

Primary Care: Family Health History Documentation Template

Documentation Tem- plate: Conceptual Structure

Contract: VA118-16-D-1008, Task Order (TO): VA-118-16-F-1008-0007, CLIN0009BA

Department of Veterans Affairs (VA)



**Knowledge Based Systems (KBS)
Office of Informatics and Information Governance (OIIG)
Clinical Decision Support (CDS)**

Publication date 04/27/2018

Version: 1.0

Primary Care: Family Health History Documentation Template: Documentation Template: Conceptual Structure

by Knowledge Based Systems (KBS), Office of Informatics and Information Governance (OIIG), and Clinical Decision Support (CDS)

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Preface

Table 1. Revision History

Date	Life Cycle Event
April 27, 2018	Published
April 27, 2018	Reviewed
March 7, 2018	Created

Table 2. Clinical White Paper Contributors

Name	Role	Affiliation
Angela Denietolis, MD	Author	Primary Care Physician James A. Haley Veterans Hospital Tampa VAMC Tampa, FL 33612
Pat Dumas, RN	Author	Clinical Program Director VACO 810 Vermont Ave NW Washington, DC 20420
Manish Merchant, MD	Author	Health Informatician Albany VAMC 113 Holland Ave. Albany, NY 12208
Timothy Dresselhaus, MD	Author	San Diego VAMC - MEDS 3350 La Jolla Village Drive San Diego, CA 92161
David Douglas, MD	Author	Portland VAMC Portland, OR E-Consult Expert

Table 3. Artifact Identifier

Domain	Artifact ID	Name
urn:va.gov:kbs:knart:artifact:rl	a5da18a9-4ee9-5531-8fe7-99a0317cdab2	

Artifact Applicability

Table 4. Applicability Foci, Description and Codes

Focus	Description	Code System	Code	Value Set	Value Set Version
TargetUser	Provider to include Primary Care	SNOMED CT	45323100012004 Primary care provider (occupation)	N/A	N/A
WorkflowSetting	Primary Care			N/A	N/A
ClinicalVenue	Outpatient	SNOMED CT	33022008 Hospital-based outpatient department (environment)	N/A	N/A
PatientAgeGroup	Adult Patients	SNOMED CT	133936004 Adult (person)	N/A	N/A

Models

Table 5. Model References

Referenced Model	Description
urn:solor.io:anf-model:1.0	VA Analysis Normal Form Model

Chapter 1. External Data Definitions

No external data expression definitions and no trigger definitions are present.

Chapter 2. Expression Definitions

Table 2.1. familyMembersList

Expression: type=elm:List
Annotation:
Codes: elm:element[elm:Code]: [27733009 Sister (person)]elm:element[elm:Code]: [70924004 Brother (person)]elm:element[elm:Code]: [66089001 Daughter (person)]elm:element[elm:Code]: [65616008 Son (person)]elm:element[elm:Code]: [72705000 Mother (person)]elm:elemen- t[elm:Code]: [394859001 Maternal grandmother (person)]elm:element[elm:Code]: [394857004 Ma- ternal grandfather (person)]elm:element[elm:Code]: [719765007 Maternal half sister (person)]elm:el- ement[elm:Code]: [719766008 Maternal half brother (person)]elm:element[elm:Code]: [736454006 Maternal aunt (person)]elm:element[elm:Code]: [442031000124102 Maternal uncle (person)]elm:el- ement[elm:Code]: [6839005 Father (person)]elm:element[elm:Code]: [394858009 Paternal grand- mother (person)]elm:element[elm:Code]: [394856008 Paternal grandfather (person)]elm:elemen- t[elm:Code]: [719764006 Paternal half sister (person)]elm:element[elm:Code]: [719762005 Pater- nal half brother (person)]elm:element[elm:Code]: [736455007 Paternal aunt (person)]elm:elemen- t[elm:Code]: [442041000124107 Paternal uncle (person)]elm:element[elm:Code]: [TSR-NoCode]

Chapter 3. Family Structure

Consider using this section when a detailed genetic history is the intent. For routine clinical care, consider beginning with the next section. If you do complete this section, include both living and deceased family members.

