Requirements Specification Document

SNOMED_CT Implementation

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Document Information

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1. General

1.1 Introduction

The Belgian e-Health Action Plan 2026–2029 places the Belgian Integrated Health Record (BIHR) at the center of the country's digital health strategy. The BIHR gives healthcare professionals and citizens an integrated view of a patient's health situation through a federated model: data stays at its authentic source rather than moving into a new central store, but is structured, coded and semantically standardized so that it can be shared, displayed and reused meaningfully. That model only works if the recorded information carries an unambiguous meaning at the point where it is captured.

The BIHR rests on three layers, each of which is referenced throughout this document:

- **Care Sets**: functional logical data models, adapted to the needs of Belgian healthcare providers and built from real use cases with clinical field experts. They are managed by RIZIV-INAMI in coordination with the eHealth platform team and the Belgian Terminology Centre, and they define which data elements are exchanged for a given clinical context.
- **FHIR**: the technical exchange standard, adopted by the Belgian e-Health plan since 2019. Each Care Set forms the basis for the corresponding Belgian HL7 FHIR profiles.
- **SNOMED CT and LOINC**: the semantic layer. Wherever relevant, each data element within a Care Set is bound to a national value set expressed in SNOMED CT or LOINC, the international terminologies chosen by the Belgian e-Health plan since 2013.

Without a consistently applied semantic layer, Care Sets and FHIR profiles alone would still leave each data element open to local interpretation.

This national architecture also answers a European obligation. Regulation (EU) 2025/327 on the European Health Data Space (EHDS) establishes a common framework for the use and exchange of electronic health data across the European Union, strengthening citizens' access to their own health data and their control over how it is used. From 26 March 2029, cross-border exchange of the first priority category of data — Patient Summary, ePrescription and eDispensation — becomes mandatory through the MyHealth@EU platform, and eHR systems may only be placed on the EU market if they comply with the applicable interoperability requirements. Structured and coded recording is therefore no longer a matter of local ambition.

To make that exchange work, EHDS requires a single European technical exchange standard per message type (FHIR) and, for each relevant data element, a single European structured semantic value set. These value sets are coded using a common semantic standard, namely SNOMED CT, with mappings to classifications and terminologies such as ICPC-3, ICD-11, ICF and ICHI. In the Belgian implementation, these value sets are bound to the data elements of the Care Sets described above; Belgian Care Sets are aligned with European standards as far as possible, and conversion between national and European formats takes place as close as possible to the source of the information.

The SNOMED CT Implementation project defines the framework that satisfies both the EHDS Regulation and the needs of clinical practice in Belgium. Within the project, two complementary workstreams are distinguished.

- **The clinical workstream** focuses on the needs and expectations of healthcare professionals. Through consultations and surveys involving clinicians, the key business needs from the field have been identified. Some of these overlap with technical requirements, such as the availability of appropriate tooling and the capacity to integrate complementary tooling seamlessly into eHR systems.

- **The technical workstream** focuses on the infrastructure and standards that support semantic interoperability: installation and configuration of a local terminology server, the implementation of SNOMED CT, and support for the FHIR profiles and value sets required for compliant data exchange.

Both workstreams are closely interconnected and must be carried out in a coordinated manner.

1.2 Purpose of the document

This Requirements Specification Document aims to establish a uniform set of functional and technical requirements for the implementation of SNOMED CT within healthcare information systems. The document serves as a reference framework for healthcare organizations, software vendors, and other stakeholders seeking to implement SNOMED CT in alignment with national objectives, the Belgian Integrated Health Record (BIHR), and the requirements of the European Health Data Space (EHDS).

The national objectives and the EHDS requirements are not two separate sets of expectations. EHDS defines the minimum: what must be exchangeable across borders, in which format, from which date. The Belgian objectives are broader in scope rather than different in direction — SNOMED CT is applied to the national health record itself, supporting care delivered within Belgium, reuse across the BIHR, and secondary use, not only the subset of data that crosses a border. An implementation that meets the national requirements in this document will therefore also meet the EHDS requirements for the Patient Summary.

