



Guidelines for Management of Translation of SNOMED CT®

Date 20121211
Version 2.02

Document Properties

Filename:	IHTSDO_Guidelines_Management Translation SCT_v2.02_20120809
Title:	Guidelines for Management of Translation of SNOMED CT®
Subject:	IHTSDO, Management of Translation of SNOMED CT®, Guidelines

Amendment History

Version	Date	Editor	Comments
0.01	20080328	Ulla Gerdin	First draft
0.02 – 1.2	20080401-20091008	Contributing authors: Ulla Gerdin, Knut Bernstein, Anna Staerner Steen, Torben Rügge, Annika Sonne Hansen, Jane Howarth, Palle Gerry Petersen, Alejandro Lopez, Nicolette de Keizer, Karin Ahlzén	Re drafting
1.3	20091008	Annika Sonne Hansen, Palle Gerry Petersen, Alejandro Lopez, Nicolette de Keizer, Karin Ahlzén	Review based on comments from the QAC and the Translation PG
1.4	20100107	Karin Ahlzén	Review based on comments from the QAC. Final document for review by Members Forum and Affiliate Forum.
1.5	20100201	Karin Ahlzén	Review based on comments from the Members Forum.
1.6	20100324	Karin Ahlzén	Review based on comments from the Committees.
2.0	20100326	Karin Ahlzén	Minor updates following QA
2.01	20111103	Karin Ahlzén	Review and inclusion of text about quality indicators in Introduction.
2.02	20120201-20120809	Jane Howarth	Review and edits related to translation quality assessment work (background, methodology and toolkit documents(s))
	20121211		Version approved for publication by IHTSDO Management Board



Review Timetable

This is the review date of the Guidelines as agreed by IHTSDO Management Board

Review date	Responsible owner	Comments
20120401	Translation SIG	To include feedback
January 2015	IHTSDO	Undertake review of all IHTSDO Translation guidance documents

© International Health Terminology Standards Development Organisation 2012. 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	6
1.1 Status of this document and feedback	7
1.2 The purpose of these guidelines	7
1.2.1 The question of translation method	7
1.2.2 Out of scope	7
1.2.3 Assessment of translation quality	8
1.3 Target group	8
1.4 Reading guidelines.....	8
2 Planning issues	9
2.1 The challenge	9
2.1.1 Key considerations for the project manager	9
2.2 Establishing the organization.....	10
2.2.1 Establishing a team of specialists.....	10
2.2.2 Establishing the translation process	10
2.2.3 Call for tender and contract issues for translation service provider	10
2.2.4 Establishing the Editorial Board.....	10
2.3 Establishing an underlying supportive technical infrastructure.....	11
2.4 Establishing linguistic guidelines	11
2.5 Identifying quality characteristics	11
2.6 International cooperation	12
2.6.1 Quality of the International Release of SNOMED CT®.....	12
2.7 Education and training of team members	12
2.8 Risk management	12
3 Translation preparation	14
3.1 Translation subset selection	14
4 The translation process	15
4.1 Translation	16
4.2 Translation review	16
4.3 Editing.....	16
4.4 Progress monitoring and follow-up	17
5 Post-translation issues	18
5.1 Validation of the translation in clinical and social care settings	18
5.2 Maintenance of linguistic guidelines	18
5.3 Maintenance with regard to translation of updated versions of SNOMED CT®	19
5.4 Post-editing	19
5.5 Translation of national concepts into SNOMED CT®-English.....	19

6 Glossary of terms	20
7 Supporting documents	22

1 Introduction

SNOMED Clinical Terms® (Systematized Nomenclature of Medicine Clinical Terms) is a comprehensive clinical **terminology** that is used to code, retrieve, and analyze health data. It constitutes a basis on which healthcare organizations can plan and document health processes, perform outcome and result researches, analyze healthcare quality and costs, and develop effective therapeutic recommendations. It resulted from the merger of SNOMED RT® and Clinical Terms Version 3. The terminology is comprised of concepts, terms and relationships that are necessary to precisely represent clinical information across the scope of health care.