- ☐ prompt: How many brothers do you have?
response: Integer (Single)
- ☐ prompt: How many sisters do you have?
response: Integer (Single)
- ☐ prompt: How many sons do you have?
response: Integer (Single)
- ☐ prompt: How many daughters do you have?
response: Integer (Single)
- ☐ prompt: How many brothers does your mother have? (your uncles)
response: Integer (Single)
- ☐ prompt: How many sisters does your mother have? (your aunts)
response: Integer (Single)
- ☐ prompt: How many brothers does your father have? (your uncles)
response: Integer (Single)
- ☐ prompt: How many sisters does your father have? (your aunts)
response: Integer (Single)

Chapter 4. Family Health History

❖ History of Autoimmune Disorders

- ☐ prompt: Autoimmune Disorder
itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a |Observation procedure (procedure)] -(363702006 |Has focus (attribute))-[85828009 |Autoimmune disease (disorder)]
response: String (Single)
- ☐ prompt: Family Member
response: Code (Single)
- ☐ prompt: Age at Autoimmune Disorder Diagnosis
response: Integer (Single)
- ☐ prompt: Autoimmune Disorder Detail
response: String (Single)
- ☐ prompt: Died as result of disease?
response: Boolean (Single)

❖ History of Allergic Disorders

- ☐ prompt: Allergic Disorder
itemCode: TSR-NoCode
response: String (Single)
- ☐ prompt: Family Member
response: Code (Single)
- ☐ prompt: Age at Allergic Disorder Diagnosis
response: Integer (Single)
- ☐ prompt: Autoimmune Disorder Detail
response: String (Single)
- ☐ prompt: Died as result of disease?
response: Boolean (Single)

❖ History of Cancers

- ☐ prompt: Cancer
itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a |Observation procedure (procedure)] -(363702006 |Has focus (attribute))-[363346000 |Malignant neoplastic disease (disorder)]
response: String (Single)
- ☐ prompt: Family Member
response: Code (Single)
- ☐ prompt: Family Member Age at Diagnosis
response: Integer (Single)
- ☐ prompt: Cancer Detail
response: String (Single)

	<input type="checkbox"/> prompt: Died as result of disease? response: Boolean (Single)
❖ History of Congenital Disorders	<input type="checkbox"/> prompt: Congenital Disorder itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a Observation procedure (procedure)] -(363702006 Has focus (attribute))->[66091009 Congenital disease (disorder)] response: String (Single) <input type="checkbox"/> prompt: Family Member response: Code (Single) <input type="checkbox"/> prompt: Family Member Age at Diagnosis response: Integer (Single) <input type="checkbox"/> prompt: Congenital Disorder Detail response: String (Single) <input type="checkbox"/> prompt: Died as result of disease? response: Boolean (Single)
❖ History of Developmental Disorders	<input type="checkbox"/> prompt: Developmental Disorder itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a Observation procedure (procedure)] -(363702006 Has focus (attribute))->[5294002 Developmental disorder (disorder)] response: String (Single) <input type="checkbox"/> prompt: Family Member response: Code (Single) <input type="checkbox"/> prompt: Family Member Age at Diagnosis response: Integer (Single) <input type="checkbox"/> prompt: Developmental Disorder Detail response: String (Single) <input type="checkbox"/> prompt: Died as result of disease? response: Boolean (Single)
❖ History of Dermatologic Disorders	<input type="checkbox"/> prompt: Dermatologic Disorder itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a Observation procedure (procedure)] -(363702006 Has focus (attribute))->[95320005 Disorder of skin (disorder)] response: String (Single) <input type="checkbox"/> prompt: Family Member response: Code (Single) <input type="checkbox"/> prompt: Family Member Age at Diagnosis response: Integer (Single) <input type="checkbox"/> prompt: Dermatologic Detail

