



Unified Medical Language System® (UMLS®)

SPECIALIST LEXICON

Metathesaurus®

SEMANTIC NETWORK

www.nlm.nih.gov/research/umls

The UMLS is a collection of tools and resources that enable **systems** to link biomedical information from different sources, such as patient record systems, bibliographic databases, factual databases, decision support systems and other biomedical and health applications.

The UMLS also improves the ability of computer programs to understand biomedical meaning in user inquiries, and to use that understanding to retrieve and integrate relevant information for users.

The UMLS consists of data files and programs organized into three Knowledge Sources. Those sources are:

METATHESAURUS — Contains information about biomedical concepts and terms from over 160 controlled vocabularies and classification, including standards for clinical documentation, diagnoses, lab test reporting, and drugs. Users can customize Metathesaurus content to meet their needs by using the "MetamorphoSys" software package.

SEMANTIC NETWORK —●— Defines broad subject categories to which Metathesaurus concepts are assigned, as well as the useful relationships that exist between categories.

SPECIALIST LEXICON —●— Includes commonly occurring English and biomedical words, as well as information necessary for natural language processing, such as word form, structure, and spelling variants. Accompanied by a suite of lexical programs.

Together these Knowledge Sources and programs provide useful tools to overcome differences in biomedical terminologies that often create barriers to effective retrieval and integration of biomedical information.

UMLS Terminology Services (uts.nlm.nih.gov) provides Web and API access to the component parts of the UMLS as well as the ability to download UMLS files and programs for local use.

The UMLS does not include end-user applications beyond the UMLS Terminology Services and MetamorphoSys.

License Agreement — The UMLS is free of charge. Users complete a license agreement that protects the rights of the providers of component vocabularies. A separate license agreement is necessary with some sources.

ADDITIONAL INFORMATION

—●— umlsinfo.nlm.nih.gov

- Fact Sheets
- Online Documentation
- License Agreement
- UMLS Terminology Services
- Other UMLS Information, e.g., FAQs, Learning Resources, UMLS Users Listserv

—●— custserv@nlm.nih.gov — NLM's e-mail address for questions on the UMLS and all other NLM resources.



U.S. National Library of Medicine