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APPENDIX A

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APPENDIX A.1

Appendix to the License Agreement for Use of the UMLS® Metathesaurus

UMLS METATHESAURUS® SOURCE VOCABULARIES -- 2004AB Edition

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NLM is working toward inclusion in the UMLS Metathesaurus of the complete, current edition of most of these vocabulary sources.

AIR93 AI/RHEUM. Bethesda, (MD): National Library of Medicine, Lister Hill Center, 1993.

Contact: May Cheh, Lister Hill Center, National Library of Medicine, Bethesda MD; e-mail: cheh@nlm.nih.gov

ALT2003 Alternative Billing Concepts (AltLink). Albuquerque (NM): Alternative Link LLC, 2003.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Alternative Link LLC; 6121 Indian School Road NE, Suite 131; Albuquerque, NM 87110; phone: 877-621-5465; <http://www.alternativelink.com>; e-mail: mail@alternativelink.com

AOD2000 Alcohol and Other Drug Thesaurus: A Guide to Concepts and Terminology in Substance Abuse and Addiction. 3rd ed. [4 volumes]. Bethesda (MD): National Institute on Alcohol Abuse and Alcoholism (NIAAA) and Center for Substance Abuse Prevention (CSAP), 2000.

Contact: Nancy Winstanley; NIAAA Library; 2107 Wilson Blvd, Suite 1000; Arlington, VA 22201; phone: 703-741-7147; e-mail: nwinstanley@csrincorporated.com

BI98 Beth Israel OMR Clinical Problem List Vocabulary. Version 1.0. Boston (MA): Beth Israel Deaconess Medical Center, 1999.

[CATEGORY 2 RESTRICTIONS APPLY](#)

Contact: Daniel Sands, M.D.; Center for Clinical Computing, Beth Israel Deaconess Medical Center, Harvard University; 330 Brookline Avenue; Boston, MA 02215; phone: 617-667-1510; e-mail: dsands@bidmc.harvard.edu

CCPSS99 Canonical Clinical Problem Statement System (CCPSS). Version 1.0. Nashville (TN): Department of Biomedical Informatics, Vanderbilt University, 1999.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Permission will be freely given for any uses and applications containing CCPSS which are not for sale - i.e. those used internally or given to others without charge.

Contact: Steven Brown, MD., Department of Biomedical Informatics, Vanderbilt University Medical Center; 2209 Garland Ave; Nashville, TN 37232-8340; phone: (615)321-6335; e-mail: sbrown@vumc.lib.mc.vanderbilt.edu

CCS2003 Clinical Classifications Software (CCS) Categories. February 2003 release. Rockville (MD): Agency for Health Care Policy and Research (AHCPR), 2003.

Contact: phone: Anne Elixhauser; Agency for Healthcare Research and Quality; 540 Gaither Road; Rockville, MD 20850; phone: 1-800-358-9295; <http://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccsfactsheet.jsp>

CDT4 Current Dental Terminology (CDT) contained in the HCFA Common Procedure Coding System (HCPCS). Version 4. Washington (DC): Health Care Financing Administration, 2002.

[CATEGORY 3 RESTRICTIONS APPLY](#)

For CDT the following special notice must be displayed:

"For CDT only, copyright 2002 American Dental Association, all rights reserved."

Contact for CDT: Mary Essling, American Dental Association; 211 E. Chicago Avenue; Chicago, IL 60611; phone: (312)440-2520

COSTAR_89-95 Computer Stored Ambulatory Records (COSTAR). Boston (MA): Massachusetts General Hospital, 1995, 1993, 1992, 1989.

The UMLS Metathesaurus includes terms that were used frequently at 3 COSTAR sites in the years indicated and supplied to NLM by Massachusetts General Hospital.

Contact: G. Octo Barnett, M.D., Laboratory of Computer Science, Massachusetts General Hospital; 50 Staniford Street, 5th floor; Boston, MA 02114; phone: 617-726-3939; e-mail: Barnett.Octo@mgh.harvard.edu

CPM2003 Columbia Presbyterian Medical Center Medical Entities Dictionary (MED). New York (NY): Columbia Presbyterian Medical Center, 2003.

The UMLS Metathesaurus includes a relatively small number of terms created at Columbia Presbyterian Medical Center for the MED, which also includes terms obtained from the UMLS Metathesaurus and other sources.

[CATEGORY 2 RESTRICTIONS APPLY](#)

Contact: James Cimino, M.D.; Department of Medical Informatics, Vanderbilt Clinic, Columbia University; 622 W. 168th Street; New York, NY 10032; phone: 212-305-8127; e-mail: jjc7@columbia.edu; <http://med.dmi.columbia.edu/>

CPT01SP Physicians' Current Procedural Terminology (CPT), Spanish translation. 4th ed. Chicago (IL): American Medical Association, 2001.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Matt Menning, CPT Intellectual Property Services Department, American Medical Association, 515 N. State Street, Chicago, IL 60610; fax: (312) 464-5022; e-mail: Matt_Menning@ama-assn.org; <http://www.ama-assn.org>

CPT2004 Physicians' Current Procedural Terminology (CPT™). 4th ed. Chicago (IL): American Medical Association, 2004.

