

SNOMED Clinical Terms and SNOMED Terminology Solutions

A brief overview
from www.capsts.org

Advancing Excellence

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Slide Objectives

- After viewing this presentation, you will have an overview of the following:
 - What is SNOMED Clinical Terms (SNOMED CT)
 - What is the need
 - Recent History & Milestones
 - What is SNOMED Terminology Solutions

What is SNOMED CT?

- Systematized Nomenclature of Medicine
Clinical Terms[®] (SNOMED CT)

What is SNOMED CT?

- A comprehensive clinical terminology covering diseases, clinical findings, and procedures
- Allows for a consistent way of indexing, storing, retrieving and aggregating clinical data across specialties and sites of care
- Helps to structure and computerize the medical record, reducing the variability in the way data is captured, encoded and used for clinical care of patients and research

Examples of Computer Applications Using SNOMED CT

- Electronic Medical Records
- Computerized Patient Order Entry such as e-prescribing or laboratory order entry
- Problem lists
- Disease templates
- Remote Intensive Care Unit Monitoring
- Laboratory Reporting
- Emergency Room Charting
- Cancer Reporting
- Therapeutic Decision Support
- Genetic Databases
- Radiology Image Bank
- Autopsy Databases
- Literature Encoding
- Clinical Research
- Global Benchmarking
- Surgical Procedure Masters

Basic Elements of SNOMED CT

- Concepts
- Hierarchies
- Relationships
- Descriptions

Concept

- The basic unit of SNOMED CT
- A SNOMED concept is a “Unit of meaning”, described by
 - a unique numeric code
 - a unique name (Fully Specified Name)
 - a set of terms (descriptions)
 - one “Preferred Term”
 - one or more Synonyms

Hierarchies

- 19 Upper level hierarchies
- Each hierarchy has sub-hierarchies

Relationships

- Is_a relationships: Relationships that link concepts within a hierarchy
- Attribute relationships (roles): Allow links between concepts across hierarchies

Descriptions

- Terms or names assigned to a concept
- Each concept has:
 - Fully Specified Name (FSN)
 - Preferred Term (display term)
- Concept may have:
 - One or more synonyms

What is the need for SNOMED CT?

The Current Situation: Paper Records Persist



Current State of Healthcare

- Patients are treated in many settings across the continuum of healthcare
- Many healthcare facilities have limitations on which aspects of information they can electronically exchange within their facility or with other facilities
- Inability to access electronic patient record information is a barrier to delivering the best patient care

The Problem in Health Care is Unique

- Information Technology has funding constraints
- Health care is complex and evolving
- Paper-based records are prevalent
- Different ways of expressing the same thing...

A myocardial infarction is also heart attack....

Variations in Expression

Myocardial infarction
MI-Myocardial infarction
Infarction of heart

Myocardial infarct
Heart attack
Cardiac infarction

...To a computer these are all different

How can they be tracked, analyzed
and reported?

Why we need standardized terminology?

- Summarizes medical information
- Allows symbolic manipulation of data
 - Selective retrieval for aggregation and analysis (e.g. “How many new cases of breast cancer have we seen this month?” “Is this person’s blood sugar improving?”)
 - Automated reasoning (i.e. clinical decision support)

SNOMED Milestones

- 1965: Systematized Nomenclature of Pathology
- 1974: SNOMED
- 1979: SNOMED II
- 1993: SNOMED Version 3.0
- 1998: SNOMED Version 3.5
- 2000: SNOMED Reference Terminology
- 2002: SNOMED CT (SNOMED RT + CTV3)
- 2002: SNOMED CT Spanish Edition
- 2003: SNOMED CT German Edition

Business Milestones

- 1999: SNOMED International signs agreement with United Kingdom's National Health Service
- 2003: Agreement with National Library of Medicine
 - Free access to English and Spanish language editions of SNOMED CT and all version updates through the NLM's UMLS Metathesaurus (a knowledge source containing biomedical concepts and terms from many controlled vocabularies and classifications)
- 2007: International Health Terminology Standards Development Organization acquires SNOMED CT from College of American Pathologists (CAP)
- 2007: SNOMED Terminology Solutions, a CAP division, offers SNOMED CT education/consulting

Available from the NLM

- Core tables:
 - Concepts Table
 - Descriptions Table
 - Relationships Table
- Component History Table
- ICD-9 CM mapping
- US English, Spanish editions

SNOMED Terminology Solutions

- Education
 - Web teleconferences, offered several times/month
 - Classroom sessions, offered at capSTS headquarters and other venues
 - Tailored education programs, dates/times/locations to meet your needs

SNOMED Terminology Solutions

- Consulting services, examples
 - Implementing SNOMED CT into systems
 - Mapping local codes sets to SNOMED CT
 - Extending content (guidance on extensions)
 - Content validation

Learn about SNOMED CT with **SNOMED Terminology Solutions**

- Contact your SNOMED Terminology Solutions Account Manager
- snomedolutions@snomed.org
- www.capsts.org
- 800-323-4040 ext. 7700 (U.S. and Canada) or 847-832-7700

THANK YOU!

For more information, contact:

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