/section/entry/supply/id	GUID	

Status	/ClinicalDocument/component/structuredBody/component/section/entry/supply/statusCode	Completed	Represents DME orders that are dispensed
Supply Date	/ClinicalDocument/component/structuredBody/component/section/entry/supply/effectiveTime		Date the supply is dispensed. Only available when athenanet provider captures this information
Supply Quantity	/ClinicalDocument/component/structuredBody/component/section/entry/supply/quantity		Quantity of equipment dispensed if captured.
Participant typeCode	/ClinicalDocument/component/structuredBody/component/section/entry/supply/participant	typeCode = "PRD"	
Participant Class Code	/ClinicalDocument/component/structuredBody/component/section/entry/supply/participant/participantRole	classCode = "MANU"	Manufactured Product
Participant ID	/ClinicalDocument/component/structuredBody/component/section/entry/supply/participant/participantRole/id	Root = "1.2.840.999.1.13.5552.1.7.2.999991"	
Participant PlayingDevice	/ClinicalDocument/component/structuredBody/component/section/entry/supply/participant/participantRole/playingDevice	code=" UNK"	Device name
Participant scopingEntity	/ClinicalDocument/component/structuredBody/component/section/entry/supply/participant/participantRole/scopingEntity	nullFlavor="NA"	athenanet does not send this information

Templates athenahealth does not send

These optional templates contained in the Medical Equipment section are not included in athenahealth's offering:

- Medical Equipment Organizer

Unstructured CCDA Specifications

(If enabled)

Overview

When enabled, the Unstructured CCDA template provides the ability to send external documents (e.g. PDF, faxes, etc.) in an electronic manner. This CCDA type will be generated when there is an inbound fax/inbound attachment received by athena via HL7 messages. These inbound documents are attached to the patient's chart.

Chart Attachment types applicable to the unstructured CCDA are:

- Lab Results
- Imaging Results

Attachments will be sent as an unstructured CCDA when there is a closed event triggered for the attachment types listed above. An Unstructured Document (UD) document type includes unstructured content – PDF directly in a text element with a mediaType attribute - PDF. More details refer the section 2.1.21 Unstructured Document (V3) Clinical Document in the HL7 2.1 C-CDA Specification.

Note: Unstructured CCDA document is applicable for Real-Time Solution only.

Closed Event Triggers Description

- When the Lab Results item is closed for the Result status = Final/Completed/Corrected/Signed in athenaClinicals, then an unstructured CDA document is generated for attachments linked to that Lab Result item along with the Structured CCDA. Unstructured is not generated if no attachments are linked to the Result item.
- When the Imaging Results item is closed in athenaClinicals, then an unstructured CDA document is generated for attachments linked to the Image Result item.
- The attachments are generated in Real-time for Lab and Imaging Orders linked only to the closed encounter.

Metadata and XML Element Mapping Table

Meta data	Description	XML element
Test name	Name of the Test is sent in the <Title> XML element as highlighted in red in the XML element column	<title>CMP, SERUM OR PLASMA - 11260587</title>
Clinical Encounter ID which contains the Lab/Imaging Order	Clinical Encounter ID is sent in the <Title> xml element suffixed with Test name as highlighted in red in the XML element column	<title>CMP, SERUM OR PLASMA - 11260587</title>
Patient/Member Athena ID	Patient's Athena ID is sent in the <ID> tag under the recordTarget\patientRole element as highlighted in red in the XML element column	<recordTarget> -<patientRole> <id extension="1600086" root="2.16.840.1.113883.3.564.13122"/>
Athena Practice ID	Athena Practice ID is sent in the recordTarget\patientRole\ID element as highlighted in red in the XML element column	recordTarget> -<patientRole> <id extension="1600086" root="2.16.840.1.113883.3.564.13122"/>
Patient SSN	If Patient has consented to share their SSN ID, then Patient SSN ID is sent in the additional <ID> tag under the recordTarget\patientRole element as highlighted in red in the XML element column	<recordTarget> -<patientRole> <id extension="1600086" root="2.16.840.1.113883.3.564.13122"/> <id extension="1040083402" root="2.16.840.1.113883.4.1"/>