	<p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Died as result of disease?</p> <p>response: Boolean (Single)</p>
❖ History of Endocrine Disorders	<p><input type="checkbox"/> prompt: Endocrine Disorder</p> <p>itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a Observation procedure (procedure)] -(363702006 Has focus (attribute))-[362969004 Disorder of endocrine system (disorder)]</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Family Member</p> <p>response: Code (Single)</p> <p><input type="checkbox"/> prompt: Family Member Age at Diagnosis</p> <p>response: Integer (Single)</p> <p><input type="checkbox"/> prompt: Endocrine Disorder Detail</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Died as result of disease?</p> <p>response: Boolean (Single)</p>
❖ History of Metabolic Disorders	<p><input type="checkbox"/> prompt: Metabolic Disorder</p> <p>itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a Observation procedure (procedure)] -(363702006 Has focus (attribute))-[75934005 Metabolic disease (disorder)]</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Family Member</p> <p>response: Code (Single)</p> <p><input type="checkbox"/> prompt: Family Member Age at Diagnosis</p> <p>response: Integer (Single)</p> <p><input type="checkbox"/> prompt: Metabolic Disorder Detail</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Died as result of disease?</p> <p>response: Boolean (Single)</p>
❖ History of Gastroenterologic Disorders	<p><input type="checkbox"/> prompt: Gastroenterologic Disorder</p> <p>itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a Observation procedure (procedure)] -(363702006 Has focus (attribute))-[119292006 Disorder of gastrointestinal tract (disorder)]</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Family Member</p> <p>response: Code (Single)</p> <p><input type="checkbox"/> prompt: Family Member Age at Diagnosis</p>

	<p>response: Integer (Single)</p> <p><input type="checkbox"/> prompt: Gastroenterologic Disorder Detail</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Died as result of disease?</p> <p>response: Boolean (Single)</p>
❖	<p>History of Genitourinary Disorders</p> <hr/> <p><input type="checkbox"/> prompt: Genitourinary Disorder</p> <p>itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a Observation procedure (procedure)] ->(363702006 Has focus (attribute))->[42030000 Disorder of the genitourinary system (disorder)]</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Family Member</p> <p>response: Code (Single)</p> <p><input type="checkbox"/> prompt: Family Member Age at Diagnosis</p> <p>response: Integer (Single)</p> <p><input type="checkbox"/> prompt: Genitourinary Disorder Detail</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Died as result of disease?</p> <p>response: Boolean (Single)</p>
❖	<p>History of Reproductive Disorders</p> <hr/> <p><input type="checkbox"/> prompt: Reproductive Disorder</p> <p>itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a Observation procedure (procedure)] ->(363702006 Has focus (attribute))->[362968007 Disorder of reproductive system (disorder)]</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Family Member</p> <p>response: Code (Single)</p> <p><input type="checkbox"/> prompt: Family Member Age at Diagnosis</p> <p>response: Integer (Single)</p> <p><input type="checkbox"/> prompt: Reproductive Disorder Detail</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Died as result of disease?</p> <p>response: Boolean (Single)</p>
❖	<p>History of Hematologic Disorders</p> <hr/> <p><input type="checkbox"/> prompt: Hematologic Disorder</p> <p>itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a Observation procedure (procedure)] ->(363702006 Has focus (attribute))->[414022008 Disorder of cellular component of blood (disorder)]</p> <p>response: String (Single)</p>