The requirements described in this document are the basis for assessing the maturity and compliance of a SNOMED CT implementation. They serve as objective criteria for the registration of the “snomedization” of Electronic Health Records within related healthcare applications.
These requirements define what is assessed. An eHR application demonstrates compliance by meeting them, and that assessment serves two purposes:

1. registration of the application's SNOMED CT implementation with the responsible Belgian authorities; and
2. confirmation that the application is semantically prepared for the cross-border exchange of Patient Summary data required by the EHDS Regulation from March 2029.

1.3 Why SNOMED CT

EHDS requires a single semantic standard per data element. In Belgium that requirement was settled by policy rather than left to individual implementers: SNOMED CT was designated as the reference terminology for the healthcare sector, building on the choice of SNOMED CT and LOINC already made in the Belgian e-Health plan. Under that decision, other coding systems are not maintained as parallel, equally authoritative alternatives but are derived from SNOMED CT by mapping.

A hybrid model — a different primary coding system per domain — was considered and set aside, for reasons that are structural as much as political:

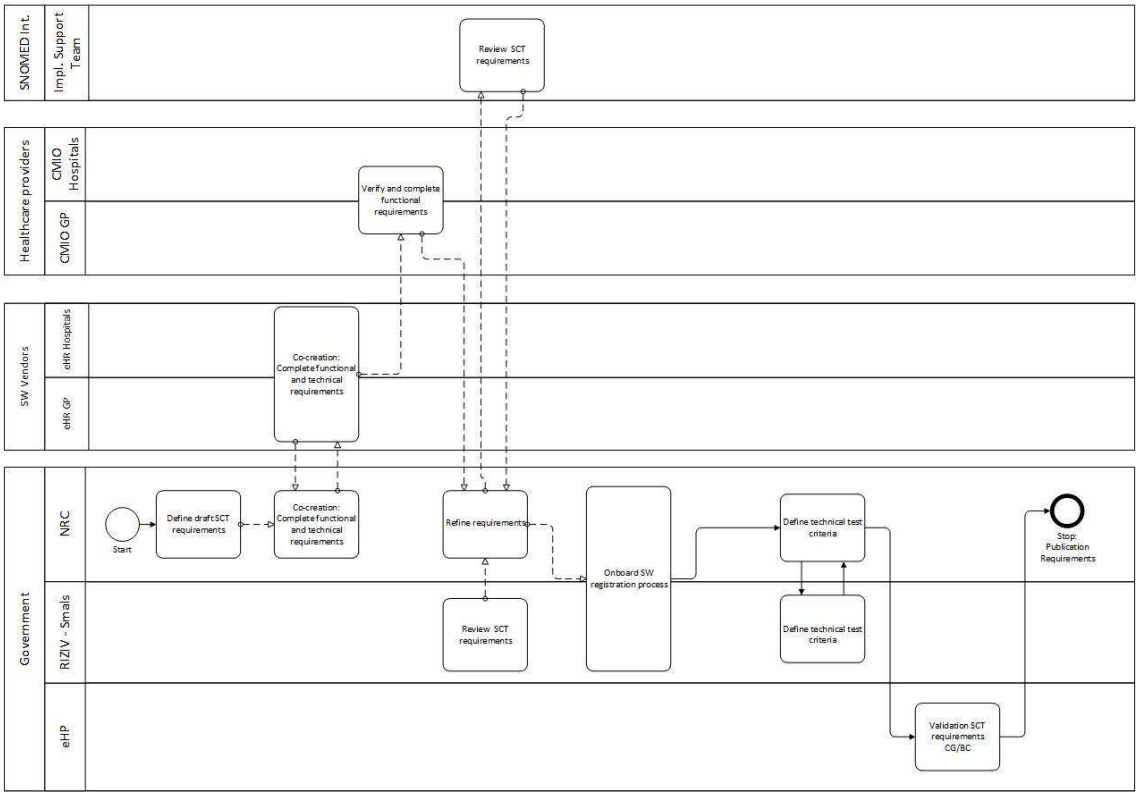
- **Classifications and terminologies solve different problems.** A classification groups concepts into a fixed, usually mono-hierarchical set of categories for statistics, epidemiology, audit and billing. A terminology represents the clinical concepts themselves, with meaning carried by defining relationships rather than by a category list. Classifications count well; they were not built to drive point-of-care entry, decision support, or safe exchange between systems.
- **One backbone avoids an N-to-N mapping problem.** With a single reference terminology, every other system needs one mapping — to SNOMED CT. A hybrid needs a maintained mapping between every pair of standards in active use, and a release of any one can break the others.
- **It is what the EHDS architecture calls for.** One unique technical standard per message type, one unique semantic value set per data element, with mappings outward to classifications — a single-backbone-plus-mappings model, not several competing primary standards.
- **It builds on what already runs.** Belgium operates a National Release Centre and publishes a Belgian Edition monthly and is one of SNOMED International's member countries and territories, with EU funding having supported SNOMED CT adoption across Member States. A Belgium-specific hybrid would forgo that shared governance and tooling.

