Mental Health: Iraq & Afghanistan Post-Deployment Screen Documentation Template

Documentation Template: Conceptual Structure

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Knowledge Based Systems (KBS)
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Clinical Decision Support (CDS)

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Mental Health: Iraq & Afghanistan Post-Deployment Screen 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
May 23, 2018	Published
May 23, 2018	Reviewed
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Table 2. Clinical White Paper Contributors

Name	Role	Affiliation
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Table 3. Artifact Identifier

Domain	Artifact ID	Name
urn:va.gov:kbs:knart:artifact:r1	72f70ac0-f76e-5b3b-800a-2d5a365a296a	B51

Artifact Applicability

Table 4. Applicability Foci, Description and Codes

Focus	Description	Code System	Code	Value Set	Value Set Version
TargetUser	Primary Care Provider	SNOMED CT	453231000124104 |Primary care provider (occupation)|	N/A	N/A
TargetUser	Mental Health Provider			N/A	N/A
PatientAgeGroup	Adult	SNOMED CT	133936004 |Adult (person)|	N/A	N/A
ClinicalVenue	Outpatient	SNOMED CT	33022008 |Hospital-based outpatient department (environment)|	N/A	N/A
WorkflowTask	Post-deployment screening			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

Definitions

Table 1.1. PostDeploymentScreening

Expression: type=elm:Query
Annotation:
Codes: elm:value[elm:Code]: [398166005 |Performed (qualifier value)|]elm:value[elm:Code]: [10918624-0ba1-4f32-be0e-bf7fd0d0cca3 |Defense force post-deployment health screen (procedure)]

Table 1.2. DeploymentInIraqAfter9-11-2001

Expression: type=elm:Retrieve , dataType=anf:ClinicalStatement, codeProperty=topic, dateProperty=dateTime
Annotation:
Codes: elm:element[elm:Code]: [[a997cc03-3e99-40eb-833a-6374c7750a3a |Observation procedure (procedure)] ->(363702006 |Has focus (attribute))->[dddcf231-e7a6-4458-9fc1-44fad307ac46 |Military deployment in Iraq (finding)]]
dateRange[elm:Interval]   low: elm:DateTime()   high: elm:Today()

Table 1.3. DeploymentInAfghanistanAfter9-11-2001

Expression: type=elm:Retrieve , dataType=anf:ClinicalStatement, codeProperty=topic, dateProperty=dateTime
Annotation:
Codes: elm:element[elm:Code]: [[a997cc03-3e99-40eb-833a-6374c7750a3a |Observation procedure (procedure)] ->(363702006 |Has focus (attribute))->[9c279b5c-5f9b-405c-b98c-47463909963c |Military deployment in Afghanistan (finding)]]
dateRange[elm:Interval]   low: elm:DateTime()   high: elm:Today()

Triggers

No trigger definitions are present.

Chapter 2. Expression Definitions

No expression definitions are present.

Chapter 3. Iraq & Afghanistan Post-Deployment Screen

	prompt:	Is the Veteran post-deployment after return from service in Iraq or Afghanistan after September 11, 2001?
		Post Deployment Screening identification
	itemCode:	10918624-0ba1-4f32-be0e-bf7fd0d0cca3 |Defense force post-deployment health screen (procedure)
	response:	Boolean (Single)

responseBinding: Property ("IsPostDeployment")

Condition: elm:Property

	⊳ prompt:	Dates
	response:	Timestamp (Multiple)

Infectious Disease Screen

	prompt:	Unexplained fevers since serving in the area of conflict?
	response:	Boolean (Single)

responseBinding: Property ("UnexplainedFevers")

Condition: elm:Property

	prompt:	Description
	response:	String (Single)
	prompt:	Chronic diarrhea or other gastrointestinal complaints since serving in the area of conflict?
	itemCode:	[a997cc03-3e99-40eb-833a-6374c7750a3a |Observation procedure (procedure)] ->(363702006 |Has focus (attribute))->[236071009 |Chronic diarrhea (disorder)]
	response:	Boolean (Single)

responseBinding: Property ("GIComplaints")