	<input type="checkbox"/> prompt: Family Member response: Code (Single) <input type="checkbox"/> prompt: Family Member Age at Diagnosis response: Integer (Single) <input type="checkbox"/> prompt: Hematologic Disorder Detail response: String (Single) <input type="checkbox"/> prompt: Died as result of disease? response: Boolean (Single)
❖ History of Hereditary Disorders	<input type="checkbox"/> prompt: Hereditary Condition itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a Observation procedure (procedure)] -(363702006 Has focus (attribute))-[32895009 Hereditary disease (disorder)] response: String (Single) <input type="checkbox"/> prompt: Family Member response: Code (Single) <input type="checkbox"/> prompt: Family Member Age at Diagnosis response: Integer (Single) <input type="checkbox"/> prompt: Hereditary Condition Detail response: String (Single) <input type="checkbox"/> prompt: Died as result of disease? response: Boolean (Single)
❖ History of Infectious Diseases	<input type="checkbox"/> prompt: Infectious Disease itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a Observation procedure (procedure)] -(363702006 Has focus (attribute))-[40733004 Infectious disease (disorder)] response: String (Single) <input type="checkbox"/> prompt: Family Member response: Code (Single) <input type="checkbox"/> prompt: Family Member Age at Diagnosis response: Integer (Single) <input type="checkbox"/> prompt: Infectious Disease Detail response: String (Single) <input type="checkbox"/> prompt: Died as result of disease? response: Boolean (Single)
❖ History of Musculoskeletal Disorders	<input type="checkbox"/> prompt: Musculoskeletal Disorder itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a Observation procedure (procedure)] -(363702006 Has focus (attribute))-[928000 Disorder of musculoskeletal system (disorder)]

	<p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Family Member</p> <p>response: Code (Single)</p> <p><input type="checkbox"/> prompt: Family Member Age at Diagnosis</p> <p>response: Integer (Single)</p> <p><input type="checkbox"/> prompt: Musculoskeletal Disorder Detail</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Died as result of disease?</p> <p>response: Boolean (Single)</p>
❖	History of Neurologic Disorders
	<p><input type="checkbox"/> prompt: Neurologic Disorder</p> <p>itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a Observation procedure (procedure)] ->(363702006 Has focus (attribute))->[118940003 Disorder of nervous system (disorder)]</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Family Member</p> <p>response: Code (Single)</p> <p><input type="checkbox"/> prompt: Family Member Age at Diagnosis</p> <p>response: Integer (Single)</p> <p><input type="checkbox"/> prompt: Neurologic Disorder Detail</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Died as result of disease?</p> <p>response: Boolean (Single)</p>
❖	History of Ophthalmic Disorders
	<p><input type="checkbox"/> prompt: Ophthalmic Disorder</p> <p>itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a Observation procedure (procedure)] ->(363702006 Has focus (attribute))->[371409005 Disorder of eye region (disorder)]</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Family Member</p> <p>response: Code (Single)</p> <p><input type="checkbox"/> prompt: Family Member Age at Diagnosis</p> <p>response: Integer (Single)</p> <p><input type="checkbox"/> prompt: Ophthalmic Disorder Detail</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Died as result of disease?</p> <p>response: Boolean (Single)</p>
❖	History of Psychiatric Disorders
	<p><input type="checkbox"/> prompt: Psychiatric Disorder</p>

	<p>itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a Observation procedure (procedure)] ->(363702006 Has focus (attribute))->[74732009 Mental disorder (disorder)]</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Family Member</p> <p>response: Code (Single)</p> <p><input type="checkbox"/> prompt: Family Member Age at Diagnosis</p> <p>response: Integer (Single)</p> <p><input type="checkbox"/> prompt: Psychiatric Disorder Detail</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Died as result of disease?</p> <p>response: Boolean (Single)</p>
❖	<p>History of Behavioral Health Disorders</p> <hr/> <p><input type="checkbox"/> prompt: Behavioral Health Disorder</p> <p>itemCode: TSR-NoCode</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Family Member</p> <p>response: Code (Single)</p> <p><input type="checkbox"/> prompt: Family Member Age at Diagnosis</p> <p>response: Integer (Single)</p> <p><input type="checkbox"/> prompt: Behavioral Health Disorder Detail</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Died as result of disease?</p> <p>response: Boolean (Single)</p>
❖	<p>History of Pulmonary Disorders</p> <hr/> <p><input type="checkbox"/> prompt: Pulmonary Disorder</p> <p>itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a Observation procedure (procedure)] ->(363702006 Has focus (attribute))->[19829001 Disorder of lung (disorder)]</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Family Member</p> <p>response: Code (Single)</p> <p><input type="checkbox"/> prompt: Family Member Age at Diagnosis</p> <p>response: Integer (Single)</p> <p><input type="checkbox"/> prompt: Pulmonary Disorder Detail</p> <p>response: String (Single)</p> <p><input type="checkbox"/> prompt: Died as result of disease?</p> <p>response: Boolean (Single)</p>

