

1 Introduction

Purpose of This Guide

This guide provides advice on combined use of [SNOMED CT](#) and [LOINC](#). It also contains specifications and guidance related to the distribution files containing the results of cooperative work linking [SNOMED CT](#) and [LOINC](#).

Who Should Read This Guide

This guide is intended to be read by anyone interested in effective ways to use SNOMED CT and LOINC together in a clinical information system, laboratory information or any associated systems, specifications or standards. These people fall into two broad categories:

End Users of Applications and Service that Use SNOMED CT and/or LOINC

These people need:

- To be aware of the importance and benefits of effectively combining the use of SNOMED CT and LOINC to meet their requirements for entry, communication, retrieval and use of clinical and laboratory information.
- To understand their own data entry requirements in order to appreciate and make use of the potential benefits of integrated use of SNOMED CT and LOINC.

This guide provides:

- A high-level description of the features and benefits of SNOMED CT and LOINC and the added benefits of effective combined use.
- Specific guidance on use of the two terminologies in ways that make use of their strengths and the added value provided by links developed between them.

Designers and Developers of Applications, Services or Standards that Use SNOMED CT and/or LOINC

These people need:

- To understand the range of features supported by SNOMED CT and/or LOINC likely to be important for their users.
- To be able to develop systems that use SNOMED CT and LOINC together in ways that support the delivery of systems that meet user requirements and deliver practical benefits.

This guide provides:

- Guidance on approaches to use of SNOMED CT and LOINC which identify high-level approaches that minimize overlap and maximize synergy between the terminologies.
- High-level guidance on possible ways to utilize the maps and associations being developed as part of cooperative work between SNOMED International and Regenstrief Institute.
- Summaries of use cases of different ways of combining SNOMED CT and LOINC, that offer examples of evidence for the approaches recommended in this guidance.

Background and Scope

In July 2013, IHTSDO

¹ and Regenstrief Institute Inc. (RII) signed a long-term agreement

² to begin cooperative work linking their leading global healthcare terminologies: Logical Observation Identifiers Names and Codes, or LOINC, and SNOMED Clinical Terms. This agreement will help improve safety, functionality and interoperability for the rapidly growing number of clinicians who manage and exchange health data with electronic medical records.

The agreement builds on and complements the strengths of both organizations and terminologies. The cooperative work will link the rich clinical semantics of SNOMED CT to LOINC codes, which provide extensive coverage of laboratory tests and some types of clinical measurements. By aligning how the two terminologies represent the attributes of tests and some measurements, this collaboration will provide users a common framework within which to use LOINC and SNOMED CT.

Like IHTSDO, Regenstrief is a not-for-profit organization that seeks to enhance the effective delivery of health care. The organizations believe it makes sense to work together to limit duplication of effort and focus limited resources on enhancements that serve the practical needs of the growing number of users of LOINC and SNOMED CT.

The agreement defines a long-term, broadly scoped, working relationship. To underline the long-term commitment of both organizations, the new agreement will be in force for at least 10 years. The organizations' immediate focus is laboratory testing as well as some basic clinical measurements, and they intend to expand into other areas of mutual interest in the future.

As part of the cooperation agreement between IHTSDO and RII it was agreed that the organizations would develop joint guidance on ways in which SNOMED CT and LOINC should be used together. This guidance document is limited to the scope of the agreement and thus principally covers laboratory investigations along with vital signs and anthropomorphic measurements.

The guide starts with short introductions to SNOMED CT and LOINC followed by an overview of the cooperative work to bring them closer. These sections identify the potential benefits of using SNOMED CT and LOINC together.

The remainder of the guide consists of advice on how to make effective combined use of SNOMED CT and LOINC in ways that recognize the scope and strengths of the two terminology resources. The guidance also considers ways to deliver added-value by using the links between SNOMED CT and LOINC developed as part of the cooperative work.

Footnotes

RefNotes

- ¹ In January 2017, the International Healthcare Terminology Standards Development Organisation adopted the new trading name [SNOMED International](#). However, for historical accuracy, this background section uses the former designation IHTSDO.
- ² For further information about the agreement and cooperative work please see <http://snomed.org/loinc-cooperation>.