0. Introduction

This is the 2002AC documentation addendum to the 2002AA documentation. Changes to the documentation due to addition or deletion of new content in 2002AC are outlined here. Some sections, like String Count by Source and Precedence, are shown in their entirety since there are significant changes to these sections with each release.

As an addendum, the content is presented in the order of the January (2002AA) documentation with the same section numbers and structure.

During the year, announcements concerning the UMLS project are made to the umls-users group. Anyone can subscribe to this discussion list. To subscribe to the listserver, simply send a message to listserv@nlm.nih.gov which includes the following line:

subscribe umls-users

0.1a What’s New for 2002AC UMLS

0.1a.0 Introduction

The UMLS Knowledge Sources are now released quarterly. The Spring 2002 release was named 2002AB; the Summer release is called 2002AC; and so on. When necessary, releases may become even more frequent; it will be up to each user to decide how frequently to load new updates. This What’s New section will help a user decide by outlining changes present in a new release.

0.1a.1 Metathesaurus

The 2002AC edition of the Metathesaurus includes 870,853 concepts and 2.27 million concept names in its source vocabularies. Comparing 2002AC to 2002AB, there are 731 fewer concepts primarily due to synonymy work done with the RxNorm Project; 11,643 more names in MRCON; and 11,063 more names in MRSO.

Five sources were updated for the 2002AC release – AOD2000, Alcohol and Other Drug Thesaurus; CSP2002, Computer Retrieval of Information on Scientific Projects (CRISP);
The SCD column in MRCXT, MRSAT and MRSO was renamed CODE due to a potential conflict with the new Term Type SCD for the RxNorm project. SCD is now a Term Type for NLM02 and CODE represents the column for “Unique identifier or code for an entry in the source vocabulary.”

MRCUI is a historical file tracking all CUIs that have been in past Metathesaurus releases and are not in the current release. This file makes better use of the information contained in MERGED.CUI and DELETED.CUI. These file exist for users who have used them in the past but all the information in these files is now contained in MRCUI. MRCUI is actually better because for some CUIS in DELETED.CUI it will provide bequeathal relationships which may allow users to make better use of old CUIs.

RxNorm

This release continues the creation and refinement of concepts to support the RxNorm Project. These concepts relate the names of orderable medications to a dose forms from a set proposed by the HL7 Vocabulary Technical Committee as a value set, and the components of those medications. For further discussion, see the article at:


0.1b What’s New for 2002AB UMLS

0.1b.0 Introduction

The UMLS Knowledge Sources are now released quarterly. This Spring 2002 release is named 2002AB; the Summer release will be called 2002AC; and so on. When necessary, releases may become even more frequent; it will be up to each user to decide how frequently to load new updates. This What’s New section will help a user decide by outlining changes present in a new release.

0.1b.1 Metathesaurus

The 2002AB edition of the Metathesaurus includes 871,584 concepts and 2.10 million concept names in its source vocabularies. There are 94,644 more concepts; 142,338 more names in MRCON; and 151,870 more names in MRSO.

There are three new sources for the 2002AB release- NCBI2001, Taxonomy from National Center for Biotechnology Information; NLM02, RxNorm work done by the
National Library of Medicine; and NLM03, RxNorm relationship work done by the National Library of Medicine.

Three sources were updated for the 2002AB release – INS2002, French translation of MeSH; MDR41, Medical Dictionary for Regulatory Activities Terminology (MedDRA) version 4.1; and MSH2002_02_10, Medical Subject Headings (MeSH) February 10, 2002.

VANDF01 now has a Restriction Level of 0.

MTHMSTFRE and MTHMSTITA now have a Restriction Level of 0.

The file sizes in MRFILES now show the correct sizes for each format (note that ISO/PC text files have one more character per line than Unix text files).

**RxNorm**

This release contains about 16,000 concepts created by the National Library of Medicine which express the meaning of a drug name in a normalized form. These concepts relate the names of orderable medications to a dose forms from a set proposed by the HL7 Vocabulary Technical Committee as a value set, and the components of those medications. For further discussion, see the article at:


**Problems Identified in 2002AA Release and Repaired for 2002AB Release**

1. 2002AA MRCXT ICPC2E/ICPC2P Problem

   I. Problem

   There are two problems in the 2002AA MRCXT that affect International Classification of Primary Care, Version 2-Plus (ICPC2P) and International Classification of Primary Care, 2nd ed. Electronic form (ICPC2E). First, there are a number of incomplete contexts present containing only the second level ANC row (typically with context numbers 3 or 4) without the higher or lower ANC rows, and without any CCP, SIB, or CHD rows.

