

5.2.4 Guideline D - Specimens

Recommendation:

Were specimen source (type, source site and collection method) is conveyed in attributes other than the test name, these values should be coded using SNOMED CT.

In particular:

- specimen type terms should be drawn from the 123038009 |Specimen| hierarchy in SNOMED CT
- specimen source site terms should be drawn from the 123037004 |Body structure| hierarchy
- specimen collection method terms should be drawn from the 71388002 |Procedure| hierarchy

Notes:

Laboratory test names typically include the specimen (e.g. the LOINC "System") upon which the observation was made, but some attributes about the specimen can be carried in other parts of the information or messaging model. Where such other specimen attributes are reported as coded values, they should use SNOMED CT concepts.

Examples

Example 1: Part of the Value set for Specimen Type (PHIN-VADS CDC)

Table 5.2.4-1: Value Set Code NHSNSpecimenTypeCode

Concept Code	Preferred Concept Name	Code System Name
258414004	Adipose tissue sample	SNOMED-CT
309141004	Adrenal gland specimen	SNOMED-CT
119373006	Amniotic fluid specimen	SNOMED-CT
309479002	Artery sample	SNOMED-CT
309493009	Bile duct biopsy sample	SNOMED-CT
119341000	Bile specimen	SNOMED-CT
309491006	Biliary tract tissue sample	SNOMED-CT
119297000	Blood specimen	SNOMED-CT
119359002	Bone marrow specimen	SNOMED-CT
https://phinvads.cdc.gov/vads/ViewValueSet.action?id=6F61F377-E515-43D2-BFEB-4BF135244033#		

Example 2: Specimen type and specimen source site in NAHLN messaging

The Specimen Type (SPM.4) field describes the precise nature of the entity that will be the source material for the observation. While every effort will be made to provide coded values for specimen types being used in NAHLN agent testing, there may be cases where a coded value specific to a particular specimen type is not immediately available. In these instances, an alternative coded value and description of the specimen may be sent in components 4-6 of the CWE data type. In some cases the precise term is not available in the coded reference system. In these situations, it is allowable to send the original text of the specimen description in the CWE.9 component

An example of coded value for SPM.4

```
<SPM.4>
<CWE.1>661000009100</CWE.1>
<CWE.2>Oropharyngeal swab</CWE.2>
<CWE.3>SCT</CWE.3>
<CWE.9>OP swabs</CWE.9>
</SPM.4>
```

The Specimen Source Site (SPM.8) contains an identifier for the source of the specimen (i.e the anatomical location, organ or site from which the specimen originated). This field is needed when the SNOMED specimen hierarchy does not contain a pre-coordinated term that adequately describes the specimen. For example, in the case where tonsillar tissue is obtained from a pig by scraping, the source would be 'Tonsillar structure (palatine)' In general this field is only needed when additional information about the region from where the specimen was collected is needed. For environmental specimens this field may supply additional information on where the specimen originated. In cases where the specimen and specimen source are identical, this field need not be populated.

There is no one correct answer to precisely which detail should be provided by a pre-coordinated, more specific specimen type and which with a less specific type plus a specimen source. Many specimen/source combinations could be correctly expressed either way. The NAHLN will try to provide guidance on specific testing protocols.

An example of SPM.8, used in conjunction with SPM.4

```
<SPM.4>
<CWE.1>128168004</CWE.1>
<CWE.2>Tissue specimen from liver</CWE.2>
<CWE.3>SCT</CWE.3>
</SPM.4>
<SPM.8>
<CWE.1>89255003</CWE.1>
<CWE.2>right lateral lobe of liver</CWE.2>
<CWE.3>SCT</CWE.3>
</SPM.8>
```