CATEGORY 3 RESTRICTIONS APPLY

The following special notice must be displayed:

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Contact: Matt Menning, CPT Intellectual Property Services Department, American Medical Association, 515 N. State Street, Chicago, IL 60610; (312) 464-5022; e-mail: Matt_Menning@ama-assn.org; <http://www.ama-assn.org>

CSP2004 Computer Retrieval of Information on Scientific Projects (CRISP). Bethesda (MD): National Institutes of Health, Division of Research Grants, Research Documentation Section, 2004.

Contact: Dorette Finch; Division of Research Documentation, ORA, OER, National Institutes of Health; 6701 Rockledge Drive; Bethesda, MD 20892-7983

CST95 Coding Symbols for Thesaurus of Adverse Reaction Terms (COSTART) . Rockville (MD): Food and Drug Administration, Center for Drug Evaluation and Research, 1995.

COSTART has been superseded by the Medical Dictionary for Regulatory Activities (MedDRA) Terminology.

DDB00 Diseases Database 2000. London (England): Medical Object Oriented Software Enterprises Ltd., 2000.

CATEGORY 3 RESTRICTIONS APPLY

Contact: Malcolm Duncan; Medical Object Oriented Software Enterprises Ltd; Unit 36c Marryat Square; Fulham, London SW6 6UA; United Kingdom; phone: 020 7381 4220; <http://www.diseasesdatabase.com/>

DMDICD10_1995 Internationale Klassifikation der Krankheiten 10 [German translation of ICD10]. Cologne (Germany): Deutsches Institut fuer Medizinische Dokumentation und Information, 2000.

CATEGORY 1 RESTRICTIONS APPLY

Contact: Dr. Michael Schopen; phone: 49-221-472-4352; e-mail: schopen@dimdi.de; <http://www.dimdi.de>

DMDUMD_1996 Die Nomenklatur fuer Medizinprodukte UMDNS [German translation of UMDNS]. Cologne (Germany): Deutsches Insitut fuer Medizinische Dokumentation und Information, 2000.

CATEGORY 1 RESTRICTIONS APPLY

Contact: Dr. Michael Schopen; phone: 49-221-472-4352; e-mail: schopen@dimdi.de; <http://www.dimdi.de>

DSM3R_1987 Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R). 3rd ed. rev. Washington (DC): American Psychiatric Association, 1987.

CATEGORY 3 RESTRICTIONS APPLY

Contact: see entry for DSM4

DSM4_1994 Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Washington (DC): American Psychiatric Association, 1994.

CATEGORY 3 RESTRICTIONS APPLY

The APA usually charges small administrative fees for copyright permissions, but these may be waived for research purposes. All users should apply for permission in writing or by email to:

Contact: Customer Service, American Psychiatric Press, Inc. 1000 Wilson Blvd., Suite 1825,

Arlington, VA 22209; e-mail: csdept@appi.org; <http://www.appi.org>

DXP94 DXplain (An expert diagnosis program). Boston (MA): Massachusetts General Hospital.

Contact: G. Octo Barnett, M.D., Laboratory of Computer Science, Massachusetts General Hospital; 50 Staniford Street, 5th floor; Boston, MA 02114; phone: 617-726-3939; e-mail: Barnett.Octo@mgh.harvard.edu

GO2004_03_02 Gene Ontology (GO): tool for the unification of biology. The Gene Ontology Consortium, March 2, 2004.

Contact: <http://www.geneontology.org/>

HCDT4 HCPCS Version of Current Dental Terminology (CDT). Version 4. Washington (DC): Health Care Financing Administration, 2002.

[CATEGORY 3 RESTRICTIONS APPLY](#)

HCPCS04 Health Care Financing Administration (HCFA) Common Procedure Coding System (HCPCS). Washington (DC): Health Care Financing Administration, 2004.

The American Medical Association's CPTTM codes in HCPCS have a Source Abbreviation of HCPT04. The American Dental Association's CDT codes in HCPCS have a Source Abbreviation of HCDT4.

Contact for HCPCS: C. Kaye Riley, Health Care Financing Administration; e-mail: criley@hcfa.gov

HCPT04 HCPCS Version of Current Procedural Terminology (CPT). Washington (DC): Health Care Financing Administration, 2004.

[CATEGORY 3 RESTRICTIONS APPLY](#)

HHC2003 Saba, Virginia. Home Health Care Classification of Nursing Diagnoses and Interventions. Washington (DC): Georgetown University, 2003.

[CATEGORY 1 RESTRICTIONS APPLY](#)

Contact: Virginia Saba, Ph.D., R.N.,; Georgetown University; 2332 South Queen Street; Arlington, VA 22202; phone: 703-521-6132; e-mail: vsaba@worldnet.att.net; <http://www.sabacare.com/>

HL7_1998-2002 Health Level Seven Vocabulary (HL7). Ann Arbor (MI): Health Level Seven, 1998.