This does not remove the practical need for interface terminologies, NIHDI nomenclature, or free-text capture where no concept yet exists. The distinction is that they remain entry conveniences or downstream outputs bound to a SNOMED CT concept identifier, not competing primary standards.

Introducing SNOMED CT does not require vendors to discard their existing coding infrastructure. The expected relationship is:

- A proprietary interface terminology may continue to drive data entry and user display, provided the SNOMED CT concept identifier is stored and remains the authoritative record of what was captured.
- Existing classifications used for reporting and reimbursement continue to be produced, but as mapped outputs of the SNOMED CT-coded record rather than as separate manual entry.
- Historical data recorded before SNOMED CT implementation remains readable and queryable; requirements on inactive concepts and historical associations govern how it is interpreted over time.

1.4 Governance & Validation process



The process for defining SNOMED CT requirements starts at the NRC (National Release Center), which drafts an initial version of the SNOMED CT requirements. These requirements serve as the foundation for a collaborative development process.

Subsequently, a co-creation phase is initiated in which the NRC works together with the eHR software vendors for both general practitioners and hospitals to further elaborate and refine the functional and technical requirements. The objective of this phase is to ensure that the requirements are aligned with policy objectives while remaining technically feasible within existing software environments.

Following this joint development process, the functional requirements are presented to representatives of healthcare professionals (CMIOs from general practice and hospitals). They review the proposed functionalities and, where necessary, supplement them based on the operational needs of clinical practice.

At the same time, the SNOMED CT requirements are reviewed by the Implementation Support Team of SNOMED International. This review aims to ensure that the requirements comply with SNOMED CT standards and internationally recognized implementation guidelines.

Feedback from both the healthcare sector and SNOMED International is subsequently incorporated into a requirements refinement phase. During this stage, the requirements are consolidated, adjusted, and optimized until a broadly supported and technically consistent version is achieved.

Once the refinement phase is completed, the registration process begins with onboarding.

Subsequently, the technical test criteria are defined. These criteria describe how compliance of software applications with the SNOMED CT requirements will be assessed. Because SNOMED CT only carries meaning in relation to the environment it operates in, the requirements and their test criteria are always specified together with three elements:

- the information models — the Care Sets and the Belgian HL7 FHIR profiles derived from them, which determine which data elements exist and what they mean in context;
- the terminology bindings — for each SNOMED CT-coded data element, the set of concepts permitted, expressed as a reference set, value set or ECL constraint rather than as a manually maintained list; and
- the services — the FHIR terminology service operations the eHR must expose or consume in order to resolve those bindings at runtime.

A requirement stated without all three cannot be assessed objectively. The development of the test criteria is carried out collaboratively by the involved stakeholders and is aligned with both the functional and technical requirements.

The final version of the requirements is then submitted for formal validation by eHealth, more specifically within the eHealth Governance Committee.

Following successful validation, the SNOMED CT requirements are officially published. This concludes the process and provides all stakeholders with a validated set of requirements that can be used for implementation, testing, and further rollout.

2. Technical Requirements

2.1 Scope of the implementation

The requirements in this chapter apply to eHR systems used in direct patient care: general practice software packages and hospital electronic health record systems. Requirements apply to the eHR as a whole, including any terminology component, middleware or third-party module the supplier relies on to satisfy them.
The following Care Sets and the Belgian FHIR profiles derived from them carry the SNOMED CT bindings referenced in this document, in scope of the Patient Summary.

Care Set	Content
Problem list	Patient problems and conditions
Observation	Clinical observations and vital parameters
Allergy & Intolerance	Allergies, intolerances and reactions
Vaccination	Administered vaccines and immunisation history
Procedures	Performed procedures

2.2 Objectives & Categories

The implementation of SNOMED CT within Electronic Health Records (eHRs) is based on **four strategic objectives** that together form the foundation of the technical implementation of the project.