SNOMED CT® comprises more than 310,000 active concepts represented by some 1,000,000 descriptions, i.e. "Fully specified names", "Preferred terms", and synonyms. Thus, one concept may be **represented** by several descriptions. The concepts are arranged in **hierarchies** (systems of concepts) covering areas like symptoms and signs, disorders, operations, treatments, drugs, administrative items, etc. – i.e. all these categories of information are needed in a health record.

As explained by Spackman and Reynoso (Spackman et al. 2004), it is "a terminological resource designed to be implemented in software applications to represent clinically relevant information reliably and reproducibly" (further information concerning the history of SNOMED CT® may be found in the introductory sections of their article).

When implemented in software applications, SNOMED CT® can be used to represent clinically relevant information consistently, reliably and comprehensively as an integral part of the electronic health record (EHR). Information systems can use the concepts, hierarchies and relationships as a common reference point.

The global dissemination of SNOMED CT® increases the need to provide the terminology in many different languages. SNOMED CT® has a built-in framework to manage different languages and dialects. Currently, entire or partial translations of SNOMED CT® are available in US English, UK English, Spanish, Danish, Swedish and Canadian French, Translations in other IHTSDO Member countries and elsewhere are also in progress.

The basic objective of any SNOMED CT® translation is to provide accurate representations of SNOMED CT® concepts in such a way that they are understandable, usable and safe: the principle of *concept-based translation* must be borne in mind. Due to the inevitably normative nature of a translated version of SNOMED CT®, defining a set of linguistic guidelines, including syntactical, morphological, and orthographic rules, is crucial.

Since SNOMED CT® is meant to be applied in numerous and various settings by users from the most heterogeneous backgrounds, realms and languages, the communicational aspect of concept definition becomes an issue of paramount importance. A qualitative translation of SNOMED CT® is a

standardization of a country's language for special purpose (LSP), in this instance for health and social care.

1.1 Status of this document and feedback

These guidelines constitute a part of the IHTSDO quality assurance system for content and are based upon the collective experience from countries that have already translated, or, are in the process of translating, SNOMED CT®.

This document was originally created as one of the key deliverables of the former Translation Standard Processes Project Group (TSPPG), under the guidance and direction of the Translation Special Interest Group (SIG).

The Translation Special Interest Group (SIG) collect suggestions for changes or amendments to these guidelines. At least one month prior to an IHTSDO annual meeting of the Translation SIG, the feedback should be sent to the Chair of the SIG and the IHTSDO Chief Quality Officer who will review the feedback submitted and determine how any necessary updates to the Guidelines will be made.

1.2 The purpose of these guidelines

Within the scope of translation of SNOMED CT®, these guidelines comprise recommendations regarding the management of a translation project. New Members of IHTSDO will be able to find advice and documented experience to support their translation efforts and to help avoid mistakes. The Guidelines enable projects to build on best practices from both a qualitative and a cost effective perspective and contribute to “lessons learned”.

The guidelines identify critical steps of the translation project, but, are not prescriptive regarding the detailed sequence of the steps in the translation process, since some steps are highly dependent on how the project is organized locally.

This document is a companion guideline for use in conjunction with the **“Guidelines for Translation of SNOMED CT®”**, which contains important information on common issues relevant to translating SNOMED CT®.

1.2.1 The question of translation method

The management of the process of back translation is not part of these guidelines since none of the IHTSDO Members chose back translation as a method for quality control. The process described within this document provides for a two-step quality review mechanism that is to be used by translators as well as clinicians. A third level of quality control and assurance (“Validation of the translation in clinical and social care settings”) is described in sn 5.1.

1.2.2 Out of scope

This guideline does not include general project management principles, or, reference specific project management methodologies.

This document does not include linguistic guidelines applicable to translations of SNOMED CT®. The linguistic guidelines are found in the separate, companion, IHTSDO document “**Guidelines for Translation of SNOMED CT®**”.

