

UMLS Survey - 2021

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Instructions for completing the UMLS Annual Report

We ask all UMLS licensees to complete the Annual Report to meet the reporting requirement in the License Agreement for Use of the UMLS Metathesaurus. You may have requested a UMLS license for the use of the UMLS, SNOMED CT, RxNorm, the Value Set Authority Center (VSAC), or another terminology product or service provided by the National Library of Medicine. You may be using this information directly or indirectly via a vendor's application, such as medical coding software or an electronic health record (EHR). At the end, please press the "Next" button to submit your responses. You can also download your responses into a PDF file.



Which of the following terminology products did you use this year?

- UMLS (Unified Medical Language System) [NOTE: Do not select if you ONLY used individual terminology products, such as LOINC or RxNorm, OUTSIDE of the UMLS Metathesaurus] (1)
 - RxNorm (2)
 - VSAC (Value Set Authority Center) (4)
 - MetaMap (3)
 - MedlinePlus Connect (21)
 - NIH Common Data Element (CDE) Repository (5)
 - SNOMED CT - US Edition (11)
 - SNOMED CT - International Release (10)
 - LOINC (Logical Observation Identifier Names & Codes Terminology) (7)
 - CPT (Current Procedural Terminology) (6)
 - None of these (18)
 - I don't know (20)
 - Other; please specify: (19)
-

End of Block: Default Question Block

Start of Block: UMLS block

What terminology or code system would you like to see added to the UMLS?



For what purpose(s) did you use UMLS?

- Process texts to extract concepts, relationships or knowledge (5)
 - Facilitate mapping between terminologies (8)
 - Develop an information retrieval system (3)
 - Extract specific terminologies from the Metathesaurus (e.g., MedDRA, MeSH, SNOMED CT) (1)
 - Create and maintain local terminology (2)
 - Develop a terminology server or service (6)
 - Research terminologies and ontologies beyond any of the above categories (7)
 - Other; please specify: (16)
-

Which features of the UMLS Metathesaurus did you use?

- Terms/concept names (MRCONSO) (1)
 - Relationships among concepts (MRREL) (2)
 - Semantic Types (MRSTY) (3)
 - Concept Attributes (MRSAT) (4)
 - Mappings (MRMAP/MRSMAP) (5)
 - Concept Definitions (MRDEF) (6)
 - Indexes (7)
 - Other; please specify: (8)
-

Do you provide an application, tool, or system that utilizes the UMLS?

- Yes (1)
 - No (2)
-

Display This Question:

If Do you provide an application, tool, or system that utilizes the UMLS? = Yes

Please describe your application, tool, or system that utilizes the UMLS.
How does it utilize the UMLS? Are UMLS data exposed to users? Who uses the application/tool/system?

Did you install the UMLS locally?

Yes (1)

No (2)

Display This Question:

If Did you install the UMLS locally? = Yes

Did you install the UMLS locally using a database?

Yes (1)

No (2)

Display This Question:

If Did you install the UMLS locally using a database? = Yes



When you installed the UMLS locally, which database did you use?

- MS Access (1)
 - MS SQL Server (2)
 - MySQL (3)
 - Oracle (4)
 - PostgreSQL (5)
 - Semantic Web Triple Store (6)
 - NoSQL (7)
 - Other; please specify: (8)
-

Display This Question:

If Did you install the UMLS locally? = Yes

What format of Metathesaurus data did you use?

- RRF (Rich Release Format) (2)
- ORF (Original Release Format) (4)

Display This Question:

If Did you install the UMLS locally using a database? = No

How did you implement the UMLS locally?



Which UMLS API product(s) did you use?

- UMLS REST API (1)
- UMLS SOAP API (2)
- Legacy UMLSKS API (3)
- Did not use any UMLS API (4)

Display This Question:

*If Which UMLS API product(s) did you use? = UMLS REST API
Or Which UMLS API product(s) did you use? = UMLS SOAP API
Or Which UMLS API product(s) did you use? = Legacy UMLSKS API*

Briefly describe your most common use cases for the UMLS API.



How did you browse the UMLS data?

- UTS (1)
 - MetamorphoSys (2)
 - BioPortal (5)
 - Other; please specify: (4)
-

Display This Question:

If How did you browse the UMLS data? = UTS

What can NLM do to improve the UTS?

Please select and briefly describe any enhancements you would suggest to improve the UMLS.