- Terminology Services & Provisioning
- Data entry
- Storage
- Interoperability

These objectives share a common goal: to promote the correct, consistent and sustainable use of SNOMED CT. These objectives are an absolute prerequisite for obtaining high-quality data and semantic interoperability, which is essential for national and European data exchange.

To achieve these objectives, a set of functional and technical requirements has been defined. These requirements describe the minimum expectations that an implementation must meet to ensure a compliant and high-quality use of SNOMED CT within eHR systems.
The requirements are grouped into different categories, each representing a specific and essential characteristic of a successful SNOMED CT implementation. These categories are based on the implementation principles and best practices established by SNOMED International.

2.1.1. Categories

Versioning It is important that suppliers work with valid editions, versions, and derivative products (documents, subsets, mappings, etc. that reference SNOMED CT concepts) of SNOMED CT that are relevant within the national context. This is also important when taking into account the native language(s) of national healthcare systems, where relevant and where the native language version is available.
Maintenance The ability to incorporate changes from the international and national editions of SNOMED CT is essential for a successful long-term implementation. The Belgian SNOMED CT Edition is released monthly; the National Release Center publishes a new version of the national edition on a monthly basis. These updates contain important changes that may result from advances in medical knowledge or from corrections made following feedback from the user and clinical communities.
User interface The success of a SNOMED CT implementation is often determined by the quality of, and the approach adopted for, the development of the user interface and/or tools supporting data entry. This is where end users will interact and use SNOMED CT and a poor implementation will have a considerable impact on the quality of data entered.
Terminology Guidance The search and selection functionality within the user interface plays a crucial role in the daily use of the system. A well-designed and efficiently used search function enables users to find the right information, concepts, or data more quickly, significantly reducing the time required to perform tasks.
Storage The way in which SNOMED CT is stored in the Electronic Health Record (eHR) and effectively reused in clinical practice for the benefit of both the clinician and the patient is another factor that can determine whether an implementation is successful. The use of SNOMED CT concept identifiers is a mandatory requirement.
Analytics & reporting One of the key drivers for the implementation of SNOMED CT is the structuring of data and the use of the built-in logic of this ontology to derive clinical insights from patient data that would otherwise not be available in unstructured data.
Interoperability An important aspect of SNOMED CT implementations is how interoperability is implemented. SNOMED CT is a very powerful tool to ensure the safe, unambiguous transfer of patient data between organizations and the use of SNOMED CT concept identifiers is at the foundation of this.

2.2 Objective 1 - Terminology Services & Provisioning

The eHR shall provide terminology services conformant to the HL7 FHIR Terminology Service specification, operating against the most recent version of the SNOMED CT code system.

2.2.1 Terminology Services

N°	**TSP1**
Summary	FHIR enabled services
Description	The eHR shall provide terminology services conformant to the HL7 FHIR Terminology Service specification, implementing at minimum following operations against the SNOMED CT code system (http://snomed.info/sct). • $lookup • $validate-code • $expand Applicable RefSets: • Problems • Observation • Allergy & Intolerance • Vaccination • Procedures
Category	/

N°	**TSP2**
Summary	Semantic definition and evaluation of SNOMED CT concept sets
Description	The FHIR terminology service shall support the dynamic definition and evaluation of SNOMED CT concept sets based on the SNOMED CT hierarchy and relationships, without requiring all member concepts to be individually enumerated or maintained. The terminology service shall support: • ValueSet/$expand to return the concepts satisfying a dynamically defined SNOMED CT constraint; and • $validate-code to determine whether a specified SNOMED CT concept satisfies that constraint. The solution should support SNOMED CT Expression Constraint Language (ECL), conformant to a published SNOMED International ECL specification supported by the solution, as the standard mechanism for expressing these constraints. Where ECL is not supported, the supplier shall demonstrate that the alternative mechanism: 1. evaluates concept membership dynamically using the SNOMED CT hierarchy and relationships; 2. supports equivalent use within ValueSet/$expand and $validate-code; and 3. does not require the complete resulting concept set to be manually enumerated or maintained.
Category	/

2.2.2 Terminology Provisioning

The eHR shall support the controlled and timely adoption of the Belgian Edition of SNOMED CT published by the Belgian National Release Centre (BE NRC). The solution shall support the incorporation of new releases and their associated terminology content in a manner that preserves terminology integrity and does not adversely affect clinical workflows.
The production solution is not required to adopt every monthly Belgian Edition release. However, the SNOMED CT version used in production shall remain within the permitted version lag defined below.

