**Instructions in this guide to recreate a value set from a given source are based on specific version of the value set and its source at the time it was downloaded from the source. There may be updates made to the sources later, thereby requiring to change steps accordingly.**

**All the values (Codes and Descriptions) obtained from respective sources are copied to a generic template\* in order to maintain a consistent format for a value set.**

**For the fields –**

* **Value Set Name and OID in Value Set Info sheet,**
* **Code system, Code system version, Code system OID in Code List sheet**

**Data was obtained from C-CDA R2.1 IG.**

**For field TTY (Term Type) in Code List sheet, if the data is not available in the source, term ‘PT’- as Preferred Term, was used.**

**Below is a list of value sets downloaded from VSAC. These value sets are used as-is for configuration.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **OID** | **Code Count** | **Source** |
| Ability | urn:oid:2.16.840.1.113883.11.20.9.46 | 8 | https://vsac.nlm.nih.gov/valuesets |
| Act Priority | urn:oid:2.16.840.1.113883.1.11.16866 | 15 | https://vsac.nlm.nih.gov/valuesets |
| ADL Result Type | urn:oid:2.16.840.1.113883.11.20.9.47 | 6 | https://vsac.nlm.nih.gov/valuesets |
| Administrative Gender (HL7 V3) | urn:oid:2.16.840.1.113883.1.11.1 | 3 | https://vsac.nlm.nih.gov/valuesets |
| AdministrationUnitDoseForm | urn:oid:2.16.840.1.113762.1.4.1021.30 | 11 | https://vsac.nlm.nih.gov/valuesets |
| AdvanceDirectiveTypeCode | urn:oid:2.16.840.1.113883.1.11.20.2 | 7 | https://vsac.nlm.nih.gov/valuesets |
| Allergy and Intolerance Type | urn:oid:2.16.840.1.113883.3.88.12.3221.6.2 | 9 | https://vsac.nlm.nih.gov/valuesets |
| Body Site | urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 | 20 | https://vsac.nlm.nih.gov/valuesets |
| Care Model | urn:oid:2.16.840.1.113883.11.20.9.61 | 9 | https://vsac.nlm.nih.gov/valuesets |
| ConsultDocumentType | urn:oid:2.16.840.1.113883.11.20.9.31 | 51 | https://vsac.nlm.nih.gov/valuesets |
| Coverage Role Type | urn:oid:2.16.840.1.113883.1.11.18877 | 8 | https://vsac.nlm.nih.gov/valuesets |
| Current Smoking Status | urn:oid:2.16.840.1.113883.11.20.9.38 | 8 | https://vsac.nlm.nih.gov/valuesets |
| CVX Vaccines Administered - Vaccine Set | urn:oid:2.16.840.1.113762.1.4.1010.6 | 148 | https://vsac.nlm.nih.gov/valuesets |
| Detailed Ethnicity | urn:oid:2.16.840.1.114222.4.11.877 | 43 | https://vsac.nlm.nih.gov/valuesets |
| DIRQuantityMeasurementTypeCodes | urn:oid:2.16.840.1.113883.11.20.9.29 | 16 | https://vsac.nlm.nih.gov/valuesets |
| DischargeSummaryDocumentTypeCode | urn:oid:2.16.840.1.113883.11.20.4.1 | 7 | https://vsac.nlm.nih.gov/valuesets |
| Encounter Planned | urn:oid:2.16.840.1.113883.11.20.9.52 | 150 | https://vsac.nlm.nih.gov/valuesets |
| EncounterTypeCode | urn:oid:2.16.840.1.113883.3.88.12.80.32 | 177 | https://vsac.nlm.nih.gov/valuesets |
| EntityNameUse | urn:oid:2.16.840.1.113883.1.11.15913 | 13 | https://vsac.nlm.nih.gov/valuesets |
| EntityPersonNamePartQualifier | urn:oid:2.16.840.1.113883.11.20.9.26 | 10 | https://vsac.nlm.nih.gov/valuesets |
| Ethnicity | urn:oid:2.16.840.1.114222.4.11.837 | 2 | https://vsac.nlm.nih.gov/valuesets |
| Family Member Value Set | urn:oid:2.16.840.1.113883.1.11.19579 | 63 | https://vsac.nlm.nih.gov/valuesets |
| Goal Achievement | urn:oid:2.16.840.1.113883.11.20.9.55 | 5 | https://vsac.nlm.nih.gov/valuesets |