Chapter 5. Family Members with Selected Condition

Family Members with Selected Condition

❖ Family Member with Selected Condition

prompt:

response: Code (Single)

response EnumerationConstraint (List)

range:

item: Sister

item: Brother

item: Daughter

item: Son

item: Mother

item: Maternal Grandmother

item: Maternal Grandfather

item: Maternal Half-Sister

item: Maternal Half-Brother

item: Maternal Aunt

item: Maternal Uncle

☞ item: Other

Details

item: Father

item: Paternal Grandmother

item: Paternal Grandfather

item: Paternal Half-Sister

item: Paternal Half-Brother

item: Paternal Aunt

item: Paternal Uncle

prompt: Living

response: Code (Multiple)

response EnumerationConstraint (List)

range:

item: Yes([a997cc03-3e99-40eb-833a-6374c7750a3a |Observation procedure (procedure)]- ->(363702006 |Has focus (attribute))->[365472006 |Finding of relatives surviving (finding)])

item: No([a997cc03-3e99-40eb-833a-6374c7750a3a |Observation procedure (procedure)]- ->(363702006 |Has focus (attribute))->[365474007 |Finding of details of family (finding)]->(363714003 |Interprets (attribute))->[fd38bb5d-4f5d-43b5-9b22-b648079ccf4c |Age at time of death (observable entity)])

item: Unknown

☞ item: Other

Details

prompt: Age Deceased?

response: Integer (Single)

prompt: Other comments about this family member

response: String (Single)

Chapter 6. Patient Genetic Testing History

Patient Genetic Testing History

Patient Genetic Testing Done?	
◆ prompt: Yes	
response: Boolean (Single)	
❖	
	prompt: Test
	response: Code (Single)
	response EnumerationConstraint (List)
	range:
	item:
	prompt: Results
	response: Tuple (Single)
	prompt: Additional Genetic Testing/Results?
	response: Boolean (Single)
❖	Patient Genetic Testing Done?
	prompt: Additional genetic testing history
	response: String (Single)

Chapter 7. Historian

Historian

prompt: Relationship to Patient

response: String (Single)

Chapter 8. Tabular List

Terminology Service Request (TSR) Mappings

Table 8.1. Terminology Versions

Name	Identifier	Version
SNOMED CT	2.16.840.1.113883.6.96	United States Edition 20180301

Table 8.2. Terminology References

System	Code	Display Text	References
SNOMED CT	133936004 Adult (person)	Adult Patients	1
SNOMED CT	27733009 Sister (person)	Precoordinated Expression	1
SNOMED CT	33022008 Hospital-based outpatient department (environment)	Outpatient	1
SNOMED CT	394856008 Paternal grandfather (person)	Precoordinated Expression	1
SNOMED CT	394857004 Maternal grandfather (person)	Precoordinated Expression	1
SNOMED CT	394858009 Paternal grandmother (person)	Precoordinated Expression	1
SNOMED CT	394859001 Maternal grandmother (person)	Precoordinated Expression	1
SNOMED CT	405824009 Genetic test (procedure)		1
SNOMED CT	442031000124102 Maternal uncle (person)	Precoordinated Expression	1
SNOMED CT	442041000124107 Paternal uncle (person)	Precoordinated Expression	1
SNOMED CT	453231000124104 Primary care provider (occupation)	Provider to include Primary Care	1
SNOMED CT	65616008 Son (person)	Precoordinated Expression	1
SNOMED CT	66089001 Daughter (person)	Precoordinated Expression	1
SNOMED CT	6839005 Father (person)	Precoordinated Expression	1
SNOMED CT	70924004 Brother (person)	Precoordinated Expression	1
SNOMED CT	719762005 Paternal half brother (person)	Precoordinated Expression	1
SNOMED CT	719764006 Paternal half sister (person)	Precoordinated Expression	1