   For example,

   C0000731|S0351958|ICPC2P|D25|3|ANC|2|Symptoms and Complaints Component|C0497525|1|||

   Second, there are a number of contexts attributed to ICPC2E that have "ICPC2-Plus" as the context tree-top.

   For example,
II. Scope

These errors affect only ICPC2P and ICPC2E MRCXT data.

The first problem affects about 2500 rows of MRCXT and the second problem affects another 23,000 rows. In total, about 2500 "contexts" are affected (where a "context" is a CUI,SUI,SOC,SCD,CXN tuple).

These problems will cause a failure to correctly display these 2500 contexts.

Additionally, exceptions will occur in applications that expect the complete ANC tree to be available for contexts represented in MRCXT.

2. MetamorphoSys 2002AA Configuration File Problem

I. Problem

There is a bug in the configuration file distributed with MetamorphoSys that affects the ability of the user to configure both the precedence and suppressibility of LOINC term types. This does not affect the ability of the user to exclude the entire LOINC vocabulary from using MetamorphoSys.

II. Scope

This problem is limited to a users' ability to change the precedence and suppressibility within LOINC. Other sources are not affected.

3. MRXNS.ENG, MRXNW.ENG Problem

I. Problem

The version of LVG used to compute the MRXNW.ENG and MRXNS.ENG files was slightly different from the version distributed with the 2002AA UMLS, causing small variations in the normalized forms of some strings in MRCON.

II. Scope

A total of 26 strings were affected by this problem. There are 28 lines in the old MRXNS.ENG that have incorrect NSTR fields. The new MRXNS.ENG replaces those lines with 36 new ones which are both corrected normalized forms and additional normalized strings.
Following is an example of a corrected NSTR. The original MRXNS.ENG has this line,

ENG|02 14 19 19 19 2 2 5 5 5 alpha beta chaetocin dide dioxide diphenyl epidithio phenylenetheny|C0292271|L0354632|S2175084|

The corrected MRXNS.ENG replaces it with this line,

ENG|02 14 14 15 19 19 19 2 2 5 5 5 7 alpha beta beta chaetocin dide dioxide diphenyl e epidithio phenylenetheny|C0292271|L0354632|S2175084|

Here is another example. The following line comes from the original MRXNS.ENG

ENG|3r capsanthin|C0951566|L1862217|S2191205|

This is replaced in the corrected MRXNS.ENG by two lines.

ENG|13 3 3r 5 capsanthin ci isomer r|C0951566|L1862217|S2191205|
ENG|13 3 3r 5 capsanthin cis isomer r|C0951566|L1862217|S2191205|

The original MRXNW.ENG contained no incorrect lines, however there were some missing lines. The corrected MRXNW.ENG has an additional 88 lines. For example,

ENG|15|C0292271|L0354632|S2175084|

This corresponds with the first MRXNS.ENG example shown above.

This problem only affects users who make use of the normalized index files.

The incorrect normalized strings and normalized words come from the following list of sources:

RCD99, MSH2002

4. MRCXT (CST95, SNM2) Problem

I. Problem

There are cases of multiple CST95 and SNM2 contexts being assigned the same context number for a single CUI,SUI,SAB,SCD tuple, leading to cases of overlapping contexts. In one case, specifically, this causes a single context to have two CCP rows.