Contact: Health Level Seven, 3300 Washtenaw Avenue, Suite 227, Ann Arbor MI 48104-4250; phone: 734-677-7777; e-mail: HQ@HL7.ORG; <http://www.hl7.org>

ICD10_1998, ICD10AE_1998 International Statistical Classification of Diseases and Related Health Problems (ICD-10). Tenth Revision. Geneva (Switzerland): World Health Organization, 1998.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Office of Publications, World Health Organization, 1211 Geneva 27, Switzerland; <http://www.who.int/whosis/icd10>

ICD10AM_2000, ICD10AMAE_2000 International Statistical Classification of Diseases and Related Health Problems. Tenth Revision, Australian Modification; 2nd Edition: January 2000.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Developed and Maintained by the National Centre for Classification in Health, University of Sydney, Faculty of Health Sciences; PO Box 170 Lidcombe, NSW, Australia 1825; Phone: 2 9351 9461

ICD10DUT_200403 International Classification of Diseases 10th edition, Dutch Translation, March 2004

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Inge M. Okkes, PhD, Department of Family Practice, Division Clinical Methods & Public Health, Academic Medical Center - University of Amsterdam, Meibergdreef 15 (Room J2-213), 1105 AZ AMSTERDAM, The Netherlands; Tel: 31 20 566 4660; E-mail: I.m.okkes@AMC.UVA.NL

ICD9CM_2004 International Classification of Diseases: 9th revision, Clinical Modification (ICD-9-CM). 6th edition, updated. Washington (DC): Centers for Medicare and Medicaid Services; July 2003.

NLM has generated fully specified titles for ICD-9-CM codes in cases in which the official ICD-9-CM titles consist of extensions to higher levels in the ICD-9-CM hierarchy. The fully specified names were produced with reasonable care, but have not yet been reviewed and approved by the producers of ICD-9-CM.

Contact: Patricia E. Brooks, pbrooks@cms.hhs.gov; http://www.cms.hhs.gov/ICD9ProviderDiagnosticCodes/01_overview.asp

ICPC2E_1998, ICPC2AE_1998 International Classification of Primary Care: 2nd ed. electronic form. 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; 1998.

CATEGORY 3 RESTRICTIONS APPLY

Contact: Prof. Dr. H. Lamberts, Department of Family Practice, Division Clinical Methods & Public Health, Academic Medical Center - University of Amsterdam, Meibergdreef 15 (Room J2-214 and J2-213), 1105 AZ Amsterdam, The Netherlands; Tel: 31 20 566 4711; E-mail: H.Lamberts@AMC.UVA.NL.

Inge M. Okkes, PhD, Department of Family Practice, Division Clinical Methods & Public Health, Academic Medical Center - University of Amsterdam, Meibergdreef 15 (Room J2-213), 1105 AZ AMSTERDAM, The Netherlands; Tel: 31 20 566 4660; E-mail: I.m.okkes@AMC.UVA.NL

See reference: Okkes, IM; Jamouille, M; Lamberts, H; Bentzen, N. ICPC-2-E: the electronic version of ICPC-2. Differences from the printed version and the consequences. *Family Practice*; 2000; 17:101-107.

ICPC2EDUT_200203 International Classification of Primary Care. 2nd ed. electronic form, Dutch translation, March 2002. 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; March 2002.

CATEGORY 3 RESTRICTIONS APPLY

Contact: Prof. Dr. H. Lamberts, Department of Family Practice, Division Clinical Methods & Public Health, Academic Medical Center - University of Amsterdam, Meibergdreef 15 (Room J2-214 and J2-213), 1105 AZ Amsterdam, The Netherlands; Tel: 31 20 566 4711; E-mail: H.Lamberts@AMC.UVA.NL.

Inge M. Okkes, PhD, Department of Family Practice, Division Clinical Methods & Public Health,

Academic Medical Center - University of Amsterdam, Meibergdreef 15 (Room J2-213), 1105 AZ AMSTERDAM, The Netherlands; Tel: 31 20 566 4660; E-mail: I.m.okkes@AMC.UVA.NL

ICPC2EENG_200203 International Classification of Primary Care. 2nd ed. electronic form, English translation. 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; March 2002.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Prof. Dr. H. Lamberts, Department of Family Practice, Division Clinical Methods & Public Health, Academic Medical Center - University of Amsterdam, Meibergdreef 15 (Room J2-214 and J2-213), 1105 AZ Amsterdam, The Netherlands; Tel: 31 20 566 4711; E-mail: H.Lamberts@AMC.UVA.NL.

Inge M. Okkes, PhD, Department of Family Practice, Division Clinical Methods & Public Health, Academic Medical Center - University of Amsterdam, Meibergdreef 15 (Room J2-213), 1105 AZ AMSTERDAM, The Netherlands; Tel: 31 20 566 4660; E-mail: I.m.okkes@AMC.UVA.NL

ICPC2P_2000, ICPCPAE_2000 International Classification of Primary Care: Version 2-Plus: Australian Modification; January, 2000.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Helena Britt, Family Medicine Research Centre, Acacia House, Westmead Hospital, Westmead NSW 2145, Australia. E-mail: helenab@med.usyd.edu.au; <http://www.fmrc.org.au>

ICPC93 Lamberts, Henk, Wood, Maurice, and Hofmans-Okkes, Inge, editors. International Classification of Primary Care (ICPC) in The European Community (with a multi language layer on a floppy disk). Oxford: Oxford University Press, 1993.

