- 1. **SHALL** contain exactly one [1..1] **@classCode="**OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:81-8621).
- 2. **SHALL** contain exactly one [1..1] **@moodCode="**EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:81-8622).
- 3. SHALL contain exactly one [1..1] templateId (CONF:81-8623) such that it
 - a. **SHALL** contain exactly one [1..1] **@root="**2.16.840.1.113883.10.20.22.4.47" (CONF:81-10495).
- 4. **SHALL** contain exactly one [1..1] **code** (CONF:81-19141).
 - a. This code **SHALL** contain exactly one [1..1] **@code="**ASSERTION" Assertion (CONF:81-19142).
 - b. This code **SHALL** contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.4" (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:81-26504).
- 5. **SHALL** contain exactly one [1..1] **statusCode** (CONF:81-8625).
 - a. This statusCode **SHALL** contain exactly one [1..1] **@code="**completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:81-19097).
- 6. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD" (CONF:81-8626).
 - a. This value **SHALL** contain exactly one [1..1] **@code="**419099009" Dead (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96 **STATIC**) (CONF:81-26470).

Figure 149: Family History Death Observation Example

3.29 Family History Observation (V3)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.46:2015-08-01 (open)]

Table 283: Family History Observation (V3) Contexts

Contained By:	Contains:
Family History Organizer (V3) (required)	Age Observation (optional)
	Family History Death Observation (optional)

Family History Observations related to a particular family member are contained within a Family History Organizer. The effectiveTime in the Family History Observation is the biologically or clinically relevant time of the observation. The biologically or clinically relevant time is the time at which the observation holds (is effective) for the family member (the subject of the observation).

 ${\it Table~284: Family~History~Observation~(V3)~Constraints~Overview}$

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl	7ii:2.16.840.1.	113883.10.2	0.22.4.46	:2015-08-01)
@classCode	11	SHALL		1198- 8586	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	11	SHALL		1198- 8587	urn:oid:2.16.840.1.113883.5.1 001 (HL7ActMood) = EVN
templateId	11	SHALL		1198- 8599	
@root	11	SHALL		1198- 10496	2.16.840.1.113883.10.20.22.4 .46
@extension	11	SHALL		<u>1198-</u> <u>32605</u>	2015-08-01
id	1*	SHALL		1198- 8592	
code	11	SHALL		<u>1198-</u> <u>32427</u>	urn:oid:2.16.840.1.113883.3.8 8.12.3221.7.2 (Problem Type (SNOMEDCT))
translation	1*	SHALL		<u>1198-</u> <u>32847</u>	urn:oid:2.16.840.1.113762.1.4 .1099.28 (Problem Type (LOINC))
statusCode	11	SHALL		1198- 8590	
@code	11	SHALL		1198- 19098	urn:oid:2.16.840.1.113883.5.1 4 (HL7ActStatus) = completed
effectiveTime	01	SHOULD		1198- 8593	
value	11	SHALL	CD	1198- 8591	urn:oid:2.16.840.1.113883.3.8 8.12.3221.7.4 (Problem)
entryRelationship	01	MAY		1198- 8675	
@typeCode	11	SHALL		1198- 8676	urn:oid:2.16.840.1.113883.5.9 0 (HL7ParticipationType) = SUBJ
@inversionInd	11	SHALL		1198- 8677	true
observation	11	SHALL		1198- 15526	Age Observation (identifier: urn:oid:2.16.840.1.113883.10. 20.22.4.31
entryRelationship	01	MAY		1198- 8678	
@typeCode	11	SHALL		1198- 8679	urn:oid:2.16.840.1.113883.5.9 0 (HL7ParticipationType) = CAUS
observation	11	SHALL		1198- 15527	Family History Death Observation (identifier: urn:oid:2.16.840.1.113883.10. 20.22.4.47

- 1. **SHALL** contain exactly one [1..1] **@classCode="**OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1198-8586).
- 2. **SHALL** contain exactly one [1..1] **@moodCode="**EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1198-8587).
- 3. SHALL contain exactly one [1..1] templateId (CONF:1198-8599) such that it
 - a. **SHALL** contain exactly one [1..1] **@root="**2.16.840.1.113883.10.20.22.4.46" (CONF:1198-10496).
 - b. **SHALL** contain exactly one [1..1] **@extension="2015-08-01"** (CONF:1198-32605).
- 4. **SHALL** contain at least one [1..*] **id** (CONF:1198-8592).
- 5. **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from ValueSet **Problem**Type (SNOMEDCT) urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 **DYNAMIC**(CONF:1198-32427).
 - a. This code **SHALL** contain at least one [1..*] **translation**, which **SHOULD** be selected from ValueSet **Problem Type** (LOINC) urn:oid:2.16.840.1.113762.1.4.1099.28 **DYNAMIC** (CONF:1198-32847).
- 6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1198-8590).
 - a. This statusCode **SHALL** contain exactly one [1..1] **@code="**completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1198-19098).
- 7. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:1198-8593).
- 8. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD", where the code **SHALL** be selected from ValueSet Problem urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 **DYNAMIC** (CONF:1198-8591).
- 9. MAY contain zero or one [0..1] entryRelationship (CONF:1198-8675) such that it
 - a. **SHALL** contain exactly one [1..1] **@typeCode="**SUBJ" Subject (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 **STATIC**) (CONF:1198-8676).
 - b. **SHALL** contain exactly one [1..1] @inversionInd="true" True (CONF:1198-8677).
 - c. **SHALL** contain exactly one [1..1] <u>Age Observation</u> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.31) (CONF:1198-15526).
- 10. MAY contain zero or one [0..1] entryRelationship (CONF:1198-8678) such that it
 - a. **SHALL** contain exactly one [1..1] **@typeCode="**CAUS" Causal or Contributory (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 **STATIC**) (CONF:1198-8679).
 - b. **SHALL** contain exactly one [1..1] **Family History Death Observation** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.47) (CONF:1198-15527).

