Description of SNOMED CT Terminology

SNOMED International, a division of the College of American Pathologists (CAP), oversees the strategic direction and scientific maintenance of the Systematized Nomenclature of Medicine, better known as SNOMED®. Over the last 35 years, SNOMED has become recognized globally as a comprehensive, medical terminology created for the indexing of the electronic health record. In 1999, a single terminology known as SNOMED Clinical Terms (CT) was created from the merger of SNOMED and the United Kingdom's terminology. SNOMED CT is available in English, Spanish and German language editions, and is used in 40 countries around the world.

SNOMED CT contains over 364,400 health care concepts with unique meanings and formal logic-based definitions organized into hierarchies. As of January 2005, there were 984,000 synonyms to provide flexibility in expressing clinical concepts, and approximately 1.45 million relationships to describe the relationship between concepts. This rich and detailed structure allows a common understanding of concepts, and enables reliability and consistency of data retrieval. SNOMED enables retrieval of information for educational purposes, disease management or research, and performance of outcome analysis for quality improvement. Independent studies[1,2] have demonstrated SNOMED to be the most complete reference terminology in existence for the clinical environment.

In 2003, the National Committee on Vital and Health Statistics (NCVHS), an advisory body to the Department of Health and Human Services (DHHS) evaluated 38 health care terminologies and classification systems to support the electronic medical record. SNOMED CT was rated highest among all terminologies evaluated. In November 2003, the NCVHS reported[3]: "The breadth of content, sound terminology model, and widely recognized value of SNOMED CT qualify it as a general-purpose terminology for the exchange, aggregation, and analysis of patient medical information. The broad scope of SNOMED CT itself and the inclusion within it of concepts from other important healthcare terminologies allow SNOMED CT to encompass much of the patient medical record information domain."

At a Secretarial Summit on health information technology (IT) on May 6, 2004, DHHS Secretary Tommy G. Thompson announced that the English edition of SNOMED CT was available, free of charge, through the National Library of Medicine's (NLM) Unified Medical Language System® (UMLS®) Metathesaurus®. On January 29, 2004, the Consolidated Health Informatics (CHI) initiative (an effort to adopt health information interoperability standards for implementation in federal government) recommended and endorsed SNOMED CT as the terminology of choice for areas of anatomy, nursing, diagnosis and problems, and non-lab interventions and procedures.[4]

The DHHS Office of Health Information Technology, headed by David Brailer, M.D., Ph.D., notes the following:[5] "The fusion of medical language into a standard form is vital to the establishment of a health care information infrastructure. To resolve this, the Department of Health and Human Services signed an agreement in 2003 with the College of American Pathologists, seeking a unification of medical terminology. The result was a licensed standardized medical vocabulary available for free use in the United States. The College's **SNOMED** (Systematized Nomenclature of Medicine) creates a common clinical language that is a necessary element of a health care information infrastructure."

[1] Campbell JR, Carpenter P, Sneiderman C, Cohn S, Chute CG, Warren J. (1997) Phase II evaluation of clinical coding schemes: completeness, taxonomy, mapping, definitions, and clarity. <u>Journal of the American Medical Informatics Association; 4:</u>238-251.

[2] Chute C, Cohn S, Campbell K, Oliver D, Campbell JR. The content coverage of clinical classifications. <u>Journal of the American Medical Informatics Association. 1996;3:</u>224-33.

[3] Letter to Secretary Tommy Thompson from the National Committee on Vital and Health Statistics, November 5, 2003. www.snomed.org/about/documents/NCHVS_110503.pdf

[4] Department of Health and Human Services. Fact Sheet. Harnessing Information Technology to Improve Health Care. http://www.os.dhhs.gov/news/press/2004pres/20040427a.html, Accessed April 26, 2005

[5] Department of Health and Human Services. News Release: Secretary Thompson, Seeking Fastest Possible Results, Names First Health Information Technology Coordinator, HHS Also Announces Milestones in Developing Health IT. May 6, 2004. http://www.hhs.gov/news/press/2004pres/20040506.html, Accessed October 5, 2004