This year, the Metathesaurus has also included translations of ICPC93 in Basque (ICPCBAQ_1993), Danish (ICPCDAN_1993), Dutch (ICPCDUT_1993), Finnish (ICPCFIN_1993), French (ICPCFRE_1993), German (ICPCGER_1993), Hebrew (ICPCHEB_1993), Hungarian (ICPCHUN_1993), Italian (ICPCITA_1993), Norwegian (ICPCNOR_1993), Portuguese (ICPCPOR_1993), Spanish (ICPCSPA_1993), and Swedish (ICPCSWE_1993).

Contact: Prof. Dr. H. Lamberts, Department of Family Practice, Division Clinical Methods & Public Health, Academic Medical Center - University of Amsterdam, Meibergdreef 15 (Room J2-214 and J2-213), 1105 AZ Amsterdam, The Netherlands; Tel: 31 20 566 4711; E-mail: H.Lamberts@AMC.UVA.NL.

Inge M. Okkes, PhD, Department of Family Practice, Division Clinical Methods & Public Health, Academic Medical Center - University of Amsterdam, Meibergdreef 15 (Room J2-213), 1105 AZ AMSTERDAM, The Netherlands; Tel: 31 20 566 4660; E-mail: I.m.okkes@AMC.UVA.NL

JABL99 Online Congenital Multiple Anomaly/Mental Retardation Syndromes. Stanley Jablonski. Bethesda (MD): National Library of Medicine, 1999.

[CATEGORY 1 RESTRICTIONS APPLY](#)

Contact: Stanley Jablonski, National Library of Medicine, Bethesda MD; e-mail: stanley_jablonski@nlm.nih.gov; http://www.nlm.nih.gov/mesh/jablonski/syndrome_title.html

LCH90 Library of Congress Subject Headings. 12th ed. Washington (DC): Library of Congress, 1989.

There are later editions of this source that are not reflected in the UMLS Metathesaurus. This source has considerable non-biomedical content and will never be included in the Metathesaurus in its entirety.

Contact: <http://www.lcweb.loc.gov>

LNC212 Logical Observations Identifiers, Names, and Codes (LOINC). Version 2.12. Indianapolis (IN): The Regenstrief Institute, Feb. 9, 2004.

Contact: <http://www.loinc.org>

MCM92 Haynes, Brian. Glossary of Methodologic Terms for Clinical Epidemiologic Studies of Human Disorders. Hamilton, Ontario (Canada): McMaster University, 1992.

Contact: R. Brian Haynes, M.D., Ph.D.; Clinical Epidemiology & Biostatistics and Medicine, Faculty of Health Sciences, McMaster University; 1200 Main Street West, Rm 2C10B; Hamilton, Ontario, Canada L8N 3Z5; phone: 905-525-9140; e-mail: bhaynes@mcmaster.ca

MDDB_2003_03 Master Drug DataBase (MDDB). St. Louis (MO): Facts and Comparisons, 2003.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Karen Eckert; Medi-Span; 8425 Woodfield Crossing Blvd., Suite 490; Indianapolis, IN 46240; phone: 800-388-8884; e-mail: ms-support@drugfacts.com; <http://www.medi-span.com/products/index.aspx?id=1>

MDR70 Medical Dictionary for Regulatory Activities Terminology (MedDRA) Version 7.0, March 2004. International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH).

CATEGORY 3 RESTRICTIONS APPLY

Contact: MedDRA MSSO; 12011 Sunset Hills Road; Reston, VA 20190-3285; phone: 877-258-8280; e-mail: MSSOhelp@ngc.com; <http://meddramsso.com>

MDRAE70 Medical Dictionary for Regulatory Activities Terminology (MedDRA), American English Equivalents, Version 7.0, March 2004. International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH).

CATEGORY 3 RESTRICTIONS APPLY

Contact: MedDRA MSSO; 12011 Sunset Hills Road; Reston, VA 20190-3285; phone: 877-258-8280; e-mail: MSSOhelp@ngc.com; <http://meddramsso.com>

MDRDUT70 Medical Dictionary for Regulatory Activities Terminology (MedDRA), Version 7.0, Dutch Edition, March 2004. International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH).

CATEGORY 3 RESTRICTIONS APPLY

Contact: MedDRA MSSO; 12011 Sunset Hills Road; Reston, VA 20190-3285; phone: 877-258-8280; e-mail: MSSOhelp@ngc.com; <http://meddramsso.com>

MDREA70 Medical Dictionary for Regulatory Activities Terminology (MedDRA), American English, with expanded abbreviations, Version 7.0, March 2004. International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH).