Table 285: Problem Type (SNOMEDCT)

Value Set: Problem Type (SNOMEDCT) urn:oid:2.16.840.1.113883.3.88.12.3221.7.2

(Clinical Focus: A problem observation categorization of the condition as represented in the SNOMED CT code system.),(Data Element Scope: Problem Observation),(Inclusion Criteria: High level condition types as selected for use.),(Exclusion Criteria: Only the codes selected.)

This value set was imported on 6/20/2019 with a version of 20190319.

Value Set Source:

 $\underline{\texttt{https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.3221.7.2/expansion}$

Code	Code System	Code System OID	Print Name
248536006	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Finding of functional performance and activity (finding)
282291009	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Diagnosis interpretation (observable entity)
373930000	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Cognitive function finding (finding)
404684003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Clinical finding (finding)
409586006	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Complaint (finding)
418799008	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Finding reported by subject or history provider (finding)
55607006	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Problem (finding)
64572001	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Disease (disorder)

Table 286: Problem Type (LOINC)

Value Set: Problem Type (LOINC) urn:oid:2.16.840.1.113762.1.4.1099.28

(Clinical Focus: A problem observation categorization of the condition as represented in the LOINC code system.),(Data Element Scope: Problem observation),(Inclusion Criteria: High level condition types as selected for use.),(Exclusion Criteria: Only those selected)

This value set was imported on 6/20/2019 with a version of 20190416.

Value Set Source:

 $\underline{\texttt{https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.28/expansion}$

Code	Code System	Code System OID	Print Name
29308-4	LOINC	urn:oid:2.16.840.1.113883.6.1	Diagnosis
75275-8	LOINC	urn:oid:2.16.840.1.113883.6.1	Cognitive function [Interpretation]
75312-9	LOINC	urn:oid:2.16.840.1.113883.6.1	Clinical finding Family member
75313-7	LOINC	urn:oid:2.16.840.1.113883.6.1	Complaint Family member
75314-5	LOINC	urn:oid:2.16.840.1.113883.6.1	Diagnosis Family member
75315-2	LOINC	urn:oid:2.16.840.1.113883.6.1	Condition Family member
75316-0	LOINC	urn:oid:2.16.840.1.113883.6.1	Functional performance Family member
75317-8	LOINC	urn:oid:2.16.840.1.113883.6.1	Symptom Family member
75318-6	LOINC	urn:oid:2.16.840.1.113883.6.1	Problem Family member
75319-4	LOINC	urn:oid:2.16.840.1.113883.6.1	Mental function Family member

Figure 150: Family History Observation (V3) Example

```
<observation classCode="OBS" moodCode="EVN">
    <templateId root="2.16.840.1.113883.10.20.22.4.46" extension="2015-08-01" />
    <!-- Family History Observation template -->
    <id root="d42ebf70-5c89-11db-b0de-0800200c9a66" />
    <code code="75323-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"</pre>
displayName="Condition">
<translation code="64572001" displayName="Condition"</pre>
                                     codeSystem="2.16.840.1.113883.6.96"
codeSystemName="SNOMED CT"></translation>
                             </code>
    <statusCode code="completed" />
    <effectiveTime value="1967" />
    <value xsi:type="CD" code="22298006" codeSystem="2.16.840.1.113883.6.96"</pre>
displayName="Myocardial infarction" />
    <entryRelationship typeCode="CAUS">
        <observation classCode="OBS" moodCode="EVN">
            <templateId root="2.16.840.1.113883.10.20.22.4.47" />
              . . .
        </observation>
    </entryRelationship>
    <entryRelationship typeCode="SUBJ" inversionInd="true">
        <observation classCode="OBS" moodCode="EVN">
            <templateId root="2.16.840.1.113883.10.20.22.4.31" />
        </observation>
    </entryRelationship>
</observation>
```

3.30 Family History Organizer (V3)

[organizer: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.45:2015-08-01 (open)]

Table 287: Family History Organizer (V3) Contexts

Contained By:	Contains:
Health Concern Act (V2) (optional)	Family History Observation (V3) (required)
Risk Concern Act (V2) (optional)	
Family History Section (V3) (optional)	

The Family History Organizer associates a set of observations with a family member. For example, the Family History Organizer can group a set of observations about the patient's father.