| Healthcare Agent Qualifier | urn:oid:2.16.840.1.113883.11.20.9.51 | 2 | https://vsac.nlm.nih.gov/valuesets |
| HealthcareServiceLocation | urn:oid:2.16.840.1.113883.1.11.20275 | 189 | https://vsac.nlm.nih.gov/valuesets |
| HealthStatus | urn:oid:2.16.840.1.113883.1.11.20.12 | 10 | https://vsac.nlm.nih.gov/valuesets |
| HL7 BasicConfidentialityKind | urn:oid:2.16.840.1.113883.1.11.16926 | 3 | https://vsac.nlm.nih.gov/valuesets |
| HL7FinanciallyResponsiblePartyType | urn:oid:2.16.840.1.113883.1.11.10416 | 28 | https://vsac.nlm.nih.gov/valuesets |
| HPDocumentType | urn:oid:2.16.840.1.113883.1.11.20.22 | 13 | https://vsac.nlm.nih.gov/valuesets |
| INDRoleclassCodes | urn:oid:2.16.840.1.113883.11.20.9.33 | 6 | https://vsac.nlm.nih.gov/valuesets |
| LanguageAbilityMode | urn:oid:2.16.840.1.113883.1.11.12249 | 6 | https://vsac.nlm.nih.gov/valuesets |
| LanguageAbilityProficiency | urn:oid:2.16.840.1.113883.1.11.12199 | 4 | https://vsac.nlm.nih.gov/valuesets |
| LOINC Imaging Document Codes | urn:oid:1.3.6.1.4.1.12009.10.2.5 | 5295 | https://vsac.nlm.nih.gov/valuesets |
| Marital Status | urn:oid:2.16.840.1.113883.1.11.12212 | 9 | https://vsac.nlm.nih.gov/valuesets |
| Medication Fill Status | urn:oid:2.16.840.1.113883.3.88.12.80.64 | 2 | https://vsac.nlm.nih.gov/valuesets |
| Medication Product Form Value Set | urn:oid:2.16.840.1.113883.3.88.12.3221.8.11 | 164 | https://vsac.nlm.nih.gov/valuesets |
| Medication Route FDA VSAC name:StructuredProductLabelingDrugRouteOfAdministration | urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 | 123 | https://vsac.nlm.nih.gov/valuesets |
| Mental and Functional Status Response | urn:oid:2.16.840.1.113883.11.20.9.44 | 10 | https://vsac.nlm.nih.gov/valuesets |
| MoodCodeEvnInt | urn:oid:2.16.840.1.113883.11.20.9.18 | 2 | https://vsac.nlm.nih.gov/valuesets |
| No Immunization Reason Value Set | urn:oid:2.16.840.1.113883.1.11.19717 | 8 | https://vsac.nlm.nih.gov/valuesets |
| Nutrition Recommendations | urn:oid:2.16.840.1.113883.1.11.20.2.9 | 8 | https://vsac.nlm.nih.gov/valuesets |
| Nutritional Status | urn:oid:2.16.840.1.113883.1.11.20.2.7 | 16 | https://vsac.nlm.nih.gov/valuesets |
| Observation Interpretation (HL7) | urn:oid:2.16.840.1.113883.1.11.78 | 48 | https://vsac.nlm.nih.gov/valuesets |
| ParticipationFunction | urn:oid:2.16.840.1.113883.1.11.10267 | 48 | https://vsac.nlm.nih.gov/valuesets |
| Patient Education | urn:oid:2.16.840.1.113883.11.20.9.34 | 50 | https://vsac.nlm.nih.gov/valuesets |
| Patient Referral Act moodCode | urn:oid:2.16.840.1.113883.11.20.9.66 | 2 | https://vsac.nlm.nih.gov/valuesets |
| Payer | urn:oid:2.16.840.1.114222.4.11.3591 | 155 | https://vsac.nlm.nih.gov/valuesets |
| Personal And Legal Relationship Role Type | urn:oid:2.16.840.1.113883.11.20.12.1 | 116 | https://vsac.nlm.nih.gov/valuesets |
| Physical Exam Type | urn:oid:2.16.840.1.113883.11.20.9.65 | 53 | https://vsac.nlm.nih.gov/valuesets |
| Planned Intervention moodCode | urn:oid:2.16.840.1.113883.11.20.9.54 | 6 | https://vsac.nlm.nih.gov/valuesets |
| Planned moodCode (Act/Encounter/Procedure) | urn:oid:2.16.840.1.113883.11.20.9.23 | 5 | https://vsac.nlm.nih.gov/valuesets |
| Planned moodCode (Observation) | urn:oid:2.16.840.1.113883.11.20.9.25 | 5 | https://vsac.nlm.nih.gov/valuesets |
| Planned moodCode (SubstanceAdministration/Supply) | urn:oid:2.16.840.1.113883.11.20.9.24 | 4 | https://vsac.nlm.nih.gov/valuesets |
| PostalAddressUse | urn:oid:2.16.840.1.113883.1.11.10637 | 10 | https://vsac.nlm.nih.gov/valuesets |