Patient Address details	Patient Home address is sent in the element tag – recordTarget\patientRole\addr	<addr use="HP"> <streetAddressLine>2 Cedardale Ct</streetAddressLine> <city>Palm Coast</city> <state>FL</state> <postalCode>32137-8951</postalCode> <country>US</country> </addr>
Patient's telephone numbers	Patient's telephone numbers are sent in the recordTarget\patientRole\telecom element tag.	<telecom value="tel:+1-765-2080826" use="HP"/> <telecom value="tel:+1-765-2080826" use="MC"/> <telecom value="tel:+1-765-6616714" use="WP"/>
Patient Demographics	Patient Demographics are sent in the Patient element tag - recordTarget\patientRole\patient	<patient> <name> <given>Jeffery</given> <given>W</given> <family>Shonkwiler</family> </name> <administrativeGenderCode code="M" codeSystem="2.16.840.1.113883.5.1"/> <birthTimevalue="19570423"/> <maritalStatusCode code="M" displayName="Married" codeSystem="2.16.840.1.113883.5.2"/> <raceCode code="2106-3" displayName="White" codeSystem="2.16.840.1.113883.6.238" codeSystemName="Race & Ethnicity - CDC"/> <ethnicGroupCode code="2186-5" displayName="Not Hispanic or Latino" codeSystem="2.16.840.1.113883.6.238" codeSystemName="Race & Ethnicity - CDC"/> <languageCommunication><languageCode code="eng"/></languageCommunication> </patient>
Practice Details	Practice details are sent in the element tag – author\representedOrganization	-<author> <time value="20191121055218-0500"/> -<assignedAuthor> <id root="2.16.840.1.113883.3.564"/> -<addr use="WP"> <streetAddressLine>311 Arsenal St</streetAddressLine> <city>Watertown</city> <state>MA</state> <postalCode>02472</postalCode> <country>US</country> </addr> <telecom value="tel:+1-617-4021000" use="WP"/> -<assignedAuthoringDevice> <manufacturerModelName>athenahealth</manufacturerModelName> <softwareName>athenahealth</softwareName> </assignedAuthoringDevice> -<representedOrganization> <name>IN - Ascension - Indiana,IND_SMG_AND_DOC</name></representedOrganization> </assignedAuthor>

		</author>
Rendering Provider	Rendering provider details are sent in the Legal authenticator element tag	-<legalAuthenticator> <time value="20190712122031-0400"/> <signatureCode code="S"/> -<assignedEntity> <id extension="1285677294" root="2.16.840.1.113883.4.6"/> -<addr> <streetAddressLine>60 MEMORIAL MEDICAL PKWY</streetAddressLine> <city>PALM COAST</city> <state>FL</state> <postalCode>32164-5980</postalCode> <country>US</country> </addr> <telecom value="tel:+1-866-7513326" use="WP"/> -<assignedPerson> -<name> <given>JONATHAN</given> <family>SCRENOCK</family> <suffix>MD</suffix> </name> </assignedPerson> </assignedEntity> </legalAuthenticator>
athenahealth details	Athenahealth details are sent in the Custodian element	-<custodian> -<assignedCustodian> -<representedCustodianOrganization> <id root="2.16.840.1.113883.3.564"/> <name>athenahealth</name> <telecom value="tel:+1-617-4021000" use="WP"/> -<addr use="WP"> <streetAddressLine>311 Arsenal St</streetAddressLine> <city>Watertown</city> <state>MA</state> <postalCode>02472</postalCode> <country>US</country> </addr> </representedCustodianOrganization> </assignedCustodian> </custodian>

Encounter details	Encounter details are sent in the <ecncompassingEncounter> element tag. Details sent are in the following order • Encounter ID • Encounter Date • Rendering Provider NPI, role, name and practice details	-<componentOf> -<encompassingEncounter> <id extension="11129807" root="2.16.840.1.113883.19"/> <effectiveTime value="20190712"/> -<encounterParticipant typeCode="ATND"> -<assignedEntity> <id extension="1285677294" root="2.16.840.1.113883.4.6"/> <code code="207Q00000X" displayName="Family Practice" codeSystem="2.16.840.1.113883.6.101" codeSystemName="NUCC"/> -<addr use="WP"> <streetAddressLine>120 Cypress Edge Dr, Suite 204</streetAddressLine> <city>Palm Coast</city> <state>FL</state> <postalCode>32164-8454</postalCode> <country>US</country> </addr> <telecom value="tel:+1-386-5864428" use="WP"/> -<assignedPerson> -<name> <given>Jonathan</given> <family>Screnock</family> </name> </assignedPerson> </assignedEntity> </encounterParticipant> </encompassingEncounter> </componentOf>
Attachments -	The attachments are encoded in Base64 format and embedded in the <NonXmlBody>.	<NonXmlBody> </NonXmlBody>