1.2.3 Assessment of translation quality

Translation Project Owners (TPOs) should strive to ensure that translations comply with the principles on which SNOMED CT® was originally based (comprehensibility, reproducibility, usefulness) and that the information contained in the translated concepts is semantically equivalent to that contained in the core source terminology (international release). The IHTSDO has developed a document describing how to assess translation quality and evaluate the level of compliance. The document entitled “A methodology and toolkit for evaluating SNOMED CT® translation quality”, outlines and defines a number of requirements or “quality characteristics” (QCs) and associated metrics.

There are three types of QCs. In the context of translation quality assessment, structure QCs that relate to the management and organisation of the translation project, process QCs that relate to the activities taking place during the actual translation, and Outcome QCs that relate to the target language translation result. A “short-list” of (9) QCs was identified and for each QC, quality metrics (what and how to measure, how to evaluate, etc.), sample questionnaires (to assist with the evaluation) were developed, and, an overall “rating” assigned.

It is recommended that TPOs refer to Appendix A of the “Guidelines for Translation of SNOMED CT),and, to the methodology and toolkit document to ensure that they incorporate any quality metrics designated **mandatory** for use into their project and quality plans. Metrics to measure translation quality may also be re-formulated as contractual clauses in formal agreements between a TPO and a Translation Services Provider (TSP) for services and service levels to be provided.

1.3 Target group

The primary target group for this document are the TPOs - IHTSDO Members, or, other countries who have been granted permission to translate SNOMED CT®, directors of health and social care, and, project managers in charge of managing SNOMED CT® translation projects.

1.4 Reading guidelines

Key activities and actors in the translation process are described in section 4. This is distinguished from the project planning activities (described in section 2), the translation preparation activities (described in section 3), and, the post translation activities (described in section 5).

A brief list of terms and definitions specific for this document can be found in section 6, and a reference list is found in section 7.

2 Planning issues

2.1 The challenge

The translation of SNOMED CT® must remain faithful to terminological and linguistic principles and at the same time be able to produce national terminologies useful for clinicians in their daily work. An experienced terminology consultant puts it this way (Høy, 2006):

“The basic approach of the translation project is pragmatic-functionalist: the aim of the project, i.e. establishing a terminology functioning as a background system for the electronic health record, is constantly kept in mind, and an effort is made to provide terms which reflect the underlying concepts and are understandable and psychologically acceptable to the clinician.

The overall approach has been one of close collaboration between specialists within medicine and/or informatics, and linguists/terminologists. As pointed out by numerous professionals and terminologists, interdisciplinary collaboration is crucial in terminology work (Infoterm 2005). On the one hand, a translation based solely on linguistic, morphological-syntactical analysis might result in a seemingly correct term which would not after all represent the concept in question, or which would not be used by professionals. On the other hand, for pedagogical (and normative) reasons, a certain compliance with linguistic, systematic, and orthographic principles is necessary in order to avoid confusion and ensure practical applicability of the terminology. In practice, this means that a set of basic principles to secure consistency are followed, but in case of serious conflicts with daily clinical language the clinical use prevails.”

2.1.1 Key considerations for the project manager

In the initial phase of the translation project, a number of vital decisions have to be made. Based on the collective experience gathered from other translation projects, the following major questions have to be considered:

- who has solid theoretical knowledge of SNOMED CT®?
- who should take responsibility for the actual translation work, from source language to target language?
- which types of IT tools are needed to support translation and process administration?
- which access rights are needed to data during the translation process?
- who should write the linguistic guidelines?
- what type of education and training is needed – to whom and when?
- what should be the selection strategy for the sequence of subsets that are to be translated?
- how should the translation process be organized to guarantee the quality of the translation products?

In the sections below, these questions will be addressed.