| Pressure Point | urn:oid:2.16.840.1.113883.11.20.9.36 | 19 | https://vsac.nlm.nih.gov/valuesets |
| Pressure Ulcer Stage | urn:oid:2.16.840.1.113883.11.20.9.35 | 5 | https://vsac.nlm.nih.gov/valuesets |
| Priority Level | urn:oid:2.16.840.1.113883.11.20.9.60 | 3 | https://vsac.nlm.nih.gov/valuesets |
| Problem | urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 | 2668 | https://vsac.nlm.nih.gov/valuesets |
| Problem Severity | urn:oid:2.16.840.1.113883.3.88.12.3221.6.8 | 6 | https://vsac.nlm.nih.gov/valuesets |
| Problem Status | urn:oid:2.16.840.1.113883.3.88.12.80.68 | 3 | https://vsac.nlm.nih.gov/valuesets |
| Problem Type | urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 | 15 | https://vsac.nlm.nih.gov/valuesets |
| ProblemAct statusCode | urn:oid:2.16.840.1.113883.11.20.9.19 | 4 | https://vsac.nlm.nih.gov/valuesets |
| ProcedureAct statusCode | urn:oid:2.16.840.1.113883.11.20.9.22 | 4 | https://vsac.nlm.nih.gov/valuesets |
| ProcedureNoteDocumentTypeCodes | urn:oid:2.16.840.1.113883.11.20.6.1 | 17 | https://vsac.nlm.nih.gov/valuesets |
| ProgressNoteDocumentTypeCode | urn:oid:2.16.840.1.113883.11.20.8.1 | 25 | https://vsac.nlm.nih.gov/valuesets |
| Race | urn:oid:2.16.840.1.113883.1.11.14914 | 6 | https://vsac.nlm.nih.gov/valuesets |
| Race Category Excluding Nulls | urn:oid:2.16.840.1.113883.3.2074.1.1.3 | 5 | https://vsac.nlm.nih.gov/valuesets |
| Referral Types | urn:oid:2.16.840.1.113883.11.20.9.56 | 932 | https://vsac.nlm.nih.gov/valuesets |
| ReferralDocumentType | urn:oid:2.16.840.1.113883.1.11.20.2.3 | 67 | https://vsac.nlm.nih.gov/valuesets |
| Related Document (append/replace) | urn:oid:2.16.840.1.113883.11.20.9.62 | 2 | https://vsac.nlm.nih.gov/valuesets |
| Religious Affiliation | urn:oid:2.16.840.1.113883.1.11.19185 | 82 | https://vsac.nlm.nih.gov/valuesets |
| Residence and Accommodation Type | urn:oid:2.16.840.1.113883.11.20.9.49 | 191 | https://vsac.nlm.nih.gov/valuesets |
| Result Status | urn:oid:2.16.840.1.113883.11.20.9.39 | 6 | https://vsac.nlm.nih.gov/valuesets |
| Sensory Status Problem Type | urn:oid:2.16.840.1.113883.11.20.9.50 | 8 | https://vsac.nlm.nih.gov/valuesets |
| Social History Type | urn:oid:2.16.840.1.113883.3.88.12.80.60 | 9 | https://vsac.nlm.nih.gov/valuesets |
| SurgicalOperationNoteDocumentTypeCode | urn:oid:2.16.840.1.113883.11.20.1.1 | 10 | https://vsac.nlm.nih.gov/valuesets |
| TargetSite Qualifiers | urn:oid:2.16.840.1.113883.11.20.9.37 | 5 | https://vsac.nlm.nih.gov/valuesets |
| Telecom Use (US Realm Header) | urn:oid:2.16.840.1.113883.11.20.9.20 | 4 | https://vsac.nlm.nih.gov/valuesets |
| Tobacco Use | urn:oid:2.16.840.1.113883.11.20.9.41 | 100 | https://vsac.nlm.nih.gov/valuesets |
| TransferDocumentType | urn:oid:2.16.840.1.113883.1.11.20.2.4 | 60 | https://vsac.nlm.nih.gov/valuesets |
| Vaccine Clinical Drug | urn:oid:2.16.840.1.113762.1.4.1010.8 | 293 | https://vsac.nlm.nih.gov/valuesets |
| Vital Sign Result | urn:oid:2.16.840.1.113883.3.88.12.80.62 | 11 | https://vsac.nlm.nih.gov/valuesets |
| Wound Characteristic | urn:oid:2.16.840.1.113883.11.20.9.58 | 12 | https://vsac.nlm.nih.gov/valuesets |
| Wound Measurements | urn:oid:2.16.840.1.113883.1.11.20.2.5 | 3 | https://vsac.nlm.nih.gov/valuesets |
| Wound Type | urn:oid:2.16.840.1.113883.1.11.20.2.6 | 14 | https://vsac.nlm.nih.gov/valuesets |
| x\_ServiceEventPerformer | urn:oid:2.16.840.1.113883.1.11.19601 | 3 | https://vsac.nlm.nih.gov/valuesets |