Reports

Name	Real-Time	On-Demand
TIN/NPI Report	X	X
HPDE Opt-Out Report	X	X
Activity Report	X	
HPDE On-Demand Client Roster Summary of Daily Report		X
HPDE On-Demand Client Daily Roster Detailed Report		X
HPDE On-Demand Completed/In-Progress Roster List		X

TIN/NPI Report

Report Description	The report provides a list NPIs per TIN for each practice opted-in to Health Plan Data Exchange with at least one clinical encounter during the reporting timeframe
Reporting Timeframe	Current Calendar Year + Two Prior Years
Frequency	Monthly – distributed by the 2nd Friday (along with HPDE Opt-Out Report)

Column Headers	Description
Disclaimer	This report is to be used for approved uses only and should not be distributed outside of the approved parties
Context_ID	athena-specific unique identifier for practice
Context_Name	athena-specific name for practice
TIN	Tax ID number registered in the athena system by the practice
MedicalGroup_ Name, Address1, Address2, City, State, Zip	Medical Group location information
First_Active_Date	The first (encounter) month the NPI would have been sent to a payer via HPDE within the reporting time frame
Last_Active_Date	The last (encounter) month the NPI would have been sent to a payer via HPDE within the reporting time frame
NPI	Provider NPI number

HPDE Opt-Out Report

Report Description	The report provides a list of practices opted-out of Health Plan Data Exchange. Since they are opted-out, only limited information is available.
Reporting Timeframe	Current
Frequency	Monthly – distributed by the 2nd Friday (along with TIN/NPI Report)

Column Headers	Description
Organization	Name of practice
Context ID	athena-specific unique identifier for practice
State	Location of practice

Activity Report

Report Description	The report is to assist with high-level reconciliation purposes, specifically, # of files received in a specific timeframe matches the # of files delivered by athena
Reporting Timeframe	Prior Monday to Current Sunday
Frequency	Weekly - distributed no later than Tues of current week

Column Headers	Description
Practice ID	athena-specific unique identifier for practice
Practice Name	athena-specific name for practice
Client Name	Name of Payer
Solution Type	Implemented type of solution (e.g. Real-Time)
Interface Message ID	athena-specific generic message identifier
Message created day/time stamp	When the message was created by athena
Message processed day/time stamp	When the message was processed/delivered by athena
Canonical Type	Type of message: clinical encounter, lab result, or patient
Canonical ID	athena-specific message identifier related to the canonical type
Num Sent	# of message sent
Filename ID	athena-specific message identifier to match with the ID in the filename

HPDE On-Demand Client Roster Summary of Daily Report

Report Description	The report provides a summary view of the prior day's activity
Reporting Timeframe	Prior Business Day
Frequency	Daily
Delivery location	SFTP

Metric	Description	Data Type	Field Length	Format
Report Run Date	Date on which the report was generated	DATE	10	MM/DD/YYYY
Report Timeframe On	Timeframe for generating the report	TEXT	21	MM/DD/YYYY-MM/DD/YYYY
Total # of Rosters received	# of rosters received in reporting timeframe	NUMBER		
Total # of Chase Requests received	# of requests within the roster files received in the reporting timeframe	NUMBER		
Total # of Rosters	# of rosters in total	NUMBER		
Total # of Rosters in progress	# of rosters still in progress (can contain rosters from prior days)	NUMBER		
	# of rosters completed processing in the reporting timeframe	NUMBER		
Total # of chase requests	# of requests in total	NUMBER		
Total # of chase requests in progress	# of requests still in progress (can contain requests from prior days)	NUMBER		
	# of requests completed processing in the reporting timeframe	NUMBER		
Total # of chase requests matched	# of requests with patient match	NUMBER		
Total # of chase requests matched but no chart found	# of requests with match but no chart delivered	NUMBER		
Total # of chase requests not matched	# of requests with no match/error	NUMBER		
Total # of charts delivered	# of charts delivered	NUMBER		

