



# IHTSDO Implementation Action Plan

Implementation and Innovation Committee

Date 20100418

Version 1.01

## Amendment History

Version	Date	Editor	Comments
0.1	20100303	Tom Seabury	First draft for officers' style review
0.2	20100316	Tom Seabury	First draft for committee review. Changes associated with points in committee minutes, committee review of presentation slides, officer input detailed in a covering note relating to section 5.5
0.3	20100323	Tom Seabury	Changes in response to review comments received to v0.02 from I&I Committee members
0.4	20100324	Tom Seabury	Changes in response to review comments received to v0.03 from officers, and a proof reading.
1.0	20100329	Tom Seabury	Final sentence added to section 4.4 First release after approval by I&I Committee 29/03/2010
1.01	20100418	Jennifer Zelmer	Typographical and grammatical issues updated

## Review Timetable

Review date	Responsible owner	Comments
20100319	I&I Committee members CEO - Jennifer Zelmer	For review at V0,02 prior to presentation to the Management Board
20100322	I&I Committee members	Following incorporation of changes from review of 20100319
20100329	I&I Committee members	Review of 0.04 for approval

© International Health Terminology Standards Development Organisation 2009. All rights reserved.

SNOMED CT® was originally created by the College of American Pathologists.

This document forms part of the International Release of SNOMED CT® distributed by the International Health Terminology Standards Development Organisation (IHTSDO), and is subject to the IHTSDO's SNOMED CT® Affiliate Licence. Details of the SNOMED CT® Affiliate Licence may be found at <http://www.ihtsdo.org/our-standards/licensing/>.

No part of this document may be reproduced or transmitted in any form or by any means, or stored in any kind of retrieval system, except by an Affiliate of the IHTSDO in accordance with the SNOMED CT® Affiliate Licence. Any modification of this document (including without limitation the removal or modification of this notice) is prohibited without the express written permission of the IHTSDO.

Any copy of this document that is not obtained directly from the IHTSDO [or a Member of the IHTSDO] is not controlled by the IHTSDO, and may have been modified and may be out of date. Any recipient of this document who has received it by other means is encouraged to obtain a copy directly from the IHTSDO [or a Member of the IHTSDO. Details of the Members of the IHTSDO may be found at <http://www.ihtsdo.org/members/>].

# Table of Contents

1 Introduction.....	4
2 The three priority uses for SNOMED CT .....	4
2.1 Broad categories of Implementation .....	5
3 Priorities for Action to 2012, Roles and Resources .....	6
Gather evidence of successful benefits realization, including researching associated factors .....	7
3.1 Weighting.....	7
3.2 IHTSDO's Roles.....	7
3.3 Primary target groups for IHTSDO implementation activity.....	7
4 Elaboration on the Priorities for Action .....	8
4.1 Better understand where and how SNOMED CT is used .....	8
4.2 Develop and share implementation guidance.....	8
4.3 Increase education/awareness of the use of SNOMED CT .....	9
4.4 Develop mechanisms to share tools that support implementation .....	9
4.5 Engage users of SNOMED CT in the work of the IHTSDO.....	9
4.6 Gather evidence of successful benefits realization, including researching associated factors .....	9
5 Guiding Principles .....	10
5.1 IHTSDO works in partnership with key players from around the world .....	10
5.2 Implementation focus is embedded in IHTSDO's strategic objectives and directions for the next 3-5 years.....	10
5.3 Focus on catalyzing and supporting implementation on the 3 priority use cases (Section 2) .....	10
5.4 IHTSDO should encourage "fitness for purpose" from any implementation effort .....	11
5.5 Planning to address the needs of both future but also existing implementations .....	11
6 Detailed Planning step .....	12

# 1 Introduction

The IHTSDO agreed strategic focus to 2015, as adopted by the Management Board and General Assembly, is to:

***'Broaden and deepen implementation of SNOMED CT, within and across health information systems, countries, and professions'***

This Plan reflects the position taken by the Implementation and Innovation Committee in March 2010 and is in support of the strategic focus. Activity that has informed the plan includes the consultation with implementers which took place in 2009.