CATEGORY 3 RESTRICTIONS APPLY

Contact: MedDRA MSSO; 12011 Sunset Hills Road; Reston, VA 20190-3285; phone: 877-258-8280; e-mail: MSSOhelp@ngc.com; <http://meddramsso.com>

MDREX70 Medical Dictionary for Regulatory Activities Terminology (MedDRA), with expanded abbreviations, Version 7.0, March 2004. International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH).

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MDRFRE70 Medical Dictionary for Regulatory Activities Terminology (MedDRA), Version 7.0, French Edition, March 2004. International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH).

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Contact: MedDRA MSSO; 12011 Sunset Hills Road; Reston, VA 20190-3285; phone: 877-258-8280; e-mail: MSSOhelp@ngc.com; <http://meddramsso.com>

MDRGER70 Medical Dictionary for Regulatory Activities Terminology (MedDRA), Version 7.0, German Edition, March 2004. International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH).

CATEGORY 3 RESTRICTIONS APPLY

Contact: MedDRA MSSO; 12011 Sunset Hills Road; Reston, VA 20190-3285; phone: 877-258-8280; e-mail: MSSOhelp@ngc.com; <http://meddramsso.com>

MDRPOR70 Medical Dictionary for Regulatory Activities Terminology (MedDRA), Version 7.0, Portuguese Edition, March 2004. International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH).

CATEGORY 3 RESTRICTIONS APPLY

Contact: MedDRA MSSO; 12011 Sunset Hills Road; Reston, VA 20190-3285; phone: 877-258-8280; e-mail: MSSOhelp@ngc.com; <http://meddramsso.com>

MDRSPA70 Medical Dictionary for Regulatory Activities Terminology (MedDRA), Version 7.0, Spanish Edition, March 2004. International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH).

CATEGORY 3 RESTRICTIONS APPLY

Contact: MedDRA MSSO; 12011 Sunset Hills Road; Reston, VA 20190-3285; phone: 877-258-

8280; e-mail: MSSOhelp@ngc.com; <http://meddramsso.com>

MIM93 Victor A. McKusick, ed. Online Mendelian Inheritance in Man (OMIM). Baltimore (MD): Johns Hopkins University, 1994.

To date the UMLS Metathesaurus contains a relatively small amount of data from this source.

[CATEGORY 1 RESTRICTIONS APPLY](#)

Contact: OMIM, McKusick-Nathans Institute of Genetic Medicine; Johns Hopkins Hospital, Blalock 1007; 600 N. Wolfe St.; Baltimore, MD 21287-4922; phone: 410-955-0313; e-mail: techlicense@jhmi.edu; <http://www.ncbi.nlm.nih.gov/Omim/>

MMSL_2004_03 Multum Drug Source Lexicon. Denver (CO): Multum Information Services, Inc., March 1, 2004

[CATEGORY 1 RESTRICTIONS APPLY](#)

Contact: Multum Drug Source Lexicon; 3200 Cherry Creek South Drive, Suite 300; Denver, CO 80209; phone: 888-633-4772 x1420. <http://www.multum.com/Lexicon.htm>

MMX01 Micromedex DRUGDEX. Englewood (CO): Micromedex, 2001.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Thomson Micromedex, 6200 South Syracuse Way, Suite 300, Greenwood Village CO 80111-4740; phone: (800) 525-9083; e-mail: info@mdx.com; <http://www.micromedex.com>

MSH2004_2003_12_12 Medical Subject Headings (MeSH). Bethesda (MD): National Library of Medicine, Dec. 12, 2003.

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>

MSHCZE2003 Czech translation of MeSH 2003. Dept. of Bibliography, National Library of Medicine, Prague, Sokolska 54, Czech Republic, 2003.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Marie Votipkova; e-mail: votipkov@nlk.cz

MSHDUT2004 Nederlandse vertaling van Mesh (Dutch translation of MeSH). Amsterdam, The Netherlands: Nederlands Tijdschrift voor Geneeskunde (Dutch Journal of Medicine), 2004.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: A.J.P.M.Overbeke, Nederlands Tijdschrift voor Geneeskunde (Dutch Journal of Medicine), P.O.Box 75971, 1070 AZ Amsterdam, The Netherlands; e-mail: overveke@ntvg.nl; <http://www.ntvg.nl>

MSHFIN2003 Finnish translation of MeSH. Helsinki (Finland): Finnish Medical Society Duodecim, 2004.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Peter Nyberg, MD; phone: 09-393-091; e-mail: peter.nyberg@sll.fimnet.fi

MSHFRE2004 Thesaurus Biomedical Francais/Anglais [French translation of MeSH]. Paris (France): Institut National de la Sante et Recherche Medicale, 2004.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Claudie Hasenfuss; phone: 33-1-45-59-52-91; e-mail: hasenfus@vjf.inserm.fr; <http://www.inserm.fr>

MSHGER2004 German translation of the MeSH. Cologne (Germany): Deutsches Institut fuer Medizinische Dokumentation und Information, 2004.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Dr. Michael Schopen; phone: 49-221-472-4325; e-mail: schopen@dimdi.de; <http://www.dimdi.de>

MSHITA2004 Italian translation of MeSH. Rome (Italy): Istituto Superiore di Sanita, Settore Documentazione, 2004.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Dr. Adriana Dracos, Viale Regina Elena, 229 00161 Rome Italy; phone: 39-06-49903277; e-mail: dracos@iss.it; <http://www.iss.it>

MSHJPN2004 Japanese translation of MeSH 2004.

