Principles of Subject Indexing

The purpose of indexing with controlled vocabulary is:

• to facilitate search retrieval by eliminating (or accounting for) the use of variant terminology for the same concept.

The philosophy of MEDLINE indexing is that:

- The content and format of each item are fully and adequately described,
- The most specific vocabulary terms are used,
- The indexer's job is only to index, not to interpret, evaluate or diagnose.

Indexers use the following steps to determine the subject content of an article:

- 1. Read carefully and understand the title.
- 2. Read the introduction, looking for the purpose of the article.
- 3. Scan the body of the article, focus on the Materials & Methods section and the Results section.
- 4. Note section headings, paragraph headings; italics, boldface; charts, plates, tables, illustrations; laboratory methods, case reports, etc.
- 5. Select for indexing only those subjects actually discussed as opposed to those subjects merely mentioned.
- 6. Read the summary or conclusions of the author to determine whether the stated purpose was achieved. Do not index implications or suggested future applications. Do not index conclusive statements not supported by the text.
- 7. Scan the abstract for items missed, verifying that the text supports indexing these concepts.
- 8. Scan the author's own indexing or the keywords supplied by the publisher to see whether the concepts chosen are actually discussed in the text.
- 9. Scan the bibliographic references supplied by the author for clues and further corroboration.

NLM's MEDLINE indexers use the MeSH Browser, an online vocabulary look-up aid with virtually complete MeSH records, to find the term that best describes the concept to be indexed. They view the full record: scope note, annotation, See Also terms, etc., for hints on indexing.

Indexers use the most specific term available to describe a concept.

Example:

"The liver disease, chronic hepatitis B" is indexed as:

Hepatitis B, Chronic

rather than Liver Diseases or Hepatitis or Hepatitis B

Indexers use more than one heading if a single heading does not cover the concept (see Coordination).

Example:

"Mucinous adenocarcinoma of the ovary" is indexed as:

Adenocarcinoma, Mucinous Ovarian Neoplasms

If an exact heading does not exist, indexers use the MeSH Browser and the hierarchy to find the most specific heading available.

Example:

"Cranial radiation therapy" is indexed as

Cranial Irradiation

which is under the Radiotherapy branch of the MeSH tree

Major Topics

- Asterisks on MeSH headings and subheadings (e.g., Wound Healing/radiation effects*)
 designate that they are the major topics of the article, usually obtained from the title
 and/or statement of purpose
- Non-major (non-asterisked) headings and subheadings are usually additional topics substantively discussed within the article, terms added to qualify a major topic, or check tags. Check tags are never major topics.
- The only indexed MEDLINE citations without an asterisked heading are some biographies in which the subject's name may be considered the only major point.
- Supplementary concept headings cannot be asterisked or carry subheadings. However, they are mapped to a MeSH heading that is automatically added to the citation. The mapped MeSH heading can carry those attributes.

Gene Links

Citations for articles in which the function of one or more genes and/or proteins is a major topic are linked to entries in the NCBI Gene database.

Coordination

Most concepts cannot be adequately described with a single MeSH term. Coordination is the use of a combination of the appropriate MeSH headings, subheadings, and check tags to index a concept as specifically as possible.

Coordination can be accomplished by:

- Using a subheading to describe a specific aspect of a MeSH heading
- Using two MeSH headings
- Coordinating subheadings on two or more headings
- Coordinating a major (asterisked) MeSH heading with a non-major (non-asterisked) MeSH heading that further describes the concept
- Coordinating a heading with one or more check tags
- Indexing a "pre-coordinated" MeSH heading which combines two concepts into one

The following pages show examples of each type of coordination.

Using a subheading to describe a specific aspect of a MeSH heading:

Example:

Radiographic imaging of a lung tumor" is indexed as:

Lung Neoplasms/radiography