

**If done right, a properly designed termbase can be quite a powerful tool that goes way beyond what a simple bilingual glossary can do!**

**H**ave you ever tried to translate a medical report that includes handwritten notes by a doctor? If so, you may have already experienced what it means when you have the fear of the translation god put into you! Ultimately, patient records translation is a world where precision meets chaos and ancient wisdom finds its way into modern technology!

Medical translations generally require understanding contextual clues and working out abbreviations and acronyms or even just barely minimal codes from official classification and nomenclature systems or healthcare software. It's a world of prefixes and suffixes, of eponyms and toponyms, and the result of a constant flow of re-translations or back translations over the course of centuries.

Therefore, medical termbases (and really termbases for any technical subject!) must provide options for terminologists to handle the semantic features of a vast amount of challenging terms for optimal organization and retrieval later on.

It's not surprising, then, that termbase users and creators, such as language service providers and translators, understand what a difference a well-constructed termbase can make when it comes to consistency, accuracy, and overall translation quality. They also know how complicated terminology work can get or how quickly termbase management can become a significant project on its own, requiring additional resources and expertise.

Then, there's always the human factor that determines how terms are collected, stored, and used. Many, if not most, translators are not trained terminologists and use an ad hoc approach when collecting, storing, and managing terms. This can result in vague or confusing entries or inconsistent approaches, especially when multiple users are involved in the term recording process.

If done right, however, a properly designed termbase can be quite a powerful tool that goes way beyond what a simple bilingual glossary can do! Using medical translation projects as an example, a correctly thought-out termbase makes the process of translating medical documents, with their many acronyms, abbreviations, complex terms, and established phrases, a lot easier, especially when the source texts include content from different medical specialties, which is often the case with patient medical records.

### **Creating Termbases: Getting Started!**

A good starting point when thinking about term storage and termbase mapping (termbase setup) is how the termbase can be included in existing processes and systems and during the translation and review steps. An evaluation of the systems and processes currently in place and what different CAT tool providers have to offer are two out of many options to consider. (Note that this article refers to termbases that can be integrated into CAT tools and translation processes and not necessarily standalone terminology management products).

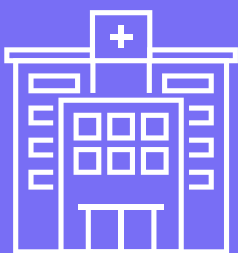
Thoughts on

# **MEDICAL TERMINOLOGY**

## **Termbase Mapping and Term Storage**



By Marion Lemari



Patient records translation is a world where precision meets chaos and ancient wisdom finds its way into modern technology!

An internal server-based solution, for example, may require the assistance of IT staff while file-based or cloud-based termbases from CAT tool providers may come as ready-to-use solutions and even include predefined termbase templates that can be customized as needed. Some CAT tool providers even specialize in offering customized solutions based on a company's linguistic needs. These solutions only serve a very specific purpose.

Aside from any technical aspects and what languages to include, the time and effort it takes to manage a termbase may also be an important factor to consider along with what type of term information to record to achieve consistency throughout the termbase entries. This is especially true if multiple terminologists manage the termbase and make changes to the entries on a more regular basis when new information becomes available.

### Termbase Structure

In its simplest form, a bilingual glossary includes a source term and a target term in alphabetical order and maybe a few notes on usage. While helpful, this format doesn't provide the full picture. On the other hand, termbases, which often have a multi-level "tree-like" structure, can provide so much more information that can aid in selecting the correct terms for a specific context.

CAT tool termbase templates may seem overly complex to new users. As such, these users may not realize that guidelines

established by reputable organizations around the world have found their way into these templates since terminology as a science (and an art!) offers many theoretical and practical approaches and solutions.

Terminology work in its most basic form includes the identification of terms in context, but this can mean different things to different people, not only for terminology research but also for recording terms in a termbase.

One common termbase structure, the default structure in Trados Studio, for example, includes an *entry level*, an *index level*, and a *term level*. All these levels allow for various additional descriptive fields that can be useful not only for a translation-oriented termbase intended to guide and assist the translator in the translation process by providing information on a term's meaning and usage, but also for additional review and verification steps. A well-planned termbase can reduce terminology errors and ensure consistency.