**List of value sets obtained from external sources/non-VSAC.**

1. **Language value set**  **oid: 2.16.840.1.113883.1.11.11526**

Source: <http://www.iana.org/assignments/language-subtag-registry/language-subtag-registry>

1. **StateValueSet oid: 2.16.840.1.113883.3.88.12.80.1**

Source: <http://www.census.gov/geo/reference/ansi_statetables.html>

1. **PostalCodeValueSet oid: 2.16.840.1.113883.3.88.12.80.2**

Source: <http://download.geonames.org/export/zip/>

1. **Unique Ingredient Identifier oid:2.16.840.1.113883.3.88.12.80.20**

Source: <http://fdasis.nlm.nih.gov/srs/jsp/srs/uniiListDownload.jsp>

1. **CountryValueSet oid: 2.16.840.1.113883.3.88.12.80.63**

Source: <https://www.iso.org/obp/ui/#search>

1. **ActStatus oid: 2.16.840.1.113883.1.11.159331 (Total of 10 codes)**

Source: <http://www.hl7.org/documentcenter/public_temp_AA6DA7FE-1C23-BA17-0C04BB4B377BA758/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/ActStatus.html>

Steps to create the value set:

1. Go to above url
2. Copy data from ‘Concept Code’ to ‘Code’ column and ‘Print Name’ to ‘Description’ column in the Code List sheet in the template\*
3. Fill in the fields – Value set details in Value Set Info sheet and Code system, Code system version, Code system OID and TTY in Code List sheet.
4. **Healthcare Provider Taxonomy (HIPAA) oid:2.16.840.1.114222.4.11.1066**

Source: <http://www.nucc.org/index.php/code-sets-mainmenu-41/provider-taxonomy-mainmenu-40/csv-mainmenu-57>

1. **UnitsOfMeasureCaseSensitive oid:2.16.840.1.113883.1.11.12839 – (813 codes in total)**

Source: <https://loinc.org/usage/units>

Note: To download this value set, LOINC requires users to set up user account and download the units.