File Format (4) _____

Mapping (5) _____

Installation (6) _____

Site Navigation (7) _____

Customer Support (8)

Use Case Examples (9)

User Forum (10) _____

Training/Documentation (11)

Other; please specify: (12)

End of Block: UMLS block

Start of Block: RxNorm



How did you access RxNorm?

- Browsing in RxNav (2)
 - Download RxNorm files (3)
 - Through the RxNorm API (5)
 - RxNav-in-a-Box (container for installation of the RxNorm API and RxNav) (7)
 - Files extracted from the Metathesaurus (4)
 - Browsing on the UMLS Terminology Services (1)
 - Other; please specify: (6)
-

Display This Question:

If How did you access RxNorm? = Files extracted from the Metathesaurus

Or How did you access RxNorm? = Browsing on the UMLS Terminology Services

Why did you use RxNorm in the UMLS? What value does the UMLS add to your use of RxNorm?



For what purpose(s) did you use RxNorm?

- E-Prescribing (1)
 - Information Exchange (2)
 - Formulary Development (3)
 - Reference Value Sets (4)
 - Analytics (5)
 - Access to information about obsolete RxCUIs and NDCs (for analytics) (7)
 - Other; please specify: (6)
-

Display This Question:

If How did you access RxNorm? = Download RxNorm files

Which RxNorm release(s) are you using?

- Monthly - Full (1)
 - Weekly - Full (2)
 - Monthly - Prescribable Subset (3)
 - Weekly - Prescribable Subset (4)
-

Do you use the RxNorm SCDF (Semantic Clinical Dose Form) term type? If yes, how are you using SCDFs?

Yes; please describe: (1) _____

No (2)

Do you use NDCs from RxNorm? If yes, please describe how are you using them.

Yes; please describe: (4) _____

No (5)

Do you use the UMLSCUI attribute in RxNorm?

Yes (1)

No (2)

What can NLM do to improve RxNorm?

End of Block: RxNorm

Start of Block: CPT



How did you access CPT?

- Download files from the American Medical Association (3)
 - CPT Developer's Tool Kit (CPT DTK) (4)
 - Files extracted from the Metathesaurus (2)
 - Browsing on the UMLS Terminology Services (1)
 - Other; please specify: (5)
-

Display This Question:

If How did you access CPT? = Files extracted from the Metathesaurus

Or How did you access CPT? = Browsing on the UMLS Terminology Services

Why did you use CPT in the UMLS? What value does the UMLS add to your use of CPT?

End of Block: CPT

Start of Block: LOINC



How did you access LOINC?

- Download files from the Regenstrief Institute (loinc.org) (4)
 - Browsing on search.loinc.org (2)
 - RELMA (Regenstrief LOINC Mapping Assistant) (6)
 - Browsing on the UMLS Terminology Services (1)
 - Files extracted from the Metathesaurus (3)
 - Other; please specify: (5)
-

Display This Question:

If How did you access LOINC? = Browsing on the UMLS Terminology Services

Or How did you access LOINC? = Files extracted from the Metathesaurus

Why did you use LOINC in the UMLS? What value does the UMLS add to your use of LOINC?

End of Block: LOINC

Start of Block: SNOMED



How did you access SNOMED CT?

- Download the US Edition of SNOMED CT (7)
 - Download the International Release of SNOMED CT (2)
 - Download the CORE Problem List Subset (3)
 - Download the Spanish Edition of SNOMED CT (4)
 - Browse on the UMLS Terminology Services (1)
 - Files extracted from the Metathesaurus (5)
 - Other; please specify: (6)
-

Display This Question:

*If How did you access SNOMED CT? = Browse on the UMLS Terminology Services
Or How did you access SNOMED CT? = Files extracted from the Metathesaurus*

Why did you use SNOMED CT in the UMLS? What value does the UMLS add to your use of SNOMED CT?

Have you implemented SNOMED CT in an electronic health record system or a terminology service used by electronic health record systems?

Yes (1)

No (2)

Display This Question:

If Have you implemented SNOMED CT in an electronic health record system or a terminology service use... = Yes



Which format of SNOMED CT did you use in your implementation?

RF1 (1)

RF2 (2)

OWL (6)

CORE Problem List Subset of SNOMED CT (3)

Don't know (4)

Other; please specify: (5)

Display This Question:

If Have you implemented SNOMED CT in an electronic health record system or a terminology service use... = Yes

In what ways do health providers interact with SNOMED CT within the system?