System	Code	Display Text	References
SNOMED CT	719765007 Maternal half sister (person)	Precoordinated Expression	1
SNOMED CT	719766008 Maternal half brother (person)	Precoordinated Expression	1
SNOMED CT	72705000 Mother (person)	Precoordinated Expression	1
SNOMED CT	736454006 Maternal aunt (person)	Precoordinated Expression	1
SNOMED CT	736455007 Paternal aunt (person)	Precoordinated Expression	1
SNOMED CT	TSR-NoCode	Precoordinated Expression	3
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a Observation procedure (procedure)] - >(363702006 Has focus (attribute))->[118940003 Disorder of nervous system (disorder)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a Observation procedure (procedure)] - >(363702006 Has focus (attribute))->[119292006 Disorder of gastrointestinal tract (disorder)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a Observation procedure (procedure)] - >(363702006 Has focus (attribute))->[19829001 Disorder of lung (disorder)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a Observation procedure (procedure)] - >(363702006 Has focus (attribute))->[32895009 Hereditary disease (disorder)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a Observation procedure (procedure)] - >(363702006 Has focus	Postcoordinated Expression	1

System	Code	Display Text	References
	(attribute))->[362968007 Disorder of reproductive system (disorder)]		
SNOMED CT	[a997cc03-3e99-40e- b-833a-6374c7750a3a Observation proce- dure (procedure)] - >(363702006 Has focus (attribute))->[362969004 Disorder of endocrine sys- tem (disorder)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40e- b-833a-6374c7750a3a Observation proce- dure (procedure)] - >(363702006 Has focus (attribute))->[363346000 Malignant neoplastic dis- ease (disorder)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40e- b-833a-6374c7750a3a Observation proce- dure (procedure)] - >(363702006 Has focus (attribute))->[371409005 Disorder of eye region (disorder)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40e- b-833a-6374c7750a3a Observation proce- dure (procedure)] - >(363702006 Has focus (attribute))->[40733004 Infectious disease (disor- der)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40e- b-833a-6374c7750a3a Observation proce- dure (procedure)] - >(363702006 Has focus (attribute))->[414022008 Disorder of cellular com- ponent of blood (disorder)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40e- b-833a-6374c7750a3a Observation proce- dure (procedure)] - >(363702006 Has focus (attribute))->[42030000	Postcoordinated Expression	1

System	Code	Display Text	References
	Disorder of the genitourinary system (disorder)]		
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a Observation procedure (procedure)] - >(363702006 Has focus (attribute))->[5294002 Developmental disorder (disorder)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a Observation procedure (procedure)] - >(363702006 Has focus (attribute))->[66091009 Congenital disease (disorder)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a Observation procedure (procedure)] - >(363702006 Has focus (attribute))->[74732009 Mental disorder (disorder)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a Observation procedure (procedure)] - >(363702006 Has focus (attribute))->[75934005 Metabolic disease (disorder)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a Observation procedure (procedure)] - >(363702006 Has focus (attribute))->[85828009 Autoimmune disease (disorder)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a Observation procedure (procedure)] - >(363702006 Has focus (attribute))->[928000 Disorder of musculoskeletal system (disorder)]	Postcoordinated Expression	1

System	Code	Display Text	References
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a Observation procedure (procedure)] - >(363702006 Has focus (attribute))->[95320005 Disorder of skin (disorder)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a Observation procedure (procedure)]- - >(363702006 Has focus (attribute))->[365472006 Finding of relatives surviving (finding)]	Yes	1
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a Observation procedure (procedure)]- - >(363702006 Has focus (attribute))->[365474007 Finding of details of family (finding)]- - >(363714003 Interprets (attribute))->[fd38b-b5d-4f5d-43b5-9b22-b648079c-cf4c Age at time of death (observable entity)]	No	1

