

# The Need for a Global Language – SNOMED CT Introduction

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**Abstract** SNOMED CT is the most comprehensive, multilingual clinical healthcare terminology in the world. It is a resource with comprehensive, scientifically validated clinical content. SNOMED CT enables consistent, processable representation of clinical content in electronic health records.

When implemented in software applications, SNOMED CT can be used to represent clinically relevant information consistently, reliably and comprehensively as an integral part of producing electronic health information. SNOMED CT supports the development of comprehensive high-quality clinical content in health records. It provides a standardized way to represent clinical phrases captured by the healthcare professional and enables automatic interpretation of these. SNOMED CT is a clinically validated, semantically rich, controlled vocabulary that facilitates evolutionary growth in expressivity to meet emerging requirements. SNOMED CT based clinical information benefits individual patients and clinicians as well as populations and it supports evidence based care.

The use of an Electronic Health Record (EHR) improves communication and increases the availability of relevant information. IHTSDO works with other standards organisations to ensure interoperability and a key area has been the work with ICN to enable the use of ICNP and SNOMED CT by the nursing profession internationally.

**Keywords:** SNOMED CT, Nursing, ICN, Interoperability, Terminology

## 1. Tutorial Organization

The proposed tutorial speakers are:

- Jane Millar, IHTSDO, [jmi@ihtsdo.org](mailto:jmi@ihtsdo.org)

Jane is IHTSDO's Collaboration Lead. Her role focuses on ensuring that SNOMED CT can operate with other standards in the EHR and that healthcare professionals have the relevant language that they need. Prior to joining IHTSDO, she held the position of Head of Information Standard Services in the National Health Service in England, a role she held from 2001. As a Physiotherapist, Jane started work in terminology development in the UK in 1993, working on the UK Clinical Terms project. Working on this multidisciplinary project, she recognized early the need to collaborate with other professionals in order to reach a shared understanding of the language used for the EHR.

- Ian Green, IHTSDO, [igr@ihtsdo.org](mailto:igr@ihtsdo.org)

Ian is the IHTSDO's Business Service Executive. He has a clinical background in nursing, specialising in cardiac nursing and Advanced Life Support. He has worked in the English NHS for 26 years as a nurse, healthcare manager and then at the UK Terminology Centre with Read Codes and SNOMED CT. He has a degree in Nursing practice and a Master's degree in Healthcare Quality Management. He has been involved with the IHTSDO since its origination in 2007, serving as a member of the Quality Committee and on a number of other IHTSDO groups. As IHTSDO's Business Service Executive, Ian provides management across SNOMED CT content, mapping, education and implementation lines of business.

## 2. Tutorial Description

IHTSDO will provide a SNOMED CT tutorial during NI2016 with the purpose of:

- a. Increasing knowledge of SNOMED CT and its applicability for healthcare professionals,
- b. Outlining how SNOMED CT contributes to the EHR and the benefits for those caring for individuals.
- c. Provides details of the work with ICN to align SNOMED CT and ICNP and practically what this means for nursing documentation and the shared EHR

IHTSDO, as the owner of SNOMED CT, will manage the tutorial. The tutorial will include:

### 2.1. *What is SNOMED CT and what is it for?*

The increasing number of EHRs implemented in countries offers opportunities for improving healthcare by better using clinical data. This does pose challenges on the way in which data is collected and stored in these EHRs.

This part of the tutorial will begin with addressing the reasons and clinical benefits for standardization of EHR content. It will go on to explain the role of information models and terminological systems such as LOINC, ICD-10, and SNOMED CT for standardization of the structure and the content of the EHR. It will then focus on SNOMED CT and its concept-based nature, explicitly separating concepts from terms. We will elaborate on its hierarchies, and the way in which definitions of concept are provided, including an explanation of the reasoning capabilities provided by these definitions. Finally, we will address steps to be taken to use SNOMED CT in practice.

### 2.2. *SNOMED CT in Nursing*

We will discuss in detail the work undertaken to develop nursing content in SNOMED CT as part of the collaboration between IHTSDO and ICN. We will describe how the work on Nursing Diagnoses and Interventions has influenced the development of SNOMED CT content, as well as aiming to present a number of practical implementations related to nursing documentation.

### *2.3. IHTSDO as an organization and its interaction with other SDOs*

This part of the tutorial presents ways in which the IHTSDO (the organisation owning, distributing and maintaining SNOMED CT) works with other organisations to support interoperability. There are a number of collaboration agreements between IHTSDO and other SDOs, and profile organisations such as WHO, WONCA, ICN, HL7, LOINC and these will be described at a high level. We will provide information on how to obtain SNOMED CT as well as opportunities to engage with the IHTSDO and take part in the work undertaken within the community focusing on information to support patient care delivery.