Condition: elm:Property

	prompt:	Description
	response:	String (Single)
	prompt:	Persistent papular or nodular rash since serving in the area of conflict?
	itemCode:	[a997cc03-3e99-40eb-833a-6374c7750a3a |Observation procedure (procedure)]- ->(363702006 |Has focus (attribute))->[271807003 |Eruption of skin (disorder)]- ->(263502005 |Clinical course (attribute))->[62459000 |Chronic persistent (qualifier value)]
	response:	Boolean (Single)

responseBinding: Property ("PersistentRash")

Condition: elm:Property

☐ prompt: Description

response: String (Single)

Embedded Fragment Screen

☐ prompt: Suspected or known embedded fragments or shrapnel as a result of serving in the area of conflict?

itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a |Observation procedure (procedure)] ->(363702006 |Has focus (attribute))->[f7456cbc-2152-424a-97b2-465d5adabccd |Embedded fragments of shrapnel (disorder)]

itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a |Observation procedure (procedure)] ->(363702006 |Has focus (attribute))->[f7456cbc-2152-424a-97b2-465d5adabccd |Embedded fragments of shrapnel (disorder)]

response: Boolean (Single)

responseBinding: Property ("EmbeddedFragments")

Condition:elm:Property

☐ prompt: Description

response: String (Single)

Traumatic Brain Injury (TBI) Screen

☐ prompt: Suspected or known head injury resulting in alteration or loss of consciousness during deployment?

itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a |Observation procedure (procedure)]- ->(363702006 |Has focus (attribute))->[3006004 |Disturbance of consciousness (finding)]- ->(42752001 |Due to (attribute))->[82271004 |Injury of head (disorder)];

itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a |Observation procedure (procedure)]- ->(363702006 |Has focus (attribute))->[419045004 |Loss of consciousness (finding)]- ->(42752001 |Due to (attribute))->[82271004 |Injury of head (disorder)];

itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a |Observation procedure (procedure)]- ->(363702006 |Has focus (attribute))->[3006004 |Disturbance of consciousness (finding)]- ->(42752001 |Due to (attribute))->[82271004 |Injury of head (disorder)];

itemCode: [a997cc03-3e99-40eb-833a-6374c7750a3a |Observation procedure (procedure)]- ->(363702006 |Has focus (attribute))->[419045004 |Loss of consciousness (finding)]- ->(42752001 |Due to (attribute))->[82271004 |Injury of head (disorder)];

response: Boolean (Single)

responseBinding: Property ("TBI")

Condition:elm:Property

☐ prompt: Description

response: String (Single)

Additional Information

☐ prompt: Additional information

response: String (Single)

Chapter 4. Tabular List

Terminology Service Request (TSR) Mappings

Table 4.1. Terminology Versions

Name	Identifer	Version
SNOMED CT	2.16.840.1.113883.6.96	United States Edition 20180301

Table 4.2. Terminology References

System	Code	Display Text[a]	References[b]
SNOMED CT	10918624-0ba1-4f32-be0e-bf7fd0d0cca3 |Defense force post-deployment health screen (procedure)	Precoordinated Expression	2
SNOMED CT	133936004 |Adult (person)|	Adult	1
SNOMED CT	33022008 |Hospital-based outpatient department (environment)|	Outpatient	1
SNOMED CT	398166005 |Performed (qualifier value)|	Precoordinated Expression	1
SNOMED CT	453231000124104 |Primary care provider (occupation)|	Primary Care Provider	1
SNOMED CT	[a997cc03-3e99-40eb-833a-6374c7750a3a |Observation procedure (procedure)] ->(363702006 |Has focus (attribute))->[236071009 |Chronic diarrhea (disorder)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40eb-833a-6374c7750a3a |Observation procedure (procedure)] ->(363702006 |Has focus (attribute))->[9c279b5c-5f9b-405c-b98c-47463909963c | Military deployment in Afghanistan (finding)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40eb-833a-6374c7750a3a |Observation procedure (procedure)] ->(363702006 |Has focus (attribute))->[ddd-	Postcoordinated Expression	1