- Pulling problems, findings, etc into the problem list from SNOMED CT content (1)
 - Enter problems, findings, as text or from institutional supported list and converted to SNOMED CT via 3rd party software (4)
 - I don't know (5)
 - Other; please specify: (6)
-

Display This Question:

If Have you implemented SNOMED CT in an electronic health record system or a terminology service use... = Yes

Do you use SNOMED CT post-coordinated expressions in your system/application?

- Yes (2)
- No (3)
- Don't know (4)

Display This Question:

If Do you use SNOMED CT post-coordinated expressions in your system/application? = Yes

Please describe how you use SNOMED CT post-coordinated expressions in your system/application.

Display This Question:

If Do you use SNOMED CT post-coordinated expressions in your system/application? = No

Please describe how you use SNOMED CT data in your application/system.



Which maps between SNOMED CT and ICD-9-CM or ICD-10-CM have you used?

- SNOMED CT to ICD-10 CM Map (1)
- SNOMED CT to ICD-9-CM map (2)
- ICD-9-CM diagnoses to SNOMED CT map (3)
- ICD-9-CM procedures to SNOMED CT map (4)
- I have not used any of the maps (5)

Display This Question:

If Which maps between SNOMED CT and ICD-9-CM or ICD-10-CM have you used? != I have not used any of the maps

Please describe how you used the maps you selected in the previous question.

End of Block: SNOMED

Start of Block: MetaMap

Please list which MetaMap options and output formats are you using?

Would you be willing to test if MetaMap Lite can serve your needs?

- Yes (1)
- No (3)

End of Block: MetaMap

Start of Block: VSAC

How do you use the VSAC and value sets?

- Author value sets (4)
 - Report clinical quality measures (CQMs) to CMS (7)
 - Access content through VSAC FHIR terminology service (8)
 - Other; please specify: (9)
-

Display This Question:

If How do you use the VSAC and value sets? = Author value sets

Would you be interested in creating a program release for easy searching and downloading of your value sets?

- Yes (1)
- No (2)

Display This Question:

If How do you use the VSAC and value sets? = Author value sets

Are you interested in creating intensional (logically-defined) value sets in VSAC?

- Yes (1)
- No (2)

Display This Question:

If Are you interested in creating intensional (logically-defined) value sets in VSAC? = Yes

What changes or additional functionality do you need to create your intensional value sets in VSAC?

Display This Question:

If Are you interested in creating intensional (logically-defined) value sets in VSAC? = Yes

Provide specific examples of intensional value sets you want to be able to create in VSAC in the future, especially with RxNorm, LOINC, and other code system functionality that is not included in this testing. (For example, a value set of all of the dispensable drugs in RxNorm or a value set of all of the SNOMED CT codes that have a causative agent of hepatitis B virus.)

Display This Question:

If How do you use the VSAC and value sets? = Author value sets

What can NLM do to improve the VSAC authoring environment?

End of Block: VSAC

Start of Block: CDE

Please describe how you used the NIH CDE Repository.

Have you used or recommended a CDE or Form in the NIH CDE Repository?

Yes (1)

No (4)

What can NLM do to improve the NIH CDE Repository?

End of Block: CDE

Start of Block: Generic Ending block

Display This Question:

If Which of the following terminology products did you use this year? != None of these

And Which of the following terminology products did you use this year? != I don't know

Please provide references (URLs, citations, publications, etc.) or details about your work that involves terminology products from NLM.

Display This Question:

If Which of the following terminology products did you use this year? = UMLS (Unified Medical Language System) [NOTE: Do not select if you <u>ONLY</u> used individual terminology products, such as LOINC or RxNorm, <u>OUTSIDE</u> of the UMLS Metathesaurus]

Or Which of the following terminology products did you use this year? = RxNorm

Or Which of the following terminology products did you use this year? = MetaMap

Or Which of the following terminology products did you use this year? = VSAC (Value Set Authority Center)

Or Which of the following terminology products did you use this year? = NIH Common Data Element (CDE) Repository

Or Which of the following terminology products did you use this year? = CPT (Current Procedural Terminology)

Or Which of the following terminology products did you use this year? = LOINC (Logical Observation Identifier Names & Codes Terminology)

Or Which of the following terminology products did you use this year? = SNOMED CT - International Release

Or Which of the following terminology products did you use this year? = SNOMED CT - US Edition



For which terminology product(s) would you like to see new or additional educational materials?