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Contact: Tsuneki Shinohara, MD, President, Japan Medical Abstracts Society, 2-5-18, Tokaido-Higashi, Sugunami, Tokyo 168-0072, Japan; e-mail: shinohara@jamas.gr.jp

MSHPOR2004 Descritores em Ciencias da Saude [Portuguese translation of MeSH]. Sao Paulo (Brazil): Latin American and Caribbean Center on Health Sciences Information. BIREME/PAHO/WHO, 2004.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Arthur Alberto Correa Treuherz; e-mail: treuherz@bireme.ops.oms.org

MSHRUS2004 Russian Translation of MeSH. Moscow (Russia): State Central Scientific Medical Library, 2004.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Tatyana Kolpakova; State Central Scientific Medical Library, Nakhimovsky prospekt 49, Moscow, GSP 117418, Russia; e-mail: tat-40@mail.ru

MSHSPA2004 Descriptores en Ciencias de la Salud [Spanish translation of MeSH]. Sao Paulo (Brazil): Latin American and Caribbean Center on Health Sciences Information. BIREME/PAHO/WHO, 2004.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Arthur Alberto Correa Treuherz; e-mail: treuherz@bireme.ops.oms.org

MSHSWE2004 Swedish translation of MeSH 2004. Karolinska Institutet, 171 77 Stockholm.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Ylva Gavel, Library of Karolinska Institutet, Box 200, SE-171 77 Stockholm, Sweden; phone: (0)8-524 84 000, fax: (0)8-524 84 310; e-mail: Ylva.Gavel@kib.ki.se

Contact: Tel: 08-254 800 00; E-mail: info@ki.se

MTH UMLS Metathesaurus. Bethesda (MD): National Library of Medicine.

Concept names with this source abbreviation were created by NLM to facilitate creation of the UMLS Metathesaurus. There are relatively few of them.

Contact: Jan Willis, UMLS Support, National Library of Medicine; e-mail: jwillis@nlm.nih.gov

MTHCHO4 UMLS Metathesaurus Hierarchical CPT terms. Bethesda (MD): National Library of Medicine.

Concept names with this source abbreviation were created by NLM to provide contextual information for CPT terms™.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Jan Willis, UMLS Support, National Library of Medicine, Bethesda MD; e-mail: jwillis@nlm.nih.gov

MTHFDA_2004_01 Metathesaurus FDA National Drug Code Directory Terms (MTHFDA). Bethesda, MD: National Library of Medicine, January 2004.

Concept names with this source abbreviation were created by NLM to provide contextual information for FDA NDC terms.

Contact: Jan Willis, UMLS Support, National Library of Medicine; e-mail: jwillis@nlm.nih.gov

MTHHHO4 Metathesaurus Hierarchical HCPCS Terms (These terms were created by the NLM to provide contextual information for HCPCS). Bethesda (MD): National Library of Medicine.

Concept names with this source abbreviation were created by NLM to provide contextual information for HCPCS.

Contact: Jan Willis, UMLS Support, National Library of Medicine, Bethesda MD; e-mail: jwillis@nlm.nih.gov

MTHICD9_2004 Metathesaurus additional NLM-generated Entry Terms for ICD-9-CM. Bethesda (MD): National Library of Medicine.

Contact: Jan Willis, UMLS Support, National Library of Medicine, Bethesda MD; e-mail: jwillis@nlm.nih.gov

MTHICPC2EAE_200203 International Classification of Primary Care, 2nd Edition, Electronic, 2E, American English Equivalents, March 2002.

Concept names with this source abbreviation were created by NLM to provide contextual information for ICPC2E terms.

Contact: Jan Willis, UMLS Support, National Library of Medicine, Bethesda MD; e-mail: jwillis@nlm.nih.gov

MTHMST2001 Metathesaurus Version of Minimal Standard Terminology Digestive Endoscopy: International Edition April 22, 1998.

Contact: Michele Tringali, tringali.michele@aoud.sanita.fvg.it

MTHMSTFRE_2001 Metathesaurus Version of Minimal Standard Terminology Digestive Endoscopy: French Edition April 22, 1998.

*NOTE: Now a CATEGORY 0

Contact: Michele Tringali, tringali.michele@aoud.sanita.fvg.it

MTHMSTITA_2001 Metathesaurus Version of Minimal Standard Terminology Digestive Endoscopy: Italian Edition April 22, 1998.

*NOTE: Now a CATEGORY 0

Contact: Michele Tringali, tringali.michele@aoud.sanita.fvg.it

MTHPDQ2004 Metathesaurus Forms of Physician Data Query Terms 2004. Bethesda, MD: National Library of Medicine.

These terms were created by NLM to provide contextual information for PDQ terms.

