



THE DEVELOPMENT OF A CONTROLLED VOCABULARY FOR OSTEOPATHIC MEDICINE

Craig S. Elam, MLS, AHIP, Associate Director, Technical Services
Kathy D. Broyles, MLS, AHIP, Public Services Librarian, Thesaurus Editor
Gibson D. Lewis Health Science Library
University of North Texas Health Science Center

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.

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 LiteratureDatabase)

A bibliographic index to the osteopathic medical literature sponsored by the American Association of Colleges of Osteopathic Medicine and the American Osteopathic Association. The index covers the osteopathic literature from the 1890s to 2004. The index ceased being updated as of January 2004.

**American Association of
Colleges of Osteopathic Medicine
(AACOM)**

**University of North Texas
Health Science Center
Gibson D. Lewis Health
Science Library**

**Thesaurus Editor
and Library Advisory
Committee**

**Educational Council On
Osteopathic Principles
(ECOP)**

**ECOP
Glossary
Subcommittee**

**Authorized
Osteopathic
Thesaurus**

*Glossary of
Osteopathic
Terminology*

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 361,800 health care concepts. It has been designated as one of the standards for use in Federal Government systems for the electronic exchange of clinical health information.

UMLS®
(Unified Medical Language
System)

Metatheasaurus®

The Metathesaurus contains information about biomedical concepts and terms from many controlled vocabularies and classifications used in patient records, administrative health data, bibliographic and full-text databases and expert systems. It preserves the names, meanings, hierarchical contexts, attributes, and inter-term relationships present in its source vocabularies; adds certain basic information to each concept; and establishes new relationships between terms from different source vocabularies. The Metathesaurus supplies information that computer programs can use to interpret user inquiries, interact with users to refine their questions, identify which databases contain information relevant to particular inquiries, and convert the users' terms into the vocabulary used by relevant information sources.

The Authorized Osteopathic Thesaurus

By December 2003, the first edition of the Authorized Osteopathic Thesaurus was completed, containing 413 terms, 204 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.

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 bibliographic database that references journal articles in life sciences with a concentration on biomedicine.

MeSH
(Medical Subject
Headings)

MeSH is NLM's controlled vocabulary thesaurus. NLM uses MeSH to index the journals that are included in MEDLINE.

Acknowledgments

Project sponsored by the American Association of Colleges of Osteopathic Medicine with financial support from The American Osteopathic Association