II. Scope

There are contexts in 52 CUIs affected by this problem. The CST95 case appears like this in MRCXT:
In the corrected MRCXT, it appears as two contexts (CXN=2 is not shown here):

C0019054|S0376154|CST95|HEMOLYSIS|1|ANC|1|COSTART: coding symbols for thesaurus of adverse reaction terms[C0220949][[|]
C0019054|S0376154|CST95|HEMOLYSIS|1|ANC|2|HEMATOLOGIC DISORDERS[C0018939][HEM][|]
C0019054|S0376154|CST95|HEMOLYSIS|1|ANC|3|Erythrocyte Abnormalities[C0391870][HAL/RBC][|]
C0019054|S0376154|CST95|HEMOLYSIS|1|ANC|4|erythrocytes decreased[C0236147][HAL/RBC/DEC][|]
C0019054|S0376154|CST95|HEMOLYSIS|1|CCP|HEMOLYSIS|C0019054|HAL/RBC/DEC/HEMOLYSIS|+|

The SNM2 cases are less obvious because they involve cases where a particular CUI,SUI,SAB,SCD is its own child. In the original MRCXT it appears like this:

C0334970|S0637124|SNM2|NOCODE|1|ANC|1|Systematized Nomenclature of Medicine. 2nd ed.[C0220966][|]
C0334970|S0637124|SNM2|NOCODE|1|ANC|2|Occupation Axis[C0334705][|]
C0334970|S0637124|SNM2|NOCODE|1|ANC|3|Professional, Technical and Related Workers[C0334704][|]
C0334970|S0637124|SNM2|NOCODE|1|ANC|4|Economists[C0334970][|]
C0334970|S0637124|SNM2|NOCODE|1|CCP|Economists[C0334970][|+|

In the corrected MRCXT, it shows up as two separate contexts:

C0334970|S0637124|SNM2|NOCODE|1|ANC|1|Systematized Nomenclature of Medicine. 2nd ed.[C0220966][|]
C0334970|S0637124|SNM2|NOCODE|1|ANC|2|Occupation Axis[C0334705][|]
C0334970|S0637124|SNM2|NOCODE|1|ANC|3|Professional, Technical and Related Workers[C0334704][|]
C0334970|S0637124|SNM2|NOCODE|1|ANC|4|Economists[C0334970][|]
C0334970|S0637124|SNM2|NOCODE|1|CCP|Economists[C0334970][|+|

Note: CHD rows are not shown in this example.

The CST problem affects just one CUI, but the SNM2 problem affects 51 CUIs.
5. MRCOC COA Sort Order

I. Problem

The ordering of the subheading frequency listings in the COA field of MRCOC changed. Although not specifically documented, the subheading frequencies have historically been listed in decreasing frequency order but were instead listed in alphabetical order.

II. Scope

All cases with multiple subheadings where the frequency order did not match the alphabetical order were affected. For example, 2001AA MRCOC had the following entry:

C0000039|C0012456|MED01|L|10|CH=8,ME=2,<>=1,AN=1|

CH is the highest frequency subheading so it appears first. The corresponding entry from the 2002AA MRCOC is this:

C0000039|C0012456|MED02|L|12|<>=1,AN=1,CH=10,ME=2|

Again, CH is the highest frequency subheading, yet it appears third because the list is sorted alphabetically. In the corrected 2002AA MRCOC, this line appears as follows:

C0000039|C0012456|MED01|L|12|CH=10,ME=2,<>=1,AN=1|

This problem affects 2007720 lines in the 2002AA MRCOC, or 17% of the total file.

0.1.2 Semantic Network

No changes to the Semantic Network.

0.1.3 SPECIALIST Lexicon and Lexical Programs

No Changes to the SPECIALIST Lexicon or Lexical Programs.

0.1.4 UMLS Knowledge Source Server

There is a new version of the UMLS Knowledge Source Server. To find out more about the new features, please go to:
2. Metathesaurus

2.1 Source Vocabularies

The Metathesaurus contains relationships, attributes and concept names from more than 60 vocabularies and classifications, some in multiple editions. Many of the source vocabularies are included in their entirety; for others the Metathesaurus has partial coverage. Some material in the UMLS Metathesaurus is from copyrighted sources of the respective copyright claimants.

The Metathesaurus source vocabularies include terminologies designed for varied uses: in patient-record systems; large disease and procedure classifications used for statistical reporting and billing; more narrowly focused vocabularies used to record data related to psychiatry, nursing, medical devices, adverse drug reactions, etc.; disease and finding terminologies from expert diagnostic systems, and some thesauri used in information retrieval.

Metathesaurus sources may have markedly differing purposes and views. Some of these sources may match your needs exactly, while others may be useless or even harmful in your applications. For this reason, it is important to select appropriate sources and reject others, using MetamorphoSys or with queries using the Source Abbreviation (SAB) in the distribution files.