2.2 Establishing the organization

2.2.1 Establishing a team of specialists

To achieve a successful outcome, a number of specialists must be engaged in all the different parts of the process. The following competencies/experiences have been identified:

- health and social care professionals
- medical translators, e.g.:
 - translators of brochures in the medical area
 - translators of research papers
 - interpreters
- terminologists
- knowledge of present use of health and social care terminology, classification and health informatics
- knowledge of semantics and concept based translation
- knowledge of the structure and content of SNOMED CT®.

2.2.2 Establishing the translation process

The translation can be done in-house or by an external translation service provider. In both cases it is important to specify prerequisites and expectations relating to the process and products. Based on experience from previous projects, examples of such prerequisites, include:

- emphasis on concept-based translation
- assurance of delivery on time
- contracts with the translators
- an agreed number of translated concepts per given time
- maximum allowable error rate
- maximum allowable number of concepts submitted to the editorial board
- use of subject matter experts
- agreement on the point in time when a concept's translation is complete
- agreement on which translation tools should be used.

Please also see section 2.8 Risk management.

2.2.3 Call for tender and contract issues for translation service provider

Based on the specifications for the translation process and the products and services to be delivered, a procurement process should be initiated and a contract executed with the translation service provider. Since such tendering instruments and procurement processes are often dependent on national legislation, or, other conditions, they are not described further in this guideline.

2.2.4 Establishing the Editorial Board

Parts of the translation project need to be coordinated by an editorial board. The board's major tasks are to support the translation process (see section 4), manage the linguistic guidelines, continuously make and publish decisions on linguistic principles, and, follow up on translation quality.

The interdisciplinary editorial board should be comprised of professionals with educational and empirical backgrounds within areas like health and social care terminologies, linguistics and terminology, health informatics, and, with knowledge and understanding of the International Release of SNOMED CT®.

2.3 Establishing an underlying supportive technical infrastructure

The translation process and its administration require high performance, reliable IT tools, that must be able to:

- distribute the overall concept system
- provide a base for terminological services
- support the translation process and its team members in every step of the process
- control access to the information being processed at any point in time
- produce statistics from processes that are in progress as well as those that are complete.
- show the current status of each individual concept's 'life cycle' throughout the entire translation process
- show the level of activity for all project participants.

2.4 Establishing linguistic guidelines

The target language version of SNOMED CT® should reflect established national linguistic rules, and, health and social care staff should recognize the preferred terms used in their daily activities. Well maintained linguistic guidelines are the prerequisite for a high quality translation, and the use of linguistic guidelines are therefore prescriptive for everyone in the translation process. An initial version of the linguistic guidelines should be ready in advance of the first education session for translators, reviewers and editors. The framework and the content of the linguistic guidelines are described in the **“Guidelines for translation of SNOMED CT®”**.

2.5 Identifying quality characteristics

The task of creating quality characteristics and metrics for translations was based on the IHTSDO Quality Assurance Framework. The work was undertaken by the IHTSDO Translation Quality Assessment Project Group (TQAPG). The TQAPG defined quality characteristics for Structure, Process and Outcome. These are described in length in a separate IHTSDO document, **“A Methodology and toolkit for Evaluating SNOMED CT® Translation Quality”** and include:

- Participants knowledge of terminology and terminology translation processes (also includes translators and reviewers competencies)
- Content of style guides and reference materials in the target language
- Access to translation software
- Concept-based translation principle
- Translation reviews (two-level, or, two-stage review process necessary).
- Ongoing communication, co-operation and translation project process adjustments between the TPO and the TSP
- Term equivalence

- Clinical acceptability
- Compliance with Translation Standards and Guidelines

2.6 International cooperation

2.6.1 Quality of the International Release of SNOMED CT®

It is known that errors and inconsistencies occur in the International Release of SNOMED CT® at both the system level as well as at the term level. Participants in the translation process will undoubtedly identify a number of these.

The translation project should provide a mechanism to document these errors or inconsistencies during the translation process and to clarify the methods and tools for reporting back to the IHTSDO. These guidelines recommend the use of the IHTSDO request submission process and request submission template for reporting any anomalies and inconsistencies found in the International Release of SNOMED CT®.