HPDE On-Demand Client Daily Roster Detailed Report

Report Description	The report indicates the status of each chart request for the processed
Reporting Timeframe	Prior Business Day
Frequency	Daily
Delivery Location	SFTP

Column Headers	Description	Data Type	Field Length	Format
Request Received	Date when the chase request was received by athena	DATE	10	MM/DD/YYYY
Roster ID	Client-specific identifier provided in the roster file (if populated, column T - Other)	TEXT	50	Free text including hyphens
ID	Client-specific identifier provided in the roster file (column A – ID)	TEXT	50	Free text including hyphens
Athena PracticeID	ID of the Athena Practice where member match was found	NUMBER	12	2–5-digit number
Athena PracticeName	Name of the Athena Practice where member match was found	TEXT	40	
Total No of Charts	Count of charts delivered to the client	NUMBER		
Patient Match Status	Indication of patient being found in the athena system	TEXT	12	Matched/ Not Matched
Outcome Reason code	Display reason code only when column 'Total No of Charts' is 0	TEXT	50	
Outcome Reason	Display reason code only when column 'Total No of Charts' is 0	TEXT	400	
Response Sent Date/Time	Date/time when the chart was delivered to the client. If more than one chart is delivered, this indicates the date/time of the first chart	DATETIME	25	YYYY-MM-DDTHH:mm:ssZ
Other	Client-specific value provided in the roster file (column V)	TEXT	50	Free text including hyphens

HPDE On-Demand Completed/In-Progress Roster List

Report Description	The report is to assist with high-level reconciliation purposes, specifically, # of files received in a specific timeframe matches the # of files delivered by athena
Reporting Timeframe	Prior Business Day
Frequency	Daily
Delivery Location	SFTP

Column Headers	Description	Data Type	Field Length	Format
Roster File Name	Name of roster file	TEXT	4000	Filename including hyphens
Roster Received Date	Date of when roster was received	DATE	10	MM/DD/YYYY
Status	Indication of roster file processing status	TEXT	11	Completed/ In Progress

Appendix

Exclusion of HTML tags in HPI, PE and ROS section

In sections History of Present Illness, Physical Exam and Review of Systems, the free HTML tags in the notes section is validated and transformed into valid set of elements/attributes per HL7 XSD (for schemas, refer XML spec in processable/core schemas).
This feature ensures -

1. Retaining the format of the content for better readability and
2. Final content is conformant to NarrativeBlock.xsd

Note: After the exclusion and transformation of HTML tags, the transformation happens only if compliant to XSD. If the final content doesn't meet HL7 Standards, no HTML transformation happens.

On-Demand Roster File Specification

Member Roster Content Parameters

Member Matching for On-Demand Service

HPDE - Improve Member Matching.p

Previous Change Summary

November 2021 Release

- In Structured CCDA sections (page 7,8), modified REQUESTID to ROSTERID under On-demand service.
- In Results section (page 27), updated description to include date logic for the Result Observation Time in lab results
- Added Reports section (page 61) for Real-Time and On-demand service.

August 2021 Release

- In Vital Signs section (page 26), note added to include additional vital information supported
- In Procedures section (page 38), updated Codeset & Mapping for Procedure Code under Procedure Activity Procedure
- In Immunizations section (page 40), updated description for the Manufactured Material code
- In Encounters section (page 44), added description for Entry GUID under Encounter Activities
- In Appendix (page 66),
    - In Member Roster content parameters spec file, updated Roster Element definition in the Roster Format
    - Included HPDE Member Matching document for On-Demand Service

July 2021 Release

- In Structured CCDA Sections (page 7, 8), included details about File naming conventions, wrapper fields and chart generation at Provider group for Realtime and On-demand service.
- In Results section (page 29), added translation tag for the result value under observation
- In Social History section (page 41), note added to indicate the type of questions listed in the section
- In Medical Equipment section (page 58), row added for supply date under Non-medicinal supply activity
- In Appendix (page 66), updated preferred columns and formats in the Member Roster content parameters spec file