- UMLS (Unified Medical Language System - Metathesaurus, Semantic Network, and Lexical Tools) (12)
 - RxNorm (5)
 - VSAC (Value Set Authority Center) (7)
 - SNOMED CT (8)
 - LOINC (15)
 - NIH Common Data Element (CDE) Repository (9)
 - MetaMap (13)
 - None (10)
 - Other; please specify: (11)
-

Display This Question:

If For which terminology product(s) would you like to see new or additional educational materials? = RxNorm



For which RxNorm topics would you like to see new or additional educational materials?

- Understanding term types (1)
 - Navigating the RxNorm graph (2)
 - Mapping your formulary to RxNorm (3)
 - Mapping NDCs to RxNorm (4)
 - Relating RxNorm to DailyMed (5)
 - Extracting drug classes (6)
 - Using the API (7)
 - Using RxNav (9)
 - Using RxMix (11)
 - Using RxClass (12)
 - Other; please specify: (10)
-

Display This Question:

If For which terminology product(s) would you like to see new or additional educational materials? = UMLS (Unified Medical Language System - Metathesaurus, Semantic Network, and Lexical Tools)



For which UMLS topics would you like to see new or additional educational materials?

- Understanding term types (1)
 - Using the API (2)
 - Working with databases (4)
 - Content and/or vocabulary questions (5)
 - Other; please specify: (6)
-

Display This Question:

If For which UMLS topics would you like to see new or additional educational materials? = Using the API

Or For which UMLS topics would you like to see new or additional educational materials? = Working with databases

Or For which UMLS topics would you like to see new or additional educational materials? = Content and/or vocabulary questions

Or For which UMLS topics would you like to see new or additional educational materials? = Understanding term types

Please provide more information about the UMLS topics for which you would like to see more educational resources. Are there specific topics, use cases, or questions you would like to see addressed?

Display This Question:

If For which terminology product(s) would you like to see new or additional educational materials? = SNOMED CT



For which SNOMED CT topics would you like to see new or additional educational materials?

- Post-Coordinated Expressions (1)
 - Reference Sets (RefSets) (2)
 - Mapping Subsets (3)
 - Accessing SNOMED CT (4)
 - Requesting Content Changes (5)
 - Other; please specify: (6)
-

Display This Question:

If Which of the following terminology products did you use this year? = UMLS (Unified Medical Language System) [NOTE: Do not select if you <u>ONLY</u> used individual terminology products, such as LOINC or RxNorm, <u>OUTSIDE</u> of the UMLS Metathesaurus]

Or Which of the following terminology products did you use this year? = RxNorm

Or Which of the following terminology products did you use this year? = MetaMap

Or Which of the following terminology products did you use this year? = VSAC (Value Set Authority Center)

Or Which of the following terminology products did you use this year? = NIH Common Data Element (CDE) Repository

Or Which of the following terminology products did you use this year? = CPT (Current Procedural Terminology)

Or Which of the following terminology products did you use this year? = LOINC (Logical Observation Identifier Names & Codes Terminology)

Or Which of the following terminology products did you use this year? = SNOMED CT - International Release

Or Which of the following terminology products did you use this year? = SNOMED CT - US Edition

Would you be willing to describe your use of NLM terminology products and services on the NLM Web site? (If so, NLM may contact you)

Yes (4)

No (5)

Display This Question:

If Which of the following terminology products did you use this year? != I don't know

Do you use terminologies, ontologies, or code systems outside of the UMLS license?

Yes (1)

No (4)

Display This Question:

If Do you use terminologies, ontologies, or code systems outside of the UMLS license? = Yes

What tools, programs, and services do you use to access terminology products outside of the UMLS license?

NCI EVS (1)

OHDSI (2)

NCBO BioPortal (3)

NCBI Entrez System (dbGAP, MedGen, ClinVar, etc.) (4)

Other; please specify: (5)

Display This Question:

If Do you use terminologies, ontologies, or code systems outside of the UMLS license? = Yes

Which of the following do you use outside of the UMLS license?

- ICD10CM (1)
 - UCUM (2)
 - NDC (3)
 - WHO Drug Codes (4)
 - MedDRA (5)
 - GMDN (6)
 - NCIt, NCIIm (NCI EVS) (7)
 - MedGen (8)
 - ClinVar (9)
 - dbSNP (10)
 - RefSeq (11)
 - COSMIC (12)
 - Other; please specify: (13)
-

Display This Question:

If Which of the following terminology products did you use this year? = None of these

Or Which of the following terminology products did you use this year? = I don't know

Why did you request a UMLS license/create a UTS account?

End of Block: Generic Ending block