This plan adds detail to the outline above by identifying the initiatives to be completed by 2012, along with relative priorities, resource allocation, and responsibilities. It also supports harmonisation of these with the strategic initiatives from the three other IHTSDO committees in the form of the planned:

- Product/Content Roadmap;
- Technology Roadmap; and
- Quality Assurance Action Plan.

As well as Priorities for Action to 2012, this plan sets out the Principles used to plan implementation-focused work of the Association. These are intended to inform detailed planning through to 2015.

This plan is drafted and owned by the Implementation and Innovation (I&I) Committee, for submission to the IHTSDO Management Board and General Assembly (GA) as a proposal. Implementation as a strategic focus applies not only to the work of the I&I Committee, but to the work of the Association as a whole. Consequently, when endorsed by the GA and the Management Board, this plan should inform and guide work across the Association.

Working interpretation of some nebulous concepts, such as 'implementation' (Section 2.1), is included here. Detailed planning is, however, not part of this document. Instead, outlines for each of the Priorities for Action are presented (Section 4).

## 2 The three priority uses for SNOMED CT

The following three general uses for SNOMED CT set the focus for planning implementation initiatives:

- Facilitate the accurate collection and sharing of clinical, public health, and related health information through improving the semantic representation and interoperability of health records (including personal health records and those created by health professionals).

- Contribute to improved delivery of care by the clinical and social care professions through supporting efficient, effective, and safe decision support.
- Enable ‘health system’ or ‘secondary’ uses of data held in individuals’ health records. The range of secondary uses includes, but is not limited to: links with classifications and other tools that support quality improvement activities at the health system level, clinical research, and activity reporting.

(Note: IHTSDO advocates for any ‘health system’ or ‘secondary’ uses to take place in a privacy-sensitive manner that is fully conformant with local legislation and regulations)

These three priority use cases do not exclude other uses, but they indicate the three most pressing priorities. Other use cases beyond these three listed include: literature indexing and regulatory functions.

For any of the priority uses, a working definition of ‘implementation’ may be sought, but a universally accepted definition of ‘implementation’ in the context of SNOMED CT does not exist. The following section seeks to address that to a limited extent.

## 2.1 Broad categories of Implementation

The practical approach within this plan is to infer a partial definition of ‘implementation’ from the Committee’s Terms of Reference and from parts of the plan itself.

Three of the Committee’s Terms of Reference are particularly pertinent to defining “implementation” and thereby articulating the boundaries of the Committee’s mandate. These are:

- *‘Provide advice and assurance that the IHTSDO standards and recommendations are fit for purpose and meet the needs of the broader community of interest’*
- *‘Advise on design issues and impacts, including developing proof of concept demonstrations’*

This implies examining the likely implementation impacts of critical design issues via the use of demonstrations.

- *‘Advise on implementation strategies including consideration of normative examples and compliance and conformance issues’*

The general implementation areas listed below are intended merely as a candidate set against which a future, more complete definition is likely to map. The list is in no any way a surrogate for a formal definition of ‘implementation’. These are more technically distinct than the broad use cases set out in Section 2.

General implementation categories:

- Re-coding of existing coded clinical or research records via mapping or a similar method
- Embedding SNOMED CT into the clinical record creation interface, such as in Electronic Health Record systems
- Being associated to knowledge artefacts, e.g. for decision support
- Use in interoperability specifications for clinical messages
- Use in information model instances
- Use as part of report definitions or for data filters
- Use in service description and service discovery catalogues

Combinations from the categories above are likely to be encountered. The technical depth of any implementation is a further dimension, but one which is not detailed here.