Contact: Jan Willis, UMLS Support, National Library of Medicine, Bethesda MD; e-mail: jwillis@nlm.nih.gov

MTHSCTSPA_2003_10_31 Metathesaurus forms of Spanish SNOMED Clinical Terms, 2003_10_31. Bethesda (MD): National Library of Medicine.

These terms were created by NLM to provide contextual information for Spanish SNOMED Clinical Terms.

Contact: Jan Willis, UMLS Support, National Library of Medicine, Bethesda MD; e-mail: jwillis@nlm.nih.gov

NAN2004 Sparks Ralph, Sheila, Craft-Rosenberg, Martha, Herdman, T. Heather, Lavin, Mary Ann, eds. NANDA Nursing Diagnoses: definitions and classification 2003-2004. Philadelphia (PA): NANDA International, 2003.

[CATEGORY 3 RESTRICTIONS APPLY](#) to commercial use.

Contact: NANDA, 1211 Locust St, Philadelphia, PA 19107; phone: (800)647-9002

NCBI 2003 NCBI Taxonomy, Bethesda (MD): National Center for Biotechnology Information, 2003.

Contact: NCBI Taxonomy; National Center for Biotechnology Information, National Library of Medicine, Bldg. 38A; 8600 Rockville Pike; Bethesda, MD 20894; phone: 301-496-2475; e-mail: info@ncbi.nlm.nih.gov; www.ncbi.nlm.nih.gov/Taxonomy

NCI 2004 NCI Thesaurus, 2004. Bethesda (MD): National Cancer Institute, National Institutes of Health, July 2004.

Subset only.

Contact: Sherri de Coronado; NCI Center for Bioinformatics; 6116 Executive Blvd, Room 2026; Rockville, MD 20892; e-mail: decorons@exchange.nih.gov; <http://cancer.gov/cancerinfo/terminologyresources>

NDDF_2004_03_11 (NDDF) National Drug Data File Plus Source Vocabulary 2004. San Bruno, CA: First DataBank Inc., March 11, 2004.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: http://www.firstdatabank.com/knowledge_bases/nddf_plus

NDFRT_2004_01 National Drug File - Reference Terminology, 2004_01. Washington, DC: U.S. Department of Veterans Affairs, Veterans Health Administration, January 2004.

Contact: Steven Brown; CPEP Office; 1310 24th Avenue S; Nashville, TN 37215; e-mail: Steven.Brown@med.va.gov

NEU99 Bowden, Douglas M., Martin, Richard F., Dubach, Jov G. Neuronames Brain Hierarchy. Seattle (WA): University of Washington, Primate Information Center, 1999.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Douglas M. Bowden, M.D., Regional Primate Research Center, University of Washington, Box 357330, Seattle, WA 98195; e-mail: dmbowden@u.washington.edu; <http://braininfo.rprc.washington.edu>

NIC99 McCloskey, Joanne C.; Bulechek, Gloria M., editors. Nursing interventions classification (NIC): Iowa intervention project. St. Louis (MO): Mosby Year Book, 1999.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: <http://www.nursing.uiowa.edu/centers/cncce/cnccontact.htm>

NOC97 Johnson, Marion; Maas, Meridean, editors. Nursing Outcomes Classification (NOC): Iowa outcomes project. St. Louis (MO): Mosby Year Book, 1997.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: <http://www.nursing.uiowa.edu/centers/cncce/cnccontact.htm>

OMS94 Martin, Karen S., Scheet, Nancy J. The Omaha System: Applications for Community Health Nursing. Philadelphia (PA): W.B. Saunders, 1992. (with 1994 corrections)

[CATEGORY 1 RESTRICTIONS APPLY](#)

Contact: Karen S. Martin, RN, MSN, FAAN, 2115 South 130th Street, Omaha, Nebraska 68144; fax: (402)333-2091

PCDS97 Ozbolt, Judy Grace. Patient Care Data Set (PCDS). Version 4.0. Nashville (TN): Vanderbilt University School of Nursing, 1998.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Judy Ozbolt, Vanderbilt School of Nursing, 400-C Godchaux Hall, Nashville TN 37240-0008; phone: (615)343-3291; e-mail: judy.ozbolt@mcm.vanderbilt.edu

PDQ2004 Physician Data Query Online System (PDQ). Bethesda (MD): National Cancer Institute, 2004.

Contact: Dr. Gisele Sarosy, National Cancer Institute; 6116 Executive Blvd, Room 3001; Bethesda, MD 20892; phone: 301-496-9096; e-mail: gsarosy@mail.nih.gov; <http://www.nci.nih.gov/cancerinfo/pdq/>

PPAC98 Pharmacy Practice Activity Classification (PPAC). Washington (DC): American Pharmaceutical Association. January, 1998.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Scott Antall, American Pharmaceutical Association - Academy of Pharmaceutical Research and Science; e-mail: ssa@mail.aphanet.org

PSY2001 Thesaurus of Psychological Index Terms. Ninth Edition. Washington (DC): American Psychological Association, 2001.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: PsycINFO Permissions; American Psychological Association; 750 First Street NE; Washington DC 20002-4242; phone: 800-374-2722; e-mail: PsycINFO@APA.org; <http://www.apa.org>

QMR96 Quick Medical Reference (QMR). San Bruno (CA): First Databank, 1997.