N°	**TSP3**
Summary	Belgian Edition Release Currency
Description	The solution shall ingest the latest version of the BE SNOMED CT edition in a repository in one of its environments. It can use the syndication feed of the National Terminology Server for this purpose. (The frequency of the actual deployment for clinical use in production is governed by the release policy between the vendor and the clinicians and is not covered by this requirement)
Category	Versioning

N°	**TSP4**
Summary	Controlled SNOMED CT Release Deployment
Description	The solution shall support the deployment of a new Belgian Edition of SNOMED CT while preserving the integrity and availability of the terminology service and dependent clinical functionality. Following deployment, the terminology service shall make the content of the deployed Belgian Edition available without loss or unintended modification of terminology content, including: • concepts and their active/inactive status; • descriptions and their properties; • stated and inferred relationships; and • reference sets and their members. Synchronization, import, processing and deployment of a new Belgian Edition shall not make terminology-dependent clinical functionality unavailable, except during an explicitly agreed maintenance window.
Category	Versioning

N°	**TSP5**
Summary	Version Consistency
Description	The solution shall use the same production version of the Belgian Edition of SNOMED CT across all components and terminology-dependent services that exchange or process SNOMED CT-coded information. Where the solution uses different SNOMED CT versions concurrently, the supplier shall identify the affected components and versions and demonstrate that SNOMED CT-coded information can be exchanged and processed between them without loss or unintended change of clinical meaning.
Category	Versioning

N°	TSP6
Summary	Multilanguage accommodation
Description	The solution shall support presentation of SNOMED CT content in the appropriate language using the applicable Language Reference Sets of the Belgian Edition. The Belgian Edition currently provides Dutch, French and German language content.
Category	Maintenance

N°	TSP7
Summary	Provide a reporting/feedback mechanism
Description	The solution shall provide an accessible mechanism for users to report suspected missing or erroneous SNOMED CT content, including concepts, descriptions, translations and mappings. The feedback shall ultimately be submitted through the official Belgian NRC feedback channel. The supplier may implement this by: • directing the user to the official Belgian NRC feedback channel; or • receiving the feedback within the solution and acting as an intermediary for its submission to the Belgian NRC. Link to the portal: https://apps.health.belgium.be/terminology-portal/snomed_ct_requests/nl https://apps.health.belgium.be/terminology-portal/snomed_ct_requests/fr
Category	Versioning

2.3 Objective 2 – Data entry

The eHR shall make data entry as easy as possible by providing intuitive and user-friendly functionalities to search and select terms.

2.3.1 Terminology guidance (search & select)

A powerful and user-friendly search functionality within the eHR is essential for the successful implementation of SNOMED CT. Healthcare professionals must be able to quickly and easily find and select the appropriate concepts to record clinical information accurately and consistently.
The search functionality shall support efficient concept retrieval through mechanisms such as relevant result ranking, synonyms, abbreviations, partial term matching and other appropriate search techniques. Search and selection should minimize documentation burden while supporting consistent and high-quality clinical data capture.

To illustrate possible search functionalities and user experiences, reference can be made to the following demonstration: https://ihtsdo.github.io/snomed-ui-examples/

N°	**U01**
Summary	Overview of set of basic search functionalities
Description	This overview is a set of basic search functionalities designed to help users find the appropriate SNOMED CT code more quickly and efficiently, directly from within the eHR. The focus is on simplifying the search and data entry process, enabling both experienced and less experienced users to consistently identify relevant terms. The following requirements for the “guidance” functionality outline the minimum capabilities needed to ensure a user-friendly, performant, and effective search experience.
Category	Terminology guidance