The Metathesaurus structure can incorporate translations of its source vocabularies into languages other than English. The 2002AC Metathesaurus includes the Dutch, French, Finnish, German, Italian, Portuguese, Russian (transliterated), and Spanish translations of NLM's Medical Subject Headings (MeSH). This edition also includes German translations of ICD10 and UMDNS; ICPC terms in Basque, Danish, Dutch, Finnish, French, German, Hebrew, Hungarian, Italian, Norwegian, Spanish, and Swedish; CPT terms in Spanish; Metathesaurus Version of Minimal Standard Terminology Digestive Endoscopy in French and Italian; and WHOART terms in French, German, Portuguese, and Spanish.

Users should also determine which vocabularies would require additional license arrangements for the anticipated use. MetamorphoSys (see Section 2.8 in 2002AA documentation) should be used to exclude vocabularies; it removes all vocabulary information and thus ensures compliance with the UMLS License Agreement.
2.3.1 Relationships in the Metathesaurus

Relationships in the Metathesaurus may come from the sources themselves or may be created by Metathesaurus editors to link concepts that would not otherwise be connected. Some relationships (RELs) are further refined by a Relationship Attribute (RELA, see Appendix B.1.1 in 2002AA Documentation).

Note that the nature and purpose of a relationship depends on its source, as indicated in the “Source Abbreviation for source vocabulary” (SAB) and the “Source of Relationship labels,” (SL). The source is the authority that asserts a relationship that is represented as transparently as possible within the Metathesaurus. Thus, relationships may adhere to pragmatic or esoteric principles; some are co-occurrences, statistical relationships, or mappings; some may even be self-referential (CUI1 = CUI2) where there are differing views of synonymy. Therefore it is important to select the RELs, RELAs, SABs, and SLs that match a user’s views and purposes. Note also that a variety of relationships from earlier editions of the Metathesaurus as well as editor-asserted relationships may carry the SAB and/or SL of “MTH.”

There are eleven types of relationships that exist in the Metathesaurus.

Broader (RB) has a broader relationship.

Narrower (RN) has a narrower relationship.

Other related (RO) has relationship other than synonymous, narrower, or broader.

Like (RL) the two concepts are similar or "alike”. In the current edition of the Metathesaurus, most relationships with this attribute are mappings provided by a source. In previous releases, some MeSH Supplementary Concept relationships were represented in this way.

RQ unspecified source asserted relatedness, possibly synonymous.

SY source asserted synonymy.

Parent (PAR) has parent relationship in a Metathesaurus source vocabulary.

Child (CHD) has child relationship in a Metathesaurus source vocabulary.

Sibling (SIB) has sibling relationship in a Metathesaurus source vocabulary.

AQ is an allowed qualifier for a concept in a Metathesaurus source vocabulary.

QB can be qualified by a concept in a Metathesaurus source vocabulary.
2.3.2 Context in the Metathesaurus

Updates to Context description include:

Change:
MDR41: FULL-MULTIPLE --> MDR50: FULL-MULTIPLE
MSH2002_02_10: FULL-MULTIPLE --> MSH2002_06_01: FULL-MULTIPLE

Add:
NCBI2001: FULL-NOSIB

2.7.1.2.1 Relation Relation (File=MRFILES)

Corrected Column Information:

BTS Size in bytes in this format (ISO/PC or Unix)

Section 6

6.1 Content of the CD-ROMS

The 2002AC edition of the UMLS Knowledge Sources is available only in compressed formats: Unix (TGZ) and PC (ZIP). Two CD-ROMs are required for each format. To use the UMLS, you must uncompress BOTH discs to a local hard disk, which will then contain the complete distribution including the MetamorphoSys tool to customize your version.

The PC format discs (2002AC_1_ZIP and 2002AC_2_ZIP) contain the UMLS Knowledge Sources in ZIP format, with PC line termination in the ASCII files. Use this format for Windows (version 3.1 and up), Windows NT and 2000 (v4.0 and up), XP, and OS/2. PKZIP or WINZIP programs may be used to extract the data; they may be obtained using these URLs: http://www.pkware.com or http://www.winzip.com. To extract the files to your disk, assign the target directory in which you wish to create the 2002AC release and unzip the ZIP files on BOTH CD-ROMs. NOTE that your file system must support large file sizes, e.g. NTFS or FAT32.