Contact: <http://www.firstdatabank.com>

RAM99 Randolph A. Miller Clinically Related Concepts. Nashville (TN): Vanderbilt University, 1999.

Contact: Randy Miller, M.D; Department of Biomedical Informatics, Vanderbilt University; 436 Eskind Biomedical Library; 2209 Garland Ave; Nashville, TN 37232-8340; e-mail: randolph.a.miller@vanderbilt.edu

RCD99, RCDAE_1999, RCDSA_1999, RCDSY_1999

Clinical Terms Version 3 (Read Codes) (Q199). England: National Health Service Centre for Coding and Classification, March 1999.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: NHS Information Authority, Aqueous II; Aston Cross, Rocky Lane, Birmingham B6 5RQ, UK; phone: 0121 333 0420; e-mail: helpdesk3@nhsia.nhs.uk; <http://www.nhsia.nhs.uk/terms/pages/default.asp>

RXNORM_04AB RxNorm work done by the National Library of Medicine (NLM), Bethesda (MD), National Library of Medicine, META2004AB release, July 2004.

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 <http://www.nlm.nih.gov/research/umls/rxnorm/index.html>

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

SCTSPA_2003_10_31 SNOMED Clinical Terms, Spanish Language Edition, 2003_10_31.

Northfield (IL): College of American Pathologists, Oct. 31, 2003.

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Contact: SNOMED International, a division of the College of American Pathologists, 325 Waukegan Road, Northfield, IL 60093-2750; fax: (847) 832-8335; <http://www.snomed.org>

SNM2 Systematized Nomenclature of Medicine. 2nd ed. Skokie (IL: College of American Pathologists, 1979. SNOMED update, 1982. Skokie (IL): College of American Pathologists, 1982.

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Contact: See entry for SNOMED CT©.

SNMI 98 Systematized Nomenclature of Medicine: SNOMED International. Version 3.5. Northfield (IL): College of American Pathologists; Schaumburg (IL): American Veterinary Medical Association, 1998.

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Contact: See entry for SNOMED CT©.

SNOMEDCT_2004_01_31. SNOMED Clinical Terms. Northfield (IL): College of American Pathologists, Jan. 31, 2004.

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Contact: SNOMED International, a division of the College of American Pathologists, 325 Waukegan Road, Northfield, IL 60093-2750; fax: (847) 832-8335; <http://www.snomed.org>

SPN2003 Standard Product Nomenclature (SPN). Rockville (MD): U.S. Food and Drug Administration, 2003.

Contact: <http://www.fda.gov/cdrh/prodcode.html>

SRC Entries for UMLS Metathesaurus Source Terminologies. Bethesda (MD): National Library of Medicine.

Contact: Jan Willis, UMLS Support, National Library of Medicine, Bethesda MD; e-mail: jwillis@nlm.nih.gov

ULT93 Bell, Douglas. Ultrasound Structured Attribute Reporting (UltraSTAR). Boston (MA): Brigham & Womens Hospital, 1993.

[CATEGORY 3 RESTRICTIONS APPLY](#)

Contact: Peter Doubilet, M.D., Ph.D., Brigham & Womens Hospital; e-mail: pdoubilet@partners.org

UMD2004 Universal Medical Device Nomenclature System: Product Category Thesaurus. Plymouth Meeting (PA): ECRI, 2004.

[CATEGORY 1 RESTRICTIONS APPLY](#)

Contact: Elizabeth Richardson, Director of Database and Nomenclature Systems, ECRI; e-mail: erichard@ecri.org; <http://www.ecri.org>

UWDA173 University of Washington Digital Anatomist Symbolic Knowledge Base. Rosse Cornelius. Structural Informatics Group, Department of Biological Structure, University of Washington, Seattle, Version 1.7.3, March 2003.

Contact: Jose Mejino, M.D.; e-mail: onard@biostr.washington.edu; <http://sig.biostr.washington.edu/projects/da/>

VANDF03 U.S. Department of Veterans Affairs, Veterans Health Administration National Drug File. Department of Veterans Affairs, Washington, DC. Release Date: March 13, 2003.

*NOTE: Now a CATEGORY 0

Contact: Steven Brown; CPEP Office; 1310 24th Avenue S; Nashville, TN 37215; e-mail: Steven.Brown@msd.va.gov

WHO97 WHO Adverse Drug Reaction Terminology (WHOART). Uppsala (Sweden): WHO Collaborating Centre for International Drug Monitoring, 1997.

[CATEGORY 2 RESTRICTIONS APPLY](#)

The Metathesaurus includes translations of WHO97 in French (WHOFRE_1997), German (WHOGER_1997), Portuguese (WHOPOR_1997), and Spanish (WHOSPA_1997).

Contact: WHO Collaborating Centre for International Drug Monitoring, Stora Target 3, S-753 20 Uppsala, Sweden; fax: 18-656080

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