2.7 Education and training of team members

The translation team members will need education and training regarding the structure and content of SNOMED CT®, the translation process and access to the documents and tools supporting it. The following examples outline essential education and training requirements needs and are based on experiences from the Danish and Swedish translation projects.

- SNOMED CT® overview – an introduction to SNOMED CT® should be provided for everyone involved in the translation process.
- Subset administration training – this training should be given to selected members of the team involved in planning, identifying, creating and allocating the selected subsets of SNOMED CT® that are going to be translated.
- Education in linguistic guidelines and training in how to use them – this should be provided for all translators, reviewers and editors.
- Translation tools training – this will vary depending on the roles and responsibilities of all translation team members but all will need specifically focused training in the use of any supporting translation tools used to perform their roles.

2.8 Risk management

It is essential to introduce methods and routines for monitoring both progress and quality control from the outset of project initiation. Indicators to monitor progress and quality should be defined and shared with project team members Risk factors should be managed, and the indicators should be able to reflect project status within high-risk areas. Based on previous project experiences, the following examples of important risk factors which could lead to deficient or insufficient implementation or, inadequate quality of the translation products have been identified:

- insufficient financing to undertake the project as outlined in plans
- deficient contracts between the translation service provider and the owner of the translation process

- failure of the translation agency to deliver
- insufficient translation with respect to the country's LSP
- insufficient organization of the review process
- deficient quality assurance of translations
- insufficient IT tools to support translation and validation
- insufficient training in use of tools
- insufficient professional and clinical knowledge available
- insufficient training in the conceptual principles for translation
- insufficient project management
- ambiguities and defects in the source language
- source language terms only relevant for certain countries.

3 Translation preparation

The planning issues described in section 2 are common for the entire translation project. However, for practical reasons all concepts cannot be translated simultaneously. The preparation therefore includes the selection (creation, allocation) of specific translation subsets.

3.1 Translation subset selection

The main aim of subset selection is to provide translators and reviewers with the best possible prerequisites for their work. The translator might for example want to work with concepts within the same subject field, e.g. heart conditions including body structures, disorders and procedures.

The choice of order of areas to be translated can be vital for other parts of the process of introducing SNOMED CT® to health and social care. Different approaches for identifying the initial subsets can be chosen depending on local needs. For example, one could give:

- priority to concepts which recur, link, qualify and confer meaning to other concepts in different contexts, e.g. body structures and qualifier values
- priority to concepts which are to be part of pilot projects in a given health or social care context
- priority to concepts which are to be part of a specific research project.

Selection of subsets is preferably managed by a team including specialists in health and social care, terminologists and experts on SNOMED CT®.

4 The translation process

The generic translation process depicted below is distinguished from the planning activities (section 2), the translation preparation (section 3), and the post translation activities (section 5).

These guidelines identify two major parties involved in the translation process: the translation project owner and the translation service provider. Furthermore, three major steps in the translation process are identified (Figure 1):

- translation
- translation review by the translation service provider (review 1)
- translation review by the translation project owner (review 2).