### Termbase Entry Level:

At the entry level, most termbase templates include an entry identifier, a field to specify the subject area, and options such as the term's source, the term's status, and a notes field in the event it becomes necessary to provide additional information about the concept at hand at the entry level (e.g., for other users).

In general, a termbase creator can choose between different descriptive field options, such as picklists, text

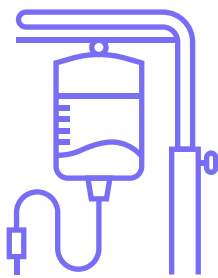
fields, number fields, calendar features, Boolean parameters, and so on, for various fields at all termbase levels.

In addition to following a concept-based approach at the entry level, in an online or server-based termbase this section can also serve as an opportunity for effective communication not only with the translators through clearly establishing the relationship between terms and a concept based on the medical specialty, but also with other stakeholders who may assist with the recording of terms. By default, templates may have a notes field or another way of leaving comments, but thinking about additional fields that can be used solely to communicate with other parties can streamline terminology work and bridge time zone and location differences.

A term status field, for example, allows for the creation of filters. This can be helpful for filtering terms that need to be reviewed by a second terminologist, for example. Other useful options can include time stamps that clearly show at a glance when a term was last updated. Sometimes, certain metadata is recorded automatically for retrieval later on, but in other instances, it makes sense to adjust basic formats according to one's more immediate needs, such as clearly highlighting who has made changes to an existing term entry.

### Concept Fields at the Entry Level:

Concept fields, such as definitions or concept notes, can either be included at the entry level or at the index or language level depending



on the complexity of the termbase and the number of languages used. For a medical termbase, specifying the medical specialty and even the subspecialty should always be part of the entry level.

#### **Index or Language Level:**

The index or language level displays the languages of a termbase through the language identifier. At this level, context information, such as a broad definition of the concept at hand, images, links, etc., highlighting information relevant for all languages can be included.

Sometimes, this level also includes notes pertaining to situations where more or less distinctions between sets of unique characteristics for a concept need to be made in a termbase, such as a particular note about a local health issue. Highlighting differences at this level is also useful for cultural concepts, for example, although more specific distinctions are usually made at the term level.

**Term Level:** At the term level, termbases include the option to add the terms in the languages specified at the index or language level.

For medical purposes, the entries at the term level can include multiple terms that apply to the same concept (e.g., medical abbreviations or expansions and even codes).

Now, there may be instances where it makes sense to add a source term but not a translation. For medical terminology, this may include certain general elements of medical terminology, such as Latin and Greek prefixes or suffixes and their translations in a

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definition field rather than in the target-language term record. This means they can be referenced through the termbase's search field but won't necessarily show up in the term recognition or during verification steps. Adding terms without translation can aid the translator in getting a general idea about what a term could mean that consists of a prefix, suffix, and their combining term.


At the term level, we usually find more definition and context fields to assist in describing semantic features. These are of particular importance with concept characteristics that apply only to one of the languages used in the termbase but not to others. An example would be a term that exists as a generic or broad idea (hypernym) in one language but requires more distinctions in another (hyponyms). Contextual information can include a noun's gender or notes on usage, common collocations, or even further definitions if needed. Synonyms are added as well, although in a medical context, translators tend to deal more with terms of partial equivalence and their correct usage (quasi- and pseudo-synonyms). Other than that, the entries can consist of simple terms,

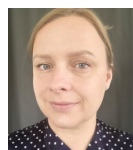
complex terms, and even entire phrases.

#### **Effective Planning = An Effective Outcome**

My approaches on termbase mapping and storage are just suggestions based on my experience in the language service provider setting that includes large volumes of medical translations. Every project is different, and the beauty of a termbase with this type of structure is that it can be customized to get the best results regardless of the subject! As a final thought, I want to highlight that it's always advisable to refer to existing standards and publications that provide a more systemic description and best practices for terminology research and term storage solutions to ensure translation quality, consistency, and accuracy.

In summary, the effective planning of termbase storage and mapping can improve translation outcomes and ensure better patient care or better communication between healthcare professionals while also facilitating communication and collaboration between terminologists and the termbase end users (translators!).

Finally, reviewing all the options available for termbase mapping and storage should include considerations regarding the integration of termbases into existing systems, potential future trends, such as planned upgrades of systems, the human factor, and overall, how collaborators work together. In addition, a well-planned termbase may allow for the optimization of internal processes, compliance, transparency, and accountability. 



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