Summary	Description
Search response time	The solution shall display the initial results of a SNOMED CT concept search within 1 second of the search being initiated by the user interface for at least 95% of searches under normal operating conditions. Any configured debounce interval or other intentional delay between user input and execution of the search shall be included in the measured response time.
Progressive matching: as the user types characters into a SNOMED CT coded data element, suggest a list of relevant concepts but limit the selection of concepts	When a user enters text in a SNOMED CT-coded data element, the solution shall dynamically return matching SNOMED CT concepts based on their preferred or acceptable descriptions. Concepts returned for selection shall have at least one preferred or acceptable description that matches the entered search text according to the supported search behaviour. The search results shall be updated as the search text is modified, without requiring the user to explicitly submit the search. **Implementation guidance:** Implementations may apply a minimum-character threshold and/or debounce mechanism to reduce unnecessary terminology search requests and

	maintain responsive search behavior. Demonstration implementations use a minimum of three characters and approximately 500 ms debounce.
The eHR system is capable of understanding variants of a concept description as a search term	The system must be able to understand variants of a term, such as the plural form and/or the feminine form, and minor spelling mistakes.
The eHR system is capable of word segmentation (decompounding)	The system shall support word segmentation of compound search terms, where applicable, to enable retrieval of relevant SNOMED CT concepts based on the constituent words of a compound term. The segmentation mechanism shall enable a compound search term to match SNOMED CT descriptions containing the corresponding constituent words, without requiring the user to manually separate the compound term.
Multi-prefix any-order search	The system shall support searches containing multiple search tokens, where each token may match a complete word or a prefix of a word in a SNOMED CT description, independently of the order in which the tokens are entered. Reordering the same search tokens shall not change which concepts qualify as matches based solely on token order. For instance: • Searching for **Skin Cancer** and **Cancer Skin** will result in the same concepts qualifying as matches. • Searching for **pro hip** can match **hip prosthesis**, because pro matches the prefix of **prosthesis** and token order is irrelevant.
The system will use context specific reference sets (language refsets, subsets per medical specialty) to facilitate concept retrieval by the clinician	The solution shall use the terminology binding, reference set, or other SNOMED CT subset applicable to the clinical context to prioritise or restrict concept search results. Where the applicable context does not provide a suitable concept, the solution shall support extending the search to the broader SNOMED CT content available to the user, where permitted by the applicable terminology binding. The mechanism used to provide context-sensitive search results may be determined by the supplier.

N°	U02
Summary	The system will enable searches using Concept ID
Description	The solution shall support searching for a SNOMED CT concept by its Concept ID. When a valid Concept ID is entered, the solution shall return the corresponding concept and display an appropriate description according to the language configuration applicable to the user. The solution should additionally support searching by Description ID. When a valid Description ID is entered, the solution shall return the SNOMED CT concept associated with that description.
Category	Terminology guidance

N°	U03
Summary	Following the return of search results, the system will permit users to browse through nearby hierarchy
Description	The solution shall enable users to explore the SNOMED CT relationships of a concept selected from the search results. Users shall be able to navigate the hierarchical relationships of the selected concept, including its parent and child concepts, and to explore other relationships defined for the concept in SNOMED CT. For each relationship presented, the solution shall identify the relationship type and the related SNOMED CT concept and enable the user to navigate to that related concept. The supplier may determine how concept relationships are presented to the user, for example through hierarchical trees, concept diagrams, relationship lists, or other equivalent user-interface mechanisms.
Category	Terminology guidance

N°	U04
Summary	Limit searching and selection to only those concepts from SNOMED CT that have been specifically bound to that data element
Description	The solution shall restrict the SNOMED CT concepts available for search and selection to those permitted by the terminology binding associated with the relevant data element. The terminology binding may be defined by a SNOMED CT hierarchy or subhierarchy, reference set, value set, ECL constraint, or other explicitly defined set of SNOMED CT concepts. Concepts that do not satisfy the applicable terminology binding shall not be selectable for that data element. Examples of search and navigation capabilities that support efficient concept selection are available through the SNOMED CT search demonstration: https://ihtsdo.github.io/snomed-ui-examples/
Category	Terminology guidance

N°	U05
Summary	Allow data capture using a temporary or container (“dummy”) code when concepts cannot be found
Description	Where a user cannot identify a suitable SNOMED CT concept for a SNOMED CT-coded data element, the solution shall provide a mechanism to record the clinical information temporarily using a temporary or container code. This code shall be clearly distinguishable from SNOMED CT-coded data and shall not be assigned a SNOMED CT Concept ID, placeholder code, or other representation implying that it is SNOMED CT-coded. This solution is bound to the terminology feedback mechanism defined in TSP7 *Provide a reporting/feedback mechanism*, requiring the missing concept to be reported through the established Belgian NRC process.
Category	Terminology guidance