### 3 Priorities for Action to 2012, Roles and Resources

The following priorities have been agreed by the Implementation and Innovation Committee as the areas for action to 2012. A relative weighting has been applied between them, as set out in the “Weighting” column in Table 1 below

These priorities are aligned with the Guiding Principles set out in Section 5, and they are described in outline in Section 4.

**Table 1 Priorities for Action to 2012**

<b>Priority for action (to 2012)</b>	<b>Weighting (in the ratio 3:2:1)</b>	<b>Resource Allocation</b>	<b>IHTSDO Role<sup>1</sup></b>
Better understand where and how SNOMED CT is used Currently & likely roll-out in next 3-5 years	3	25%	Lead
Develop and share implementation guidance	3	25%	Lead
Increase education/awareness of the use of SNOMED CT	2	17%	Participate
Develop mechanisms to share tools that support implementation	2	17%	Active Support

<sup>1</sup> See Section 3.2 for outline definition of these roles

Engage users of SNOMED CT in the work of the IHTSDO - in ways that aid the support for implementation	1	8%	Active Support
Gather evidence of successful benefits realization, including researching associated factors	1	8%	Active Support

### 3.1 Weighting

The weighting given indicates the planned resource allocation and is also an expression of relative importance. The assumption at this planning level is that each initiative will overall generate equal value from equal resource. More granular and precise weighting will arise from either operational decision making or from the more detailed planning stage.

The weighting used is a simple set of ratios 3:2:1, which brings a level of precision appropriate for this plan.

The resources to be allocated are assumed to include both the resources of IHTSDO itself and resources donated by members or other collaborators.

### 3.2 IHTSDO’s Roles

The principal role that the IHTSDO should take for each of the itemized priorities for action in Table 1 is shown in its own “IHTSDO Role” column. The labels used (Lead, Participate, and Support) distinguish at an outline level appropriate for this plan. During more detailed planning, the specifics of roles and responsibilities will be set. There is an assumed hierarchy between these, e.g. IHTSDO Leadership would include elements of participation and support, and participation includes aspects of support.

The outline for each of these roles is:

- **Lead** : The Association through its structures, such as committees or projects, will lead some actions. This will likely include the allocation of resources such as allocation of Officer and staff time, provision of IHTSDO tools, and options to procure products and services.
- **Participate** : The Association will contribute, along with other participants, to deliver the planned outputs from activity.
- **Active Support** : The Association express its support for, and may undertake some activity to progress, the area of work.

### 3.3 Primary target groups for IHTSDO implementation activity

The primary target group for IHTSDO implementation activity is those who are directly engaged with the conception, design, and delivery of SNOMED CT implementations for the priority uses listed in

Section 2. The groups for engagement are both system developers and end-users (including both clinicians and non-clinical personnel).

## 4 Elaboration on the Priorities for Action

Each item listed in the 'Priority for Action' column in Table 1 is set out here in outline. As well as this outline, the following aspects will be included in each detailed plan, in the IHTSDO annual Work Plan, or in both:

- Key milestones
- Criteria by which success may be measured
- Identification of the primary target group(s) for the activity and who else may be involved
- Key strategic issues or choices to be considered

For each of the Priorities for Action listed, Table 1 already indicates:

- The role IHTSDO will take
- The relative weighting or resource allocation between the items

The following headings correlate to priorities for action listed in Table 1.

### 4.1 Better understand where and how SNOMED CT is used

This area of work will provide a knowledge resource which is currently sought, but not fully available. This is likely to include some categorization between types of implementation and usage profiling. The intelligence gathered during this work will itself support IHTSDO decision making and should refine the targeting of dialogues relating to implementation.

IHTSDO has established the reporting of distribution and use statistics from each of the Member countries. This work, however, should extend to more detailed information and should not be limited to those implementations currently reported by the Member organizations.