Steps:

1. Go to source url
2. Download/open [**Table of Example UCUM Codes for Electronic Messaging with Preface - Version 1.3 (docx)**](https://loinc.org/usage/units/version-1.3/Table%20of%20Example%20UCUM%20Codes%20for%20Electronic%20Messaging%20with%20Preface%20-%20Version%201.3.docx)
3. From the **Table of Example UCUM Codes for Electronic Messaging, Version 1.3** in the document, copy ‘UCUM-code’ to ‘code’ column and ‘Description of the unit’ to ‘Description’ column in the Code List sheet in the template\*
4. Fill in the fields – Value set details in Value Set Info sheet and Code system, Code system version, Code system OID and TTY in Code List sheet.
5. **AgePQ\_UCUM oid:2.16.840.1.113883.11.20.9.21 (6 codes in total)**

Source: <https://loinc.org/usage/units/>

Note: To download this value set, LOINC requires users to set up user account and download the units.

Steps to create the value set are same as the UnitsOfMeasureCaseSensitive except that only values applicable to this value set are copied using C-CDA R2.1 IG as the reference.

1. **Medication Clinical Drug oid:** **2.16.840.1.113762.1.4.1010.4 (Total of 66084 codes in total).**

**Source: VSAC**

To prepare this value set, SITE team received files from NLM contact-VSAC source. It is not published yet and is in process of verification.

1. **Substance-Reactant for Intolerance oid: 2.16.840.1.113762.1.4.1010.1 (Total of 610550 codes)**

Value set intentionally defined as a GROUPING made up of:

Value Set: Medication Drug Class (2.16.840.1.113883.3.88.12.80.18) (NDFRT drug class codes); Value Set: Clinical Drug Ingredient (2.16.840.1.113762.1.4.1010.7) (RxNORM ingredient codes); Value Set: Unique Ingredient Identifier - Complete Set (2.16.840.1.113883.3.88.12.80.20) (UNII ingredient codes); Value Set: Substance Other Than Clinical Drug (2.16.840.1.113762.1.4.1010.9) (SNOMED CT substance codes).

**Note: Clinical Drug Ingredient (2.16.840.1.113762.1.4.1010.7) (RxNORM ingredient codes)**

To prepare this value set, SITE team received expansions based on Oct 2016 RxNorm from NLM. It is not published yet and is in process of verification.

**i. Value Set: Medication Drug Class (2.16.840.1.113883.3.88.12.80.18) (NDFRT drug class codes)**

**ii. Substance Other Than Clinical Drug (2.16.840.1.113762.1.4.1010.9) (SNOMED CT substance codes).**

Source: <https://phinvads.cdc.gov/vads/BrowseValueSets_browse.action>

Steps (applicable to both of the value sets above)

1. Go to above link for PHINVADS site

2. Search with value set OID by entering value set OID in ‘Search Value Sets’

3. Value set shows in results, click ‘Download as excel’ link under Value Set Information

4. Select ‘Excel’ as download format (.txt format is also available for download)

5. Click ‘Download Value Set’ and save the zip file

6. Extract files from zip and open .xls file for downloaded value set

7. Extract required data – Codes, Description, Code system, Code system version, Code system OID to fill in the template\*

**iii. Clinical Drug Ingredient (2.16.840.1.113762.1.4.1010.7) (RxNORM ingredient codes)**

Received expansions based on Oct 2016 RxNorm from NLM contact. Extracted codes from received text file using data import feature in Excel. This is not yet published by VSAC yet.

**iv. Value Set: Unique Ingredient Identifier - Complete Set (2.16.840.1.113883.3.88.12.80.20) (UNII ingredient codes)**

Source: <http://fdasis.nlm.nih.gov/srs/jsp/srs/uniiListDownload.jsp>

1. Click on UNII Data link

2. Download and save UNII\_Data.zip file

3. Extract content/files

4. Open UNIIs dd-mmm-yyyy Records.txt file (date will vary based on published date of latest version)

5. Open new Excel file

6. Go to Data – Get External Data – From text and select file in step 4 to import

7. Select ‘Delimited’ option, click ‘Next’…until ‘Finish’

8. Copy ‘UNII’ column data to ‘Code’ and data in ‘PT’ column to ‘Description’ column in the template\*

9. Fill in the fields – Value set details in Value Set Info sheet and Code system, Code system version, Code system OID and TTY in Code List sheet.

**All above sets were added to the template\* to convert into format needed for configuration.**