The Unix format CD-ROMs (2002AC_1_TAR and 2002AC_2_TAR) contain the UMLS Knowledge Sources in tar GNU ZIP (gzip) format (.tar.gz), with Unix line termination in the ASCII files. Use this format for operating systems that support
UNIX line termination (all flavors of UNIX and Linux). To unpack this you will need the free gzip (or gunzip) utility available from http://www.gnu.org. 'cd' to the target directory for 2002AC, then type the following commands:

    gzip -dc [cdrom_path]/2002AC_1.TGZ | tar xvf -

and then

    gzip -dc [cdrom_path]/2002AC_2.TGZ | tar xvf -

where [cdrom_path] is the path to the TGZ file on your CD-ROM.

NOTE that if you do not include the pipe to tar, the extraction will fail when the intermediate file exceeds most Unix file system's 2 GB size limits on single files.

Appropriate Java Runtime Environments (jre) for MetamorphoSys are included for each format.

All users should extract the full 2002AC UMLS Knowledge Sources to hard disk, creating the Standard 2002AC Directory Structure below which occupies 4.2 GB. We recommend a minimum of 8 GB available disk space.

PLEASE NOTE that you must have the full 2002AC UMLS Knowledge Sources on a local hard disk to use MetamorphoSys; you will need MetamorphoSys to comply with the license agreement and to customize the Metathesaurus to meet your needs.

**Standard 2002AC UMLS Knowledge Source Directory Structure**

<table>
<thead>
<tr>
<th>Directory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002AC/</td>
<td>root UMLS directory</td>
</tr>
<tr>
<td>DOC/</td>
<td>UMLS Knowledge Source documentation (this manual) in ASCII, PDF, and HTML.</td>
</tr>
<tr>
<td>META/</td>
<td>Metathesaurus concepts in ASCII relational format</td>
</tr>
<tr>
<td>CHANGE/</td>
<td>Files identifying significant differences from the previous edition.</td>
</tr>
<tr>
<td>METAMSYS/</td>
<td>MetamorphoSys system</td>
</tr>
<tr>
<td>METASUBSET/</td>
<td>Your customized Metathesaurus (initially empty)</td>
</tr>
</tbody>
</table>
Semantic Network in ASCII relational format and unit record formats; and Semantic Network documentation in ASCII format.

SPECIALIST lexicon in ASCII relational and unit record formats and SPECIALIST documentation in ASCII format.

SPECIALIST Documentation

SPECIALIST lexicon related lexical programs in executable and C source code.

A.1 Appendix to the License Agreement for Use of the UMLS Knowledge Sources

Additions to the Appendix include the following (new sources, updates and restriction level changes):

UMLS METATHESAURUS SOURCE VOCABULARIES -- Summer 2002AC Edition

Source information for new or updated sources for the 2002AC release:


Contact: Kathleen Mullen; e-mail: kmullen@his.com

CSP2002  Computer Retrieval of Information on Scientific Projects (CRISP). Bethesda

Contact: http://www-commons.cit.nih.gov/crisp


Contact: http://www.regenstrief.org/loinc/loinc.htm


CATEGORY 3 RESTRICTIONS APPLY

Contact: http://meddramsso.com/


CATEGORY 3 RESTRICTIONS APPLY

Contact: http://meddramsso.com


CATEGORY 3 RESTRICTIONS APPLY

Contact: http://meddramsso.com

CATEGORY 3 RESTRICTIONS APPLY

Contact: http://meddramsso.com/

MSH2002_06_01 Medical Subject Headings (MeSH). Bethesda (MD): National Library of Medicine, June 01, 2002.

This source has been translated into many languages. To date, eight of the translations have been incorporated into the UMLS Metathesaurus.