### 4.2 Develop and share implementation guidance

This item will ensure that the need for implementation guidance is matched by its planned delivery. The sharing of informal or non-global guidance may be within scope too, as for example guidance which is specific to one jurisdiction (so never appropriate to adopt into an international standard) but may include fragments which are of broader or universal interest. This work will include, but has the potential to extend beyond, the current preparation of a revision to the existing Technical Implementation Guide [TIG].

### **4.3 Increase education/awareness of the use of SNOMED CT**

This item focuses on existing or credible future uses for SNOMED CT, which could be adopted by implementers. This complements but differs from generic education on SNOMED CT topics, which may introduce users to parts of the standard or to the characteristics of the content.

By disseminating a better understanding of actual and foreseeable SNOMED CT use, it is anticipated that the rate of adoption will increase and that existing implementers will recognize new opportunities to effectively use SNOMED CT.

### **4.4 Develop mechanisms to share tools that support implementation**

This item should deliver a growing community of collaborators who have shared access to a range of tools that support implementation. The range of tools is not set out in advance, as this is an enabling activity. There is, however, an intent that this initiative will deliver by some means one or more reference implementations, the provision of which will increase end-user acceptance and awareness of SNOMED CT. The type of reference implementation proposed is unlikely to match the proposal formerly considered by the IHTSDO Management Board but not supported due to resources available at the time.

### **4.5 Engage users of SNOMED CT in the work of the IHTSDO**

This item seeks to ensure adequate engagement of a variety of user types in the work of IHTSDO. This should support IHTSDO in making informed decisions. In line with the goals set out in Section 5.5 of this plan, it should also help IHTSDO to manage the needs of prospective, new, and existing implementations.

### **4.6 Gather evidence of successful benefits realization, including researching associated factors**

This item is in recognition that the ultimate test of fitness for purpose is not just the ability to successfully introduce new terminologies into health workflows, but also to deliver positive net benefits. The availability of evidence of actual benefits accruing from use of SNOMED CT has unparalleled potential to encourage implementation. Articulation of the means via which the benefits users are seeking from SNOMED are actualized in different implementation scenarios will inform IHTSDO's and its Members' ongoing design and development strategies. It will also help to meet the Committee's core roles of improving the implementation of SNOMED CT and other Terminological Products and IHTSDO's capacity and capability to support them both now and in the future.

## 5 Guiding Principles

A set of guiding principles were considered by the Implementation and Innovation Committee, and an attitude to these was refined during the development of this plan. The principles and the commentary around these are included here and should guide the planning of the Association's activity.

### 5.1 IHTSDO works in partnership with key players from around the world

Key players may include but are not limited to: Member countries, system developers and vendors, participants in the Community of Practice, researchers, and providers of reference information models.

It is critically important to engage those who are prospective but not current license holders. These are in addition to developers and vendors who are already Affiliate license holders.

IHTSDO will take different roles in different initiatives: lead some, actively participate in (but not lead) others, and for some others will express support for the aims but not participate directly.

In addition to the IHTSDO roles, Member countries and Affiliates are likely to participate in some partnerships.

### 5.2 Implementation focus is embedded in IHTSDO's strategic objectives and directions for the next 3-5 years

Implementation is the strategic focus of IHTSDO. This requires that implementation be considered in most, or perhaps all, of the work of the Association. It requires that consideration and focus is given not only in the nominated leading bodies for implementation, mainly the Implementation and Innovation Committee [I&I], but it should also be cross-cutting, requiring attention in most of the organisational structures and processes. As well as the I&I Committee itself, the Affiliate Forum, Member Forum, and Implementation SIG have a place in bringing focus onto implementation.

### 5.3 Focus on catalyzing and supporting implementation on the 3 priority use cases (Section 2)

(The three priority use cases are set out Section 2).

Implementation is the prerogative of many different types of organization, subject to appropriate licensed use of SNOMED CT. IHTSDO provides a range of resources which can be used by implementers, the content itself being the fundamental resource. Others include the range of IHTSDO documentation and organizational mechanisms by which implementers may engage in the work of the Association, such as the Affiliate Forum and use of the Collaborative Site.