System	Code	Display Text[a]	References[b]
	cf231-e7a6-4458-9fc1-44fad307ac46 |Military deployment in Iraq (finding)]		
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a |Observation procedure (procedure)] ->(363702006 |Has focus (attribute))->[f7456cbc-2152-424a-97b2-465d5ad-abccd |Embedded fragments of shrapnel (disorder)]	Postcoordinated Expression	2
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a |Observation procedure (procedure)]- ->(363702006 |Has focus (attribute))->[271807003 |Eruption of skin (disorder)]- ->(263502005 |Clinical course (attribute))->[62459000	Chronic persistent (qualifier value)]	Postcoordinated Expression	1
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a |Observation procedure (procedure)]- ->(363702006 |Has focus (attribute))->[3006004 |Disturbance of consciousness (finding)]- ->(42752001 |Due to (attribute))->[82271004 |Injury of head (disorder)];	Postcoordinated Expression	2
SNOMED CT	[a997cc03-3e99-40e-b-833a-6374c7750a3a |Observation procedure (procedure)]- ->(363702006 |Has focus (attribute))->[419045004 |Loss of consciousness (finding)]- ->(42752001 |Due to (attribute))->[82271004 |Injury of head (disorder)];	Postcoordinated Expression	2

[a]If a code is used multiple times in the KNART, only the display text of the first instance is shown.

[b]Count of the number of times the given code system and code pair is used in the KNART.

Chapter 5. Behavior Symbols

Table 5.1. Group Organizational Behavior

Symbol	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 5.2. Group Selection Behavior

Symbol	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 5.3. Required Behavior

Symbol	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 5.4. 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 5.5. 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 5.6. 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 5.7. 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] *Mental Health: Iraq & Afghanistan Post-Deployment Screen Clinical Content White Paper*

[CSD] *Mental Health: Iraq & Afghanistan Post-Deployment Screen Documentation Template Conceptual Structure Document*

[KVRpt] *Mental Health: Iraq & Afghanistan Post-Deployment Screen Documentation Template KNART Validation Report*

Supporting Evidence

[Bush 1998] *Bush K, Kivlahan DR, McDonell MB, Fihn SD, Bradley KA, et al. The AUDIT alcohol consumption questions (AUDIT-C): an effective brief screening test for problem drinking. Ambulatory Care Quality Improvement Project (ACQUIP). Alcohol Use Disorders Identification Test. Arch Intern Med. 1998 Sep 14;158(16):1789-95* (link [https://www.ncbi.nlm.nih.gov/pubmed/9738608])

[IOM 2013] *Committee on the Assessment of the Readjustment Needs of Military Personnel, Veterans, and Their Families; Board on the Health of Select Populations; Institute of Medicine. Returning Home from Iraq and Afghanistan: Assessment of Readjustment Needs of Veterans, Service Members, and Their Families. Washington (DC): National Academies Press (US); Mar 2013* (link [https://www.ncbi.nlm.nih.gov/books/NBK206857])

[DOD 2012] *Department of Defense (DoD) Deployment Health Clinical Center. DoD/VA Post-Deployment Health Clinical Practice Guideline (PDH-CPG) Fact Sheet. Website. Published November 2012* (link [https://www.qmo.amedd.army.mil/redep/PDH-CPG_fact_sheet_15NOV12.pdf])

[VHA/DOD 2012] *Department of Veterans Affairs. Screening and Evaluation Protocol for Veterans with Embedded Fragments Who Served in Iraq and/or Afghanistan Post-September 11, 2001. Veterans Health Administration. Washington DC 20420. VHA Directive 1303.01. Transmittal Sheet. Published April 2017* (link [https://www.va.gov/vhapublications/ViewPublication.asp?pub_ID=5372])

[VHA/DOD 2016] *Department of Veterans Affairs/Department of Defense. VA/DoD Clinical Practice Guideline for the Management of Concussion-Mild Traumatic Brain Injury. Version 2.0 – 2016. VA/DoD Clinical Practice Guidelines Website. Published February 2016.* (link [https://www.healthquality.va.gov/guidelines/Rehab/mtbi/mTBICPGFullCPG50821816.pdf])

[VHA/DOD 2015] *Department of Veterans Affairs. VA/DoD Clinical Practice Guideline for the Management of Substance Use Disorders. Version 3.0 – 2015. VA/DoD Clinical Practice Guidelines Website. Published December 2015* (link [https://www.healthquality.va.gov/guidelines/MH/sud/VADoDSUDCPGRevised22216.pdf])