Contact: Stuart Nelson, M.D., Head, MeSH Section; e-mail: nelson@nlm.nih.gov; http://www.nlm.nih.gov/mesh/meshhome.html

Source information for new or updated sources for the 2002AB release are below:


CATEGORY 3 RESTRICTIONS APPLY

Contact: Dr. Annie Advocat; e-mail: advocat@inserm-dicdoc.u-strasbg.fr; http://www.inserm.fr


CATEGORY 3 RESTRICTIONS APPLY

Contact: http://meddramsso.com/


CATEGORY 3 RESTRICTIONS APPLY

Contact: http://meddramsso.com/

Contact:  www.ncbi.nlm.nih.gov/Taxonomy/

NLM02  RxNorm work done by the National Library of Medicine (NLM), Bethesda (MD), National Library of Medicine.

This release contains concepts created by the National Library of Medicine which express the meaning of a drug name in a normalized form. These concepts relate the names of orderable medications to a dose form and the components of those medications. For further discussion, see the article at:


Contact: Stuart Nelson, M.D., Head, MeSH Section; e-mail: nelson@nlm.nih.gov

NLM03  RxNorm relationship work done by the National Library of Medicine (NLM), Bethesda (MD), National Library of Medicine.

This release contains concepts created by the National Library of Medicine which express the meaning of a drug name in a normalized form. These concepts relate the names of orderable medications to a dose form and the components of those medications. For further discussion, see the article at:


Contact: Stuart Nelson, M.D., Head, MeSH Section; e-mail: nelson@nlm.nih.gov


*NOTE: Now a CATEGORY 0.

Contact:  http://www.vapbm.org/PBM/natform.htm
Appendix B Metathesaurus Data Elements and Source Vocabulary Information

B.1.1 Column Descriptions

Updates to Column Descriptions:

<table>
<thead>
<tr>
<th>CODE</th>
<th>Unique identifier or code for an entry in the source vocabulary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alphanumeric value (<strong>NOTE: was called SCD)</strong></td>
</tr>
<tr>
<td></td>
<td>Found in MRSAT, MRSO and MRCXT</td>
</tr>
<tr>
<td></td>
<td>In cases where there is no native identifier, CODE is a unique identifier generated for the Metathesaurus.</td>
</tr>
<tr>
<td></td>
<td>Note: In 2002AB, there were some null CODE values in the NLM02 source. The codes in NLM02 were intentionally left blank in 2002AB. For 2002AC and the future, all NLM02 atoms will have real codes of the form RX000001.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COT</th>
<th>Type of Co-occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Found in MRCOC</td>
</tr>
<tr>
<td></td>
<td>Valid values for Type of Co-occurrence:</td>
</tr>
<tr>
<td>L</td>
<td>Co-occurrence of primary or main subject headings in citations to the published literature</td>
</tr>
<tr>
<td>LQ</td>
<td>second concept occurs as a MeSH topical qualifier of the first in citations to the published literature. Where CUI2 is not present, the count of citations of CUI1 with no MeSH qualifiers is reported.</td>
</tr>
<tr>
<td>LQB</td>
<td>second concept is qualified by the first (a MeSH topical qualifier) in citations to the published literature</td>
</tr>
<tr>
<td>KP</td>
<td>positive association in Knowledge Base</td>
</tr>
<tr>
<td>KN</td>
<td>negative association in Knowledge Base, e.g., a finding that is inconsistent with a disease.</td>
</tr>
<tr>
<td>MP</td>
<td>Co-occurrence of modifier and problem within a patient record</td>
</tr>
<tr>
<td>PP</td>
<td>Co-occurrence of two problems within a patient record</td>
</tr>
</tbody>
</table>

Note that in some circumstances patient record co-occurrences may be self-referential.
due to differing views of synonymy or to data anomalies.

**B.1.2 Attribute Descriptions**

Attribute additions and deletions include the following:

---

**LRN**  LOINC related name.

Examples:

- LRN|LNC205|PIVMECILLIAM;SELEXID;AMDINOCILLIN PIVOXIL
- LRN|LNC205|AMIKIN;
- LRN|LNC205|AMIKIN;KIRBY-BAUER
- LRN|LNC205|AMIKIN;

---

**MPS**  MedDRA primary SOC

PTs may have multiple tree positions, but each has a primary soc)

Examples:

- MPS|MDR50|10017947
- MPS|MDR50|10017947
- MPS|MDR50|10022117
- MPS|MDR50|10017947

---

**MSA**  MedDRA abbreviation (either SOC or Special Search Category)

Examples:

- MSA|MDR50|Eye
- MSA|MDR50|Gastr
- MSA|MDR50|Card
- MSA|MDR50|HMRYG

---

**MXR**  MedDRA cross reference to WHOART, COSTART, or ICD9-CM
Examples:

MXR|MDR50|J-ART: 1254  
MXR|MDR50|WHOART: 0268015  
MXR|MDR50|COSTART: ABDO SYND ACUTE  
MXR|MDR50|HARTS: 10  
MXR|MDR50|COSTART: ABDO SYND ACUTE

PRN  VANDF Print/Label Name

Examples:

PRN|VANDF01|CASTOR OIL  
PRN|VANDF01|COD LIVER OIL  
PRN|VANDF01|CORN STARCH TOP PWD  
PRN|VANDF01|IPECAC SYRUP  
PRN|VANDF01|ARTIFICIAL SALIVA

MISO  MedDRA Serial Code International SOC Sort Order Digit (01-26)

Examples:

MISO|07  
MISO|05  
MISO|09  
MISO|14  
MISO|11

DID  Descriptor Identifier.

The identifier for the "descriptor class" in a given source, this value may be the same as the source code.

2002AB and 2002AC have DID attributes from two sources:

MeSH: The DID is the descriptor identifier, e.g. D012711

MedDRA: The DID is the preferred MedDRA code. In MedDRA, a lower level term may have a different code from its preferred term. A DID is present for all preferred and lower level MedDRA terms, with the value of the code of the preferred term. This
attribute was formerly called "MPC" for MedDRA. In the future, many sources will include a "DID" attribute.

Examples:

(MedDRA)
DID|10000085
DID|10000060

(MeSH)
DID|D012711
DID|D015060

Attributes used in the previous release, not found in current release:

MPC  This was a precursor to the MedDRA DID attribute.
NST  Normalized Strength (VANDF01)

B.2 Source Vocabularies and their Abbreviations

Complete list of Source Abbreviations with the new updates and new sources:


COS89 Computer-Stored Ambulatory Records (COSTAR). Boston (MA): Massachusetts General Hospital, 1989. (List of terms that occur frequently at 3 COSTAR sites, supplied by Massachusetts General Hospital)

COS92 Computer-Stored Ambulatory Records (COSTAR). Boston (MA): Massachusetts General Hospital, 1992. (List of terms that occur frequently at 3 COSTAR sites, supplied by Massachusetts General Hospital)

COS93 Computer-Stored Ambulatory Records (COSTAR). Boston (MA): Massachusetts General Hospital, 1993. (List of terms that occur frequently at 3 COSTAR sites, supplied by Massachusetts General Hospital)

COS95 Computer-Stored Ambulatory Records (COSTAR). Boston (MA): Massachusetts General Hospital, 1995. (List of terms that occur frequently at 3 COSTAR sites, supplied by Massachusetts General Hospital)


DMD2002 German translation of MeSH. Cologne (Germany): Deutsches Institut fuer Medizinische Dokumentation und Information, 2002.


ICPC2E  International Classification of Primary Care (ICPC) / prepared by the Classification Committee of the World Organization of National Colleges, Academies, and Academic Associations of General Practitioners/Family Physicians (WONCA), known more briefly as the World Organization of Family Doctors. 2nd ed. Henk Lamberts and Inge Hofmans-Okkes, 1998.


ICPCBAQ  Basque translation of ICPC93; see ICPC93

ICPCDAN  Danish translation of ICPC93; see ICPC93

ICPCDUT  Dutch translation of ICPC93; see ICPC93

ICPCFIN  Finnish translation of ICPC93; see ICPC93

ICPCFRE  French translation of ICPC93; see ICPC93

ICPCGER  German translation of ICPC93; see ICPC93
ICPCHEB  Hebrew translation of ICPC93; see ICPC93
ICPCHUN  Hungarian translation of ICPC93; see ICPC93
ICPCITA  Italian translation of ICPC93; see ICPC93
ICPCNOR  Norwegian translation of ICPC93; see ICPC93
ICPCPOR  Portuguese translation of ICPC93; see ICPC93
ICPCSPA  Spanish translation of ICPC93; see ICPC93
ICPCSWE  Swedish translation of ICPC93; see ICPC93

INS2002  Thesaurus Biomedical Francais/Anglais [French translation of MeSH].