2.3.2 User interface

N°	**U06**
Summary	Show user preferred display term for each SNOMED CT concept
Description	When a user selects a SNOMED CT concept from the search results, the solution shall display the selected value using the same term that was presented and selected by the user. The solution shall not automatically replace the selected term with another description of the same SNOMED CT concept during the current data-entry interaction.
Category	User Interface

N°	**U07**
Summary	The eHR system shall display the most relevant concepts
Description	The solution shall provide at least one mechanism that enables users to rapidly access commonly used, recently used, personalized, or contextually relevant SNOMED CT concepts without performing a full terminology search. Supported mechanisms may include: • user or practice favorites; • recently selected concepts; • context-specific suggested concepts; • personalized concept preferences; or • an equivalent mechanism based on the user's clinical context or previous usage. Concepts made available through such mechanisms shall be subject to the same validation rules as concepts retrieved through standard search, including active status and any terminology binding applicable to the data element.
Category	User Interface

N°	**U08**
Summary	The eHR is capable of integrating tools/solutions facilitating the search and capture of clinical data
Description	The eHR shall support integration with tools or services that analyse clinical information during data entry and return candidate SNOMED CT concepts for user selection and confirmation. Candidate concepts shall be presented as suggestions and shall not be recorded as coded clinical data without explicit user selection or confirmation. Before a suggested concept is recorded, the eHR shall apply the same validation requirements as for concepts selected through the standard data-entry mechanism, including validation of active status and any terminology binding applicable to the data element. The integration mechanism shall allow the Concept ID and an appropriate description of each suggested SNOMED CT concept to be provided to the user.
Category	User Interface

2.4 Objective 3 - Storage

Clinical information captured using SNOMED CT shall be stored in a manner that preserves its coded meaning and supports consistent interpretation, interoperability and subsequent processing. The storage and processing of electronic health data shall comply with applicable European and Belgian legal and regulatory requirements, including the applicable requirements of the EHDS.

2.4.1 Storage

The solution shall persist the SNOMED CT concept identifier corresponding to the clinical information recorded by the user. A proprietary interface terminology or coding system may be used to facilitate data entry, provided that the corresponding SNOMED CT concept identifier is registered and remains the basis for recorded clinical information.

N°	**S01**
Summary	The eHR must store SNOMED CT concept identifiers in the health records
Description	For every SNOMED CT-coded data element, the solution shall persist the SNOMED CT Concept ID representing the recorded clinical meaning; and the term displayed to or selected by the user at the time the data was recorded. The Concept ID shall remain the authoritative coded representation of the clinical meaning. A Description ID or free-text term shall not be stored as a substitute for the corresponding Concept ID and will be considered a critical failure.
Category	Storage

N°	**S02**
Summary	Ensure that the context of each SNOMED CT concept identifier or expression is clearly represented
Description	For each SNOMED CT-coded data element, the solution shall record a SNOMED CT concept, that represents the clinical meaning of the information being recorded. Qualifiers, status indicators, workflow states or other contextual attributes may supplement the recorded clinical concept but shall not be used as a substitute for the SNOMED CT concept representing that clinical meaning. The combination of the recorded SNOMED CT content and the applicable data-model elements shall allow the intended clinical meaning to be determined without relying on free-text interpretation.
Category	Storage

N°	**S03**
Summary	Active SNOMED CT concepts for data entry
Description	The eHR shall prevent inactive SNOMED CT concepts from being newly selected or recorded as the coded value of a clinical data element. Only concepts that are active in that SNOMED CT version and permitted by the applicable terminology binding shall be accepted for recording.
Category	Storage

N°	**S04**
Summary	Preservation of historically coded data
Description	Where a SNOMED CT concept recorded in a patient record is subsequently inactivated in a later terminology release, the eHR shall retain the originally recorded SNOMED CT Concept ID as part of the clinical record. A terminology update shall not replace, overwrite or otherwise modify the originally recorded Concept ID solely because that concept has become inactive. Any association with an active replacement or successor concept shall be maintained separately from the originally recorded Concept ID and shall not alter the historical record.
Category	Storage

