Standard Terminology Helps Advance EHR

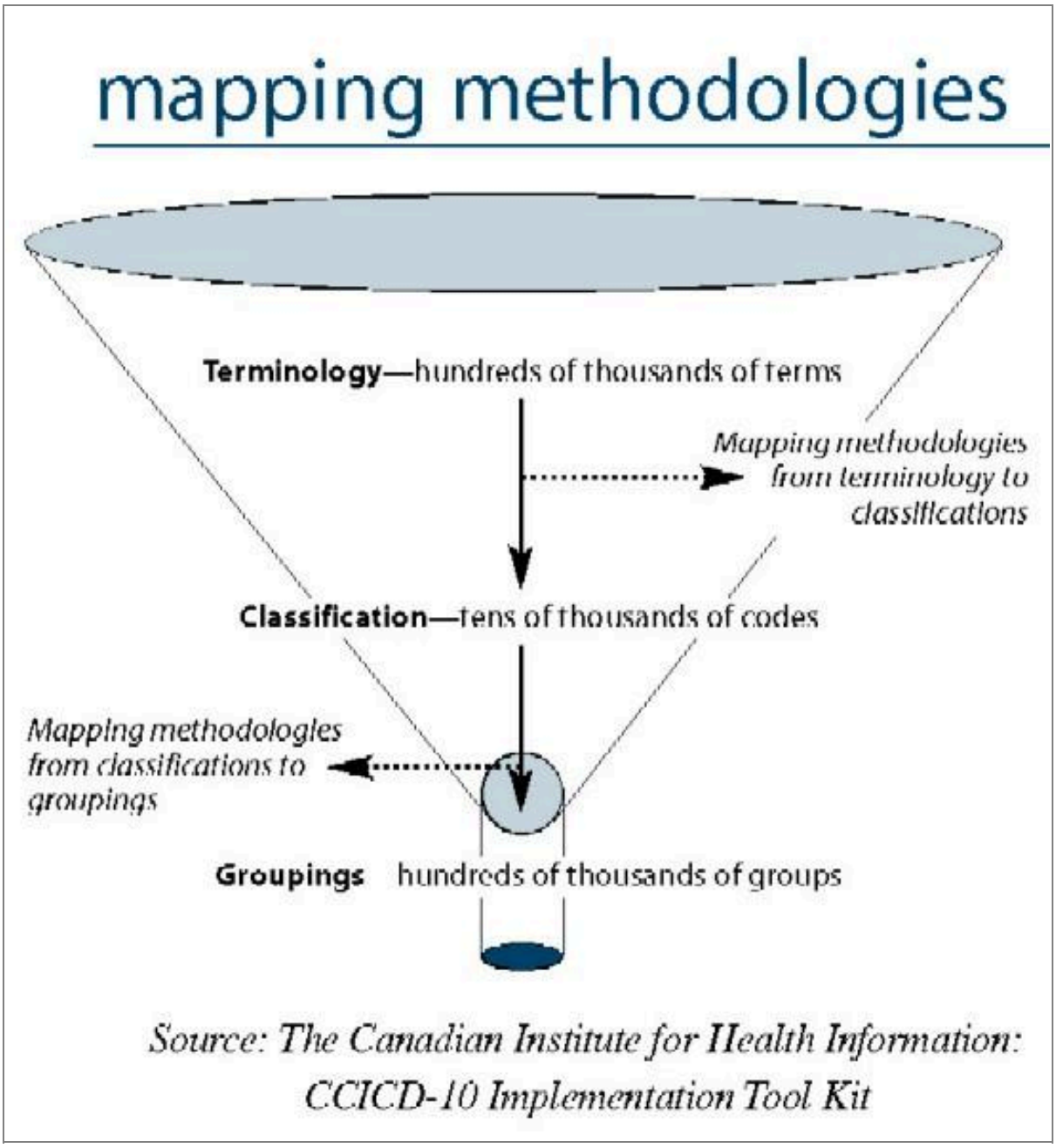
by Michelle Dougherty, RHIA

On July 1, 2003, Secretary of the Department of Health and Human Services Tommy Thompson announced a new agreement between the National Library of Medicine (NLM) and the College of American Pathologists (CAP) to license SNOMED-CT. This five-year agreement is seen as a significant advancement for the electronic health record (EHR) in the US—making a standard terminology readily available to healthcare organizations.