April 2021 Release

- In Assessment section (page 14), modified description of 'Text' under XML Data Instructions
- In Plan of Treatment section (page 16), added XML Data Instructions
- In Procedures section (page 37), updated XPath of the Procedure Note

March 2021 Release

- In Structured CCDA section, added details on Patient chart structure generated via HPDE service (page 7)
- In Header section, added
    - confidentialityCode (represents Normal/Restricted patients) under Description column (page 8)
    - Practice information (TIN, Medical Group name, Practice name and Department name) under representedOrganization tag in the Practice Details section (page 9)
- As per NCQA-IG, the following sections are renamed
    - Plan of Care to Plan of Treatment (page 14)
    - Vitals to Vital Signs (page 22)
    - Vaccine List section to Immunization (page 35)
    - Past Encounters section to Encounters (page 39)
- In Allergies section (page 29), added Description, Code Set & Mapping for Observation Code under Reaction Observation

- In Problems section (page 33), added
    - both patient's active and completed problems
    - 'author' Tags in Problem Observation element
- In Procedures section (page 35), note added on Templates that athenahealth does not send.
- In Immunizations section (page 38),
    - added NDC code under 'translation' Tag.
    - Updated templateID under CodeSet & Mapping column.
- In Social History section (page 39), updated Description of the effectiveTime tag under Social History Observation.
- In Payer section (page 45), filtering criteria of the insurance details has been updated.
- Updated 'Functional status' section (page 51) to reflect 5 questions
- In Family History section (page 51), added Description, Code Set & Mapping for Problem/Diagnosis under Family History Observation.
- New content 'DME orders' is added in Medical Equipment section (page 55)
- Appendix added for the exclusion of HTML tags in HPI, ROS, PE sections (page 63)

November 2020 Release

- A new CCDA section – Medical equipment in added to this document (Page 50)
- Instructions section renamed to Assessments (Page 12)
- Old Assessment section deprecated (Page 13)
- In Past Medical History section (Page 41) below sentence is added –

    For female patients OBG Gyn history is also listed (if available).

- In Procedure Section, below statement is moved from individual Clinical statements section to common Procedure section (Page 32) –

    The common notion of ""procedure"" is broader than that specified by the HL7 Version 3 Reference Information Model (RIM). Therefore, procedure templates can be represented with various RIM classes: act (e.g., dressing change), observation (e.g., EEG), procedure (e.g. splenectomy).

- Following updates made to Document level Specification section (Page 5)
    - Instructions section renamed to Assessment
    - Old Assessments section deprecated
    - Included new section -Medical equipment
- In Family History section, note added to indicate the type of clinical data listed in Family History section (Page 48)

October 2020 Release

- Updated content in the Structured CCDA section (page 6)
- Updated the Code set for ComponentOf Encounter ID under ComponentOf, Encompassing Encounter element. (Page 10)
- In Medications section, note added on CCD generation post encounter date (Page 14)
- In Results section, note added on CCD generated post encounter date (Page 23)
- In Problem section, SNOMED code part of Problem Value set:2.16.840.1.113883.3.88. 12.3221.7.4 sent in Value tag under Problem Observation element (Page 31)
- In Procedures Section, specified Imaging Procedure performed date is sent under the Procedure Observation tag in Procedure Activity Observation element (page 33)
- In Procedures Section, added 'author' Tags (Author Time and Represented Organization) under Procedure Observation tag in Procedure Activity Observation element (page 33-4)

- In Past encounter Section, SNOMED code part of Problem Value set: 2.16.840.1.113883.3.88. 12.3221.7.4 sent in Value tag under Problem Observation element for Encounter diagnoses (page 39)

August 2020 Release

- Updated content in the Structured CCDA section (page 6)
- In Procedures Section, updated code set under the Procedure Observation Code tag in Procedure Activity Observation (page 33)
- In Past Encounters Section, updated Encounter Diagnosis (SNOMED) Code tag and description and Encounter Diagnosis (ICD10) description (page 40)