2.4.2 Analytics & Reporting

N°	S05
Summary	Use maps from SNOMED CT to national and international classifications including legacy and current data
Description	In order to enable clinical reuse, analysis and reporting of data, including legacy and current data, the solution shall support the import, storage and use of mappings between SNOMED CT and the following national and international classifications and terminologies, where these mappings are provided as part of the Belgian SNOMED CT Edition or otherwise officially made available for Belgian use: • ICD-10; • ICPC-2; • ICHI; • NIHDI nomenclature; • LOINC; and • Orphanet codes. For each supported mapping, the solution shall be able to derive the applicable target code or codes from a SNOMED CT concept in accordance with the mapping rules, metadata and conditions defined by the mapping artefact. The mapped results shall be available to the solution components that require them, including, where applicable, user display, generated documents, reporting and data extraction. The supplier shall document the supported version of each mapping artefact and the mechanism used to keep it aligned with the corresponding Belgian SNOMED CT Edition or other officially published Belgian source.
Category	Analytics & Reporting

N°	S06
Summary	Use SNOMED CT and its defining relationships for reporting, data extraction or clinical decision support purposes
Description	Reporting, data extraction or clinical decision support functionality must (re)use SNOMED CT data. The solution evaluates SNOMED CT-coded data based on the meaning or grouping of concepts. The solution shall support evaluation using the SNOMED CT ontology rather than requiring all applicable concepts to be individually enumerated. Such evaluation shall support: • hierarchical is-a relationships; and • defining attribute relationships relevant to the concepts being evaluated. The results produced shall reflect the relationships present in the SNOMED CT edition and version applicable to the processed data.
Category	Analytics & Reporting

2.5 Objective 4 - Interoperability

Data entered into the system shall be reusable for data exchange (via the relevant care sets and FHIR profiles) as well as for secondary use, without requiring healthcare professionals to enter the same information more than once.

N°	**I01**
Summary	Use the national exchange standard FHIR to share data that are SNOMED CT coded in the eHR
Description	Use the national exchange standard FHIR to share data that are SNOMED CT coded in the eHR.
Category	Interoperability

N°	**I02**
Summary	Reuse SNOMED CT coded data elements for all relevant message exchanges
Description	Reuse SNOMED CT coded data elements to (automatically) populate FHIR resources for all relevant message exchanges.
Category	Interoperability

3. Clinical Requirements

- Clinical workstream
- Clinical process requirements (business rules)

TO BE Completed -> version 2 -> December 2026

4. Library

4.1 Glossary

Link to SNOMED CT Glossary:
https://docs.snomed.org/snomed-international-documents/snomed-ct-glossary

Other useful terms:

Term		Description
API	Application Programming Interface	It is a set of rules and protocols that lets different software programs talk to each other and share data.
ECL	Expression Constraint Language	A mechanism for querying SNOMED CT that takes into account both hierarchical and defining relationships, enabling queries to include more specific descendant concepts automatically. http://www.snomed.org/ecl
NTS	National Terminology Server	
SCT	SNOMED CT	
	Data element	A discrete, structured component of a clinical information model used to record a specific item of information. A data element defines the context and type of the value that may be recorded and may be associated with a terminology binding that constrains the permitted coded values. In the context of this document, a SNOMED CT-coded data element is a data element for which the coded clinical value is represented using SNOMED CT.

4.2 Useful Links

Search Demo : https://ihtsdo.github.io/snomed-ui-examples/

Link to the portal NRC:
https://apps.health.belgium.be/terminology-portal/snomed_ct_requests/nl
https://apps.health.belgium.be/terminology-portal/snomed_ct_requests/fr

EHDS
https://www.datavoorgezondheid.nl/onderwerpen/e/european-health-data-space/epds

https://www.ehealth.fgov.be/nl/page/ehds-european-health-data-space-de-europese-verordening-betreffende-de-europese-ruimte-voor-gezondheidsgegevens

https://www.ehealth.fgov.be/fr/page/ehds-european-health-data-space-le-reglement-europeen-relatif-a-lespace-europeen-des-donnees-de-sante

4.3 Github

Link to the SNOMED CT_Implementation Github:
https://github.com/ehealthplatformstandards/sct_implementation

4.3.1 Content

- Timeline
- Requirements Specification Document
- Roadmap & Milestones
- Clinical & Technical Requirements
    - Documentation
    - Examples
- Technical Requirements
    - Separate folder for each requirement
- Registration
- Issues