This article will explain SNOMED's role in healthcare classification systems, terminologies, and groupings, and its role in EHR development.

The Road to Standardization

The Canadian Institute for Health Information published an overview of terminology, classification systems, and groupings.[1] "Mapping Methodologies," and "Terminology, Classification, Grouping Explained," help clarify the differences among these terms.



The ability of SNOMED to standardize clinical terminology has become the cornerstone of EHR development. In recent years, numerous studies and reports identified the lack of standardization of clinical terms/vocabularies as a critical barrier to an EHR. The studies and reports—from organizations such as the Institute of Medicine, the National Committee on Vital and Health Statistics, the National Quality Forum, the eHealth Initiative, and Connecting for Health—urged the US government to develop a national standard to spearhead EHR development. As a result, the NLM entered into a five-year agreement to license SNOMED CT in the US.

A Robust Clinical Terminology

SNOMED stands for the Systematized Nomenclature of Medicine and is a division of CAP. Initially, CAP set out to develop a scientifically validated reference terminology that allowed professionals to share clinical information internationally, particularly in the laboratory setting. Today, SNOMED has been expanded to be a robust clinical terminology that can be used for capturing clinical content and documentation in the EHR.

To understand some basic principles of SNOMED, it may be best to compare it to ICD and how HIM professionals have traditionally used it. With ICD, you can pick up a book and determine a code. This is not done with SNOMED. SNOMED codes will be embedded in the EHR and work behind the scenes to code the language used in the health record. For example,

a hospital stay for the birth of a baby is represented by a couple of ICD-9-CM codes. In contrast, there would be SNOMED codes for the finite detail of the hospital stay. An Apgar Score, a small subset of clinical information collected during a stay, would be represented by separate SNOMED codes for the cardiac score, respiratory score, muscle tone, reflex response, and color.

A common use for ICD codes is the payment process. Consider this scenario: when a claim is submitted to a payer, an ICD-9-CM code is reported to represent a group of similar diseases or conditions. If you tried to send a SNOMED code in the same manner, the result would be sending the entire medical record for a stay with all of its clinical detail.

We are in interesting times as HIM professionals—standardization of the EHR will continue, new nomenclatures will surface, and new mapping processes will be required.

Terminology, Classification, Grouping Explained

Purpose	Primary use	Examples	Number of Terms	Structure
Terminology: A set of terms that describe health concepts	Recording and retrieving clinical information	SNOMED	More than 100,000 terms	Natural clinical language
Classification/Encoding: A system that groups together similar diseases and procedures and organizes related entities for easy retrieval	Statistical analysis: in the US, used for claim adjudication	ICD-9-CM ICD-10 ICD-10-PCS	ICD-9-CM has approximately 10,000 codes ICD-10 has 16,000 codes at the three-and four-character level	Standardized codes with defined statistical meaning
Grouping: Uses rules to group patients for resource utilization and funding purposes	Resource management and funding	Case Mix Groups (DRGs, CMGs, etc.)	Varies depending on system	Categorizes groups of patients with similar clinical and resource utilization characteristics

Source: The Canadian Institute for Health Information: CCICD-10 Implementation Tool Kit

To better understand the link between ICD and SNOMED, read about a recent project AHIMA undertook with CAP in "AHIMA Project Offers Insights into SNOMED, ICD-9-CM Mapping Process" published in the July/August 2003 Journal.[2]

Notes

1. "Terming, Encoding and Grouping: An Overview." Canadian Institute for Health Information. CCICD-10 Implementation Tool Kit. Available at www.cihi.com.

2. Brouch, Kathy. "AHIMA Project Offers Insights into SNOMED, ICD-9-CM Mapping Process." *Journal of AHIMA* 74, no. 7 (2003): 52-55.

References

Imel, Margo. "SNOMED Overview." AHIMA Convention Proceedings, September 23, 2002, in San Francisco, CA.

The National Library of Medicine. "Frequently Asked Questions." Available at www.nlm.nih.gov/research/umls/Snomed/snomed_faq.html.

For more information about SNOMED International, go to www.snomed.org.

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Article citation:
Dougherty, Michelle. "Standard Terminology Helps Advance EHR." *Journal of AHIMA* 74, no.10 (November 2003): 59-60.