To catalyze implementations, it is necessary for there to be an adequate set of things which implementers rely on. By identifying the priority use cases, it is possible in this planning process to select or prioritize what is provided.

## 5.4 IHTSDO should encourage "fitness for purpose" from any implementation effort

Effectively implemented, SNOMED CT can be a helpful tool in improving health and health care. Poor implementations, however, can be unhelpful or even potentially lead to risks for patients or care providers.

IHTSDO does not hold a remit to endorse any particular implementation itself; however, it does have a legitimate interest in the ability of others to judge the various qualities of any one implementation. Despite there being no specific work item in this plan to define what is meant by fitness for purpose, there are very likely to be outcomes from the work listed in this plan which contribute in part to a de-facto definition.

## 5.5 Planning to address the needs of both future but also existing implementations

This plan focuses on detailing how IHTSDO will broaden and deepen implementation of SNOMED CT: the strategic direction set out by the Management Board. In addition to this, there is the need to address here the reasonable needs that arise from existing use in existing implementations. Continuous improvement of SNOMED CT is both desirable and expected, and includes not only changes to content, but also to its own technical standards and tools. An implementation focus must account for the need to improve SNOMED CT for the benefit not only of new implementers, but also for those existing ones. There is, however, an unavoidable tension between the need to innovate and improve, and the desire for minimal collateral change to working implementations. The approach proposed in this plan is to actively manage the change processes, so that the needs of both the existing and prospective or future implementation efforts are taken into account in the various initiatives.

Active management of change processes is necessary if a credible 'implementation focus' is to be achieved, the aim being to deliver:

- Continuous Improvement
- Backwards compatibility for a stated and reasonable period
- Managed retirement or obsolete features and techniques
- Consultation which accurately reflects the variety of interests of implementers
- Lead-times for changes which strike an appropriate balance for the whole implementation constituency.

In order to achieve this, it is necessary for the actions in this plan to support an IHTSDO understanding of:

- The recognizable features and predictable impacts of those changes which are planned by IHTSDO
- The attitudes of those with responsibility for existing implementations to each change
- The likely effect of planned changes, both individually and as a whole, on the propensity to implement SNOMED CT.

The way in which these are supported by the actions in the plan will be one of the factors considered in the detailed planning stage.

Much of what is set out in this section intersects with the IHTSDO quality assurance and change management activities.

## 6 Detailed Planning step

In addition to this outline plan, there will be a detailed plan for each of the items listed as priorities for action in Table 1. The more detailed planning may be put into the presentation format shown below in Figure 1. The detailed planning and leadership of work on each of the priorities for actions is provided by individual members of the I&I Committee.

When detailing these plans, it is necessary to clearly distinguish those things which are entirely within the Association's domain and those for which the Association may only play a coordinating or catalyzing role.

The detailed planning step is integral to the other planning of the Association, such as annual Work Plans.

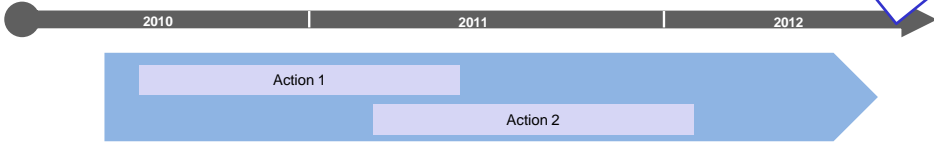
Priority Area: *Improve understanding of how and where SNOMED CT is currently used*

**Description & Target Group(s)**

Employ measures to enable improved access to information about how and where SNOMED CT.....

**Draft Example**

**Roadmap**



**Top 3 Actions to 2012**

**Milestones**

	Description	Targets
i. xx		
ii. xx		

**Figure 1 Presentation format for detailed plans**