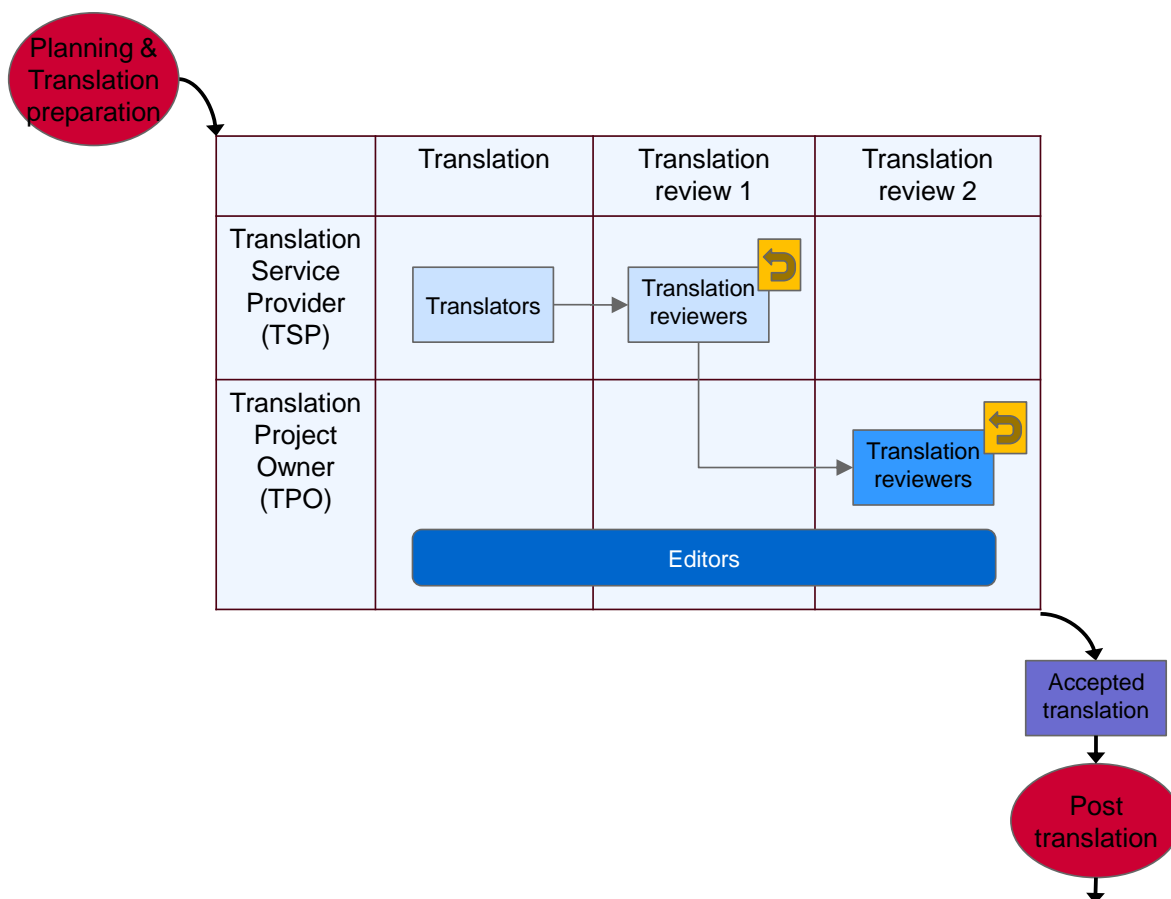


Figure 1 - overview of the translation process and the parties involved

The aim of the translation process is to provide a high-quality translation, even in the narrowest specialist fields. The three steps are found crucial to achieve the anticipated quality of the translation – particularly the two-step review process. The steps are depicted in the figure above and described in

the sections below. Details on the linguistic steps in the translation process can be found in “Guidelines for Translation of SNOMED CT®”.

4.1 Translation

Ideally, the translation should be carried out by professional translators with a health or social care background and/or health or social care personnel with a professional linguistic background. However, it may be difficult to find a sufficient number of people possessing all these qualifications.

Alternative models could include having the translation carried out either by authorized translators who have current access to consultants with a health or social care background (i.e. subject matter experts), or health and social care professionals who have been specially trained for the task and who may turn to professional translators for advice.

4.2 Translation review

Experience from existing translation projects indicates that a two-step review improves the quality of the translation. The first review is a kind of internal quality check performed by the translation service provider. The second review is an external review arranged by the translation project owner.

The competencies of the reviewers may vary, but they are often professional translators or health or social care professionals. All translated terms should at some point be reviewed by a health or social care professional who has been introduced to the structure of SNOMED CT® as well as to the rules of the linguistic guidelines applied in the target language. Ideally there should be a possibility for reviewers to address questions to subject matter experts.

