The Development of a Controlled Vocabulary for Osteopathic Medicine

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THE DEVELOPMENT OF A CONTROLLED VOCABULARY FOR OSTEOPATHIC MEDICINE

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American Association of Colleges of Osteopathic Medicine (AACOM)

The Thesaurus Project
In 2002, with financial support from the AOA and collaboration from the AACOM, the Authorized Osteopathic Thesaurus Project at UNTHSC was established to develop an official thesaurus for Osteopathic Medicine. The terms were initially derived from the literature, as represented in the OSTMED®, subject headings, and from the Glossary of Osteopathic Terminology. The AACOM ECOP Glossary Subcommittee then defined these terms and determined their interrelationships. The Thesaurus Editor, assisted by an Advisory Committee of senior librarians and the OSTMED® project manager, then clarified, compiled, and organized these terms into a structured thesaurus format providing the preferred form of each term, its definition, references to broader, narrower, or related terms, and any synonyms.

OSTMED®
(The Osteopathic Literature Database)

OSTMED® is a bibliographic index to the osteopathic medical literature sponsored by the American Association of Colleges of Osteopathic Medicine and the American Osteopathic Association. The thesaurus serves the osteopathic medical from the OSTMED® database. Updated quarterly. Last updated: 31 January 2003

SNOmed CT®
(Systematized Nomenclature of Medicine - Clinical Terms)

Produced by the College of American Pathologists, SNOMED CT® is the most comprehensive clinical terminology available containing terms for more than 300,000 health care concepts. It has been designated as one of the standards for use in health information exchange and interoperability in the electronic health record (EHR). A complete, peer-reviewed Metathesaurus® establishes new relationships between terms from different source vocabularies. The Metathesaurus vocabulary can be used to interpret user inquiries, align standards, and to establish standards and relationships between SNOMED CT® and other source terms, as well as other clinical and non-clinical medical terms.

UMLS®
(Unified Medical Language System)

UMLS® is a NLM bibliographic database that references journal articles in life sciences and medicine.

Metathesaurus®

The Metathesaurus contains information about biomedical concepts and terms from many controlled vocabularies and classifications used in patient records, administrative health care, bibliographic and full-text databases and expert systems. It preserves the names, meanings, hierarchical context, attributes, and semantic relationships present in the source vocabularies. The Metathesaurus vocabulary can be used to interpret user inquiries, align standards, and to establish standards and relationships between SNOMED CT® and other source terms, as well as other clinical and non-clinical medical terms.

Benefits
With the osteopathic terminology represented in national sources of standardized medical terminology, osteopathic physicians, educators, and researchers will now be in a position to use its unique vocabulary to:

- search the osteopathic literature with precision
- develop standardized core clinical osteopathic curricula
- analyze and evaluate osteopathic educational programs
- develop and index test items for standardized examinations
- develop and implement an osteopathic electronic medical record
- collect and analyze osteopathic patient data
- incorporate osteopathic practice in office and reimbursement software
- communicate osteopathic education, practice and research findings clearly

However, in order to realize these benefits, the Authorized Osteopathic Thesaurus must continue to be maintained. Annual revisions and additions need to reflect the evolving nature of modern osteopathic terminology.

National Library of Medicine (NLM)

MEDLINE (Medical Literature, Analysis, and Retrieval System)
Medline is NLM's controlled vocabulary thesaurus. It uses indexing terms that reduce the large volume of biomedical literature to its core.

MeSH (Medical Subject Headings)

The Authorized Osteopathic Thesaurus
By December 2003, the first edition of the Authorized Osteopathic Thesaurus was completed, containing 413 terms, 240 of which were unique main entry terms. In January 2004, an electronic file containing the Thesaurus was submitted to the National Library of Medicine for inclusion in the Metathesaurus®. Subsequently, the Thesaurus was also submitted for addition to SNOMED®, the Systematized Nomenclature of Medicine. These large databases have been declared standards for use in developing the national Electronic Medical Record (EMR) and other systems for the electronic exchange of clinical health information.

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Why a Controlled Vocabulary?
As professions develop their unique terminology, they realize the need to maintain control, currency, clarity, and consistency through a controlled vocabulary maintained in a structured thesaurus format. Indeed, Osteopathic Medicine has developed a unique terminology to transmit specialized professional knowledge to its physicians, students, patients, and public. However, this terminology is often idiosyncratic, inconsistent, imprecise, unstructured, and unrecorded. This can lead to confusion and misunderstandings in the teaching and communication of key concepts in osteopathic philosophy, principles, and practice.

Why now?
A confluence of recent developments accelerated the need to develop a controlled vocabulary:

- The rise of national and international collaborative clinical programs requiring accurate and consistent terminology for analyzing and manipulating large data files have raised the demand for a controlled osteopathic vocabulary.
- The creation of OSTMED®, which required the authors to help develop a controlled vocabulary of osteopathic subject headings to index the osteopathic literature.
- The availability of the AACOM Educational Council of Osteopathic Principles Glossary Subcommittee, which could provide osteopathic physicians expert in the osteopathic terminology by producing the Glossary of Osteopathic Terminology.