Chapter 9. Behavior Symbols

Table 9.1. Group Organizational Behavior

Sym- bol	Name	Definition
▶	Sentence Group	A group of related alternative actions is a sentence group if the item referenced by the action is the same in all the actions, and each action simply constitutes a different variation on how to specify the details for that item. For example, two actions that could be in a SentenceGroup are "aspirin, 500 mg, 2 times per day" and "aspirin, 300 mg, 3 times per day". In both cases, aspirin is the item referenced by the action, and the two actions represent two different options for how aspirin might be ordered for the patient. Note that a SentenceGroup would almost always have an associated selection behavior of "AtMostOne", unless it's a required action, in which case, it would be "ExactlyOne".
▷	Logical Group	A group with this behavior logically groups its sub-elements, and may be shown as a visual group to the end user, but it is not required to do so.
➤	Visual Group	Any group marked with this behavior should be displayed as a visual group to the end user.

Table 9.2. Group Selection Behavior

Sym- bol	Name	Definition
□	Any	Any number of the items in the group may be chosen, from zero to all.
⦿	All	All the items in the group must be selected as a single unit.
⊙	AllOrNone	All the items in the group are meant to be chosen as a single unit: either all must be selected by the end user, or none may be selected.
○	ExactlyOne	The end user must choose one and only one of the selectable items in the group. The user may not choose none of the items in the group.
⊛	AtMostOne	The end user may choose zero or at most one of the items in the group.
⦿	OneOrMore	The end user must choose a minimum of one, and as many additional as desired.

Table 9.3. Required Behavior

Sym- bol	Name	Definition
◆	Must	An action with this behavior must be included in the actions processed by the end user; the end user may not choose not to include this action.

Sym- bol	Name	Definition
◇	Could	An action with this behavior may be included in the set of actions processed by the end user.
➤	MustUnlessDocumented	An action with this behavior must be included in the set of actions processed by the end user, unless the end user provides documentation as to why the action was not included.

Table 9.4. Precheck Behavior

Sym- bol	Name	Definition
▲	Yes	An action with this behavior is one of the most frequent actions that is, or should be, included by an end user, for the particular context in which the action occurs. The system displaying the action to the end user should consider "pre-checking" such an action as a convenience for the user.
▽	No	An action with this behavior is one of the less frequent actions included by the end user, for the particular context in which the action occurs. The system displaying the actions to the end user would typically not "pre-check" such an action.

Table 9.5. Cardinality Behavior

Sym- bol	Name	Definition
◆	Single	An action with this behavior may only be completed once.
❖	Multiple	An action with this behavior may be repeated multiple times.

Table 9.6. Item Flags

Sym- bol	Name	Definition
☞	fillIn	This item, in a list entry, allows the user to enter a fill in value that is not present in the set of presented choices.

Table 9.7. Read Only Behavior

Sym- bol	Name	Definition
☆	true	For a particular action or action group, specifies whether the elements are read only.

Appendix A. References

This appendix contains the list of related resources and supporting documents used in creating this KNART.

List of References

Related Resources

[CCWP] *Primary Care: Family Health History Clinical Content White Paper*

[CSD] *Primary Care: Family Health History Documentation Template Conceptual Structure Document*

[KVRpt] *Primary Care: Family Health History Documentation Template KNART Validation Report*

Supporting Evidence

[CMS 2012] *Eligible Professional Meaningful Use Menu Set Measures: Measure 4 of 6: Stage 2: Family Health History: Center for Medicare and Medicaid ; cited October 2012. Available from: https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/downloads/Stage2_EPMenu_4_FamilyHealthHistory.pdf (link [https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/downloads/Stage2_EPMenu_4_FamilyHealthHistory.pdf])*

[VHA 2017] *Family health history: SMARTForm use case, version 1.2. SMARTForms Family Health History Use Case: U.S. Department of Veteran Affairs study; cited September 8, 2017. Available from: [V1.2_20150602.docx](#) (link [[V1.2_20150602.docx](#)])*

[NIH 2017] *My Family Health Portrait: A tool from the Surgeon General: U.S. National Institutes of Health cited December 21, 2017. Available from: <https://familyhistory.hhs.gov/FHH/html/index.html> (link [<https://familyhistory.hhs.gov/FHH/html/index.html>])*