The overall purpose of the reviews is to make sure that the preferred term reflects the underlying concept of the source language, that the term is relevant to the health and social care domain, and that the translation complies with the established linguistic guidelines of the target language.

The reviewers should also identify matters of principle and potential solutions to be presented to the editorial board for decisions.

4.3 Editing

Whatever the details of the translation workflow, an editorial board (or similar expert group) should play a part in the overall process and workflow. The editorial board should be interdisciplinary.

The board’s major task is to issue and maintain the linguistic guidelines and to resolve “difficult cases” and matters of principle based on the linguistic guidelines. The editorial board is responsible for the translation quality and issues the “accepted” terms. This means that the editorial board should check if the linguistic guidelines actually have been followed, and – if not – implement the corrections to translations that do not comply with the linguistic guidelines.

4.4 Progress monitoring and follow-up

The following issues related to the translation process should be monitored and considered:

- adjustment of the linguistic guidelines
- adjustment of the resources in the translation processes in order to continuously optimize the process
- workflow statistics
- correction of translations that do not comply with the linguistic guidelines.

The following issues of project progress should be monitored:

- follow-up on quantity, e.g. the number of approved translated concepts, the number of unresolved problem concepts sent to the editorial board, the number of errors made by the translators
- follow-up on quality, e.g. how well the translation complies with the linguistic guidelines, how well the translation complies with language corpora and concordances of respected medical journals and other relevant sources
- follow-up on costs
- follow-up on deviations from goals
- follow-up on translation service provider issues
- follow-up on performance of IT tools.

5 Post-translation issues

This section is describing important activities that will take place after the translation has been approved by the project owner. Many of these activities will take place in relation to a release of the terminology – either an international or a national release. This section does not include practical or technical issues related to the release itself or distribution of the terminology.

5.1 Validation of the translation in clinical and social care settings

After the translation, it is important that the terminology is validated by health and social care providers to ensure that the translation is useful in clinical and social care settings.

Results of this “clinical validation” may be:

- a concept is considered useful in the clinical context and the preferred term is considered adequate
- target language synonyms are proposed
- a change to the preferred term is proposed
- a new concept is proposed
- a concept is not used in practice or should not be used.

Verification can take place in different ways; e.g. as a workshop with health and social care professionals working together on a selected subset of SNOMED CT®, professionals working separately using collaborative IT tools etc. The main purposes of the validation process are to:

- check translation against documentation, guidelines, running systems – possibly with a multidisciplinary focus
- check translation against language corpora, i.e. medical journals – possibly with (semi)automatic validation
- check translation against attribute names and values in information models, i.e. archetypes
- establish on-going feedback from clinical practice with the addition of target language synonyms.

5.2 Maintenance of linguistic guidelines

As mentioned in section 4, the linguistic guidelines must be applied and should be maintained during the translation process. However, the use and implementation of the terminology may provide new insight that requires additional updates of the linguistic guidelines. As a part of the post-translation process there is a need for:

- maintenance of the linguistic guidelines
- extension of the editorial board assignments to handle ongoing maintenance (or assignment of the task to a maintenance organization).

5.3 Maintenance with regard to translation of updated versions of SNOMED CT®

New international versions of SNOMED CT® are released two times a year. The National Release Centre has 14 weeks to prepare a national release. For each new version of SNOMED CT® it is necessary to:

- translate descriptions for new concepts
- handle revision of concepts or re-activation of concepts
- assess if changes in SNOMED CT® require changes in existing (national) subsets.

5.4 Post-editing

After the translation has been approved by the project owner there might still be a need for editing previously translated descriptions. The translation of concepts in subsequent, newer releases of SNOMED CT® and the ongoing updates of the linguistic guidelines may have an impact on older translations. Post-editing issues should be managed by an editorial board, as described in 4.3.