ITA2002  Italian translation of MeSH. Istituto Superiore di Sanita Servizio
         Documentazione, Viale Regina Elena, 229 00616 Rome, Italy; 2002.

JABL99  Online Congenital Multiple Anomaly/Mental Retardation Syndromes.


LNC205  Logical Observation Identifiers, Names and Codes (LOINC). Version
        2.05. Indianapolis (IN): The Regenstrief Institute, 2002.

MCM92   Glossary of Methodologic Terms for Clinical Epidemiologic Studies of
        Human Disorders. Canada: McMaster University.

MDDB99  First DataBank Master Drug Data Base (MDDB). San Bruno (CA): First

        International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH), March 2002.

MDRAE50 Medical Dictionary for Regulatory Activities Terminology (MedDRA),
          American English Equivalents, Version 5.0. International Conference on
          Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH), March 2002.


MSH2002_06_01  Medical Subject Headings (MeSH). Bethesda (MD): National Library of Medicine, June 01, 2002.


MTHCH02  Metathesaurus Hierarchical CPT Terms (These terms were created by the NLM to provide contextual information for CPT). Bethesda (MD): National Library of Medicine.

MTHHH02  Metathesaurus Hierarchical HCPCS Terms (These terms were created by the NLM to provide contextual information for HCPCS). Bethesda (MD): National Library of Medicine.


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<th>Code</th>
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<td>NLM02</td>
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B.2.1 Sources of additional (non-concept name) information

Complete list of source information with the new updates and new sources:

A small number of sources contribute information to the Metathesaurus but do not contribute concept names (i.e., the SAB does not appear in MRSO). For example, a source may contribute relationships between concepts, but not actually name the concepts. The following SABs do not appear in MRSO:

HDA99    Health devices alerts. Plymouth Meeting, PA: ECRI.
HLREL    ICPC2E-ICD10 relationships from Dr. Henk Lamberts (HLREL). University of Amsterdam. Contact: H.Lamberts@AMC.UVA.NL.
HPC99    Healthcare product comparison system. Plymouth Meeting, PA: ECRI.
MBD02    MEDLINE (1992-1996)
MED02    MEDLINE (1997-2002)
OMIM97   Online Mendelian Inheritance in Man (OMIM). Bethesda (MD): National
### B.3 Number of Strings from Each Source

Complete list of string counts with the new updates and new sources for 2002AC included:

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New Term Types included in 2002AC:

**XX** Expanded string

New Term Types included in 2002AB:

**CMN** Common name

**EQ** Equivalent name

**PCN** Preferred common name

**SCN** Scientific name

**UCN** Unique common name

**UCP** Unique preferred common name

**B.4 Types of Names in a Vocabulary - the TTY**

New Term Types included in 2002AC:

**XX** Expanded string

New Term Types included in 2002AB:

**CMN** Common name

**EQ** Equivalent name

**PCN** Preferred common name

**SCN** Scientific name

**UCN** Unique common name

**UCP** Unique preferred common name
USN Unique scientific name
USY Unique synonym

Term Types not currently in 2002AC (these became the LRN attribute):

RN Official component related name in LOINC
RX Alternate name of preferred name in LOINC

**B.5 Order of Precedence of Source Concept Names as Distributed**

New Precedence for the 2002AC release:

MTH/PN
MTH/MM
MSH2002_06_01/MH
MSH2002_06_01/HT
MSH2002_06_01/TQ
MSH2002_06_01/EP
MSH2002_06_01/EN
MSH2002_06_01/XQ
MSH2002_06_01/NM
NLM02/SCD
NLM02/SCDC
DSM4/PT
DSM3R/PT
SNMI98/PT
SNMI98/PX
SNMI98/HT
SNMI98/HX
VANDF01/CD
VANDF01/HT
VANDF01/IN
MDDB99/CD
MMX01/CD
MMX01/IN
RCDSA/PT
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MIM93/PT
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NCBI2001/USN
NCBI2001/SCN
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LNC205/SX
B.6 Relationship Attributes not Listed in the Semantic Network

No new additions for 2002AC.

Additions to the list for 2002AB:

form_of
has_form
has_tradename
tradename_of

Deletions to the list for 2002AC:

equivalent_to