5.5 Translation of national concepts into SNOMED CT®-English

The clinical validation and the use of SNOMED CT® are likely to result in proposals for national concepts (realm-specific) and / or other descriptions to be part of the International Release versus part of national extension content. A feed-back mechanism to the IHTSDO should be established for decisions regarding concepts and terms that may be included in future releases of the International Release.

Work includes:

- identification of new SNOMED CT® concepts
- identification of additional descriptions
- local modelling, i.e. additional relationships, attributes for concepts.

6 Glossary of terms

Term	Description	Source
concept	a clinical idea to which a unique ConceptId has been assigned. (ISO 1087-1:2000) unit of knowledge created by a unique combination of characteristics	SNOMED CT® Glossary (Draft version) 2012 www.ihtsdo.org/glossary
definition	representation of a concept by a descriptive statement which serve to differentiate it from related concepts	ISO 1087-1:2000
description	a human-readable phrase or name (term) associated with a particular SNOMED CT concept code Each of the descriptions in SNOMED CT is given a separate row in the Descriptions Table. Each description is assigned a unique DescriptionId and connects a term and a concept.	SNOMED CT® Glossary (Draft version) 2012 www.ihtsdo.org/glossary
linguistic guidelines	set of rules of grammar or terminology to be observed for the type of concept in question	
realm	A sphere of authority, expertise, or preference that influences the range of Components required, or the frequency with which they are used. A Realm may be a nation, an organization, a professional discipline, a specialty, or an individual user.	SNOMED CT® Glossary (Draft version) 2012 www.ihtsdo.org/glossary
relationship	An association between two concepts (each identified by a conceptId). The nature of the association is indicated by a relationship type. Each relationship is represented by a row in the Relationships Table.	SNOMED CT® Glossary (Draft version) 2012 www.ihtsdo.org/glossary
review	examine a target text for its suitability for the agreed purpose and respect for the conventions of the domain to which it belongs and recommend corrective measures	CEN EN 15038
revise	examine a translation for its suitability for the agreed purpose, compare the source and target texts and recommend corrective measures	CEN EN 15038
source language	language in which the source text is written	CEN EN 15038
target language	language into which the source text is rendered	CEN EN 15038
term	designation of a general concept in a specific subject field	ISO 1087-1:2000
translate	render information in the source language into the target language in written form	CEN EN 15038

translation service provider (TSP)	person or organization supplying translation services	CEN EN 15038
------------------------------------	---	--------------

7 Supporting documents

Documents consulted for the development of these guidelines:

- IHTSDO Guidelines for Translation of SNOMED CT®, 2012, 2010, 2008.
- Høy, A. Coming to Terms with SNOMED CT® Terms: Linguistic and Terminological Issues Related to the Translation into Danish. In: Budin G, Laurén C, Picht H et al., Terminology Science and Research, 2006.
- Høy, A. Principles in connection with the translation of SNOMED CT® terms; compiled by Asta Høy, MA in Translation and Interpretation, PhD, consultant to the Danish National Board of Health, 2007.
- Reynoso, G.A.: SNOMED CT® Translator's handbook [draft document]. IHTSDO, July 2007.
- Spackman, K.A., Reynoso, G. Examining SNOMED from the perspective of formal ontological principles: Some preliminary analysis and observations. In: Hahn U (ed), Proceedings of the KR 2004 Workshop on Formal Biomedical Knowledge Representation. Whistler, BC, Canada, 72-80, 2004.
- Språkliga riktlinjer för översättningen av SNOMED CT® till svenska, Version 11. Socialstyrelsen, Stockholm 2010-12-31.
- ISO 704:2000 Terminology work – Principles and methods.
- ISO 860:1996 Terminology work – Harmonization of concepts and terms.
- ISO 1087-1:2000 Terminology work – Vocabulary – Part 1: Theory and application.
- ISO 10 241:1993 International terminology standards – Preparation and layout.
- ISO/FDIS 15188:2001 Project management guidelines for terminology standardization.
- CEN EN 15038 Translation service–Service requirements.