

# Translating medical reports: challenges and quality assurance

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## Abstract

This article discusses the challenges and quality assurance measures implemented by the authors when translating medical reports. In particular, the authors discuss the challenges posed by acronyms, handwritten and scanned text, and desktop publishing, as well as their use of computer aided translation (CAT) tools, term bases, and bilingual revision in their quality assurance workflow to ensure their translations are accurate.

## Introduction

As medical translators, we work with various types of medical documents, but perhaps one of the most frequent and challenging documents we come across is medical reports. We will draw on our own experiences to discuss three challenges we have come across when translating medical reports, as well as three quality assurance measures we implement in our workflow.

### Challenge 1: Acronyms

Acronyms are extremely common in medical reports, however despite how frequently they are used, we believe they are perhaps one of the most difficult elements to translate. Unlike journal articles where standard practice is to include the full form of the term when the acronym is first used, this is very seldom the case in medical reports. Medical translators must therefore be familiar with medical terminology in both the

source language (the original language) and the target language (the language the text is being translated into) in order to be able to translate medical acronyms effectively, in addition to being able to implement research and technological skills to identify uncommon acronyms.

### Unidentifiable acronyms: our experience

We were once translating a medical report for a patient who received treatment abroad and wished to continue their follow-up in the UK. There were several acronyms in the article, some we knew from past experience, and others required some research, but this translation will always be memorable because there was one acronym that we could not identify, no matter how much research we did. For context, the medical report was originally in Spanish and was issued by a cardiologist, we were translating the text into English, and the Spanish acronym in question was “DI”.

### What did we do?

Usually when we come across an unknown acronym, we will look at credible resources, such as Cosnautas, discuss the issue with colleagues, or search and/or post questions in specific medical translation forums, such as the Institute of Translation and Interpreting Medical and Pharmaceutical Network’s e-group. We found many possible translations, but unfortunately, they did not seem appropriate in the context of cardiology, and thus we had to try a different approach. With the patient’s permission, we decided to contact the hospital who issued the report directly. The hospital informed us that there was a typo, and the acronym should have been “DL” for *dislipidemia*, or *dyslipidaemia* in English.

### Challenge 2: Handwritten and scanned text

We all know the stereotype that doctors have infamously illegible handwriting. It turns out the

stereotype is true in some cases, and despite living in a world with an abundance of technology, there are times when medical reports are written manually with a pen and paper. When the doctor’s handwriting is illegible, this can add an “extra round” of translation to the task, as the handwritten text first needs to be “translated” into legible text before it can be translated into another language.

This issue of illegibility also occurs when the source text is a scanned document or a photograph of the original text, as low-quality photographs or scans can result in blurry and thus hard to read text. There is also a possibility of truncated sentences with handwritten and scanned documents due to margins being cut off during the scanning or photographing process.

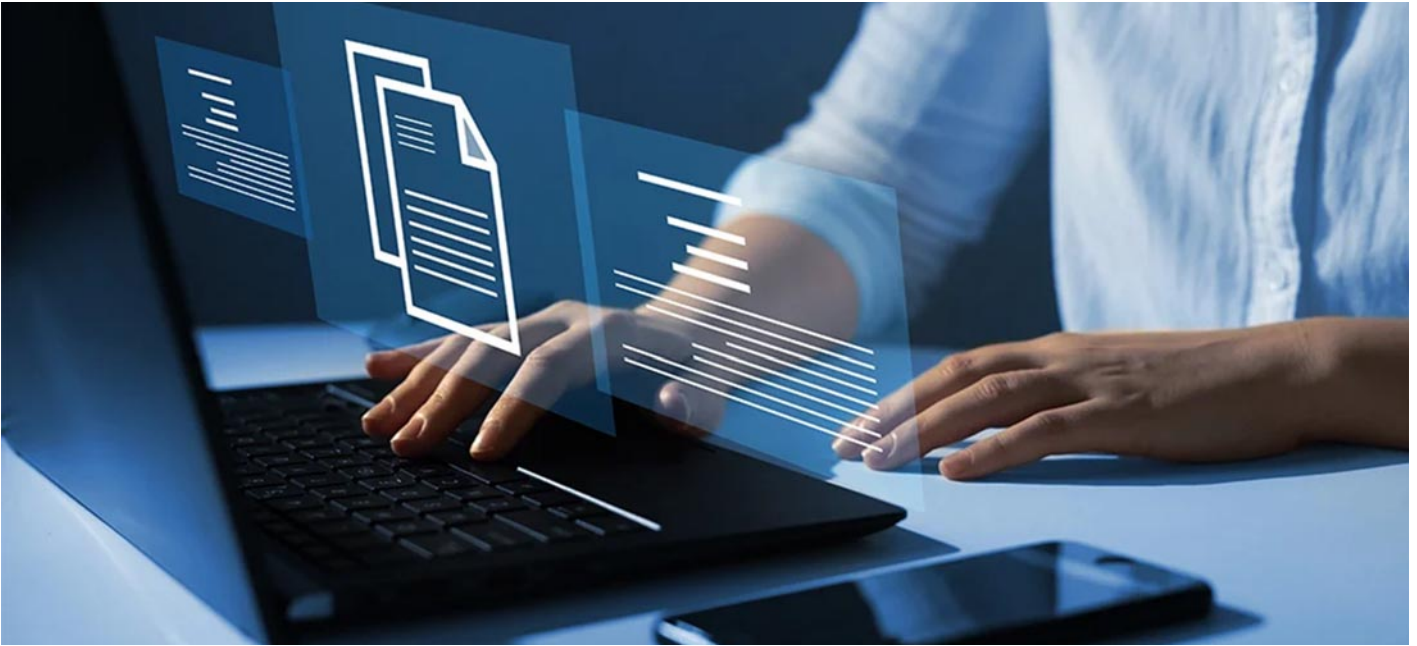
### What can we do?

Standard translation practice is to insert [illegible text] into the translation when the source text is illegible. The translator should of course use their background knowledge and the resources available to them to try to decipher the text before implementing this strategy, because if [illegible text] is inserted too many times, the resulting translation may be incomprehensible, thus defeating the object of the translation task. We believe the translator also has the responsibility to inform the client if they believe the text is not suitable for translation due to the quality of

the source text. In such cases, the translator could either refer or collaborate with a colleague who they believe may be able to decipher the text, or even advise the client on how to improve the quality of the text, for example, take photographs of individual sheets of paper without flash.

### Challenge 3: Desktop publishing

Desktop publishing is not a skill necessarily associated with a translator, yet it is a useful and sometimes necessary skill to produce a faithful translation of the source document.



When a medical report contains tables or attached images, graphs, etc. this information should also be translated. The aim is to keep the format of the translation as similar as possible to the source text, thus allowing someone who does not speak the source language to look at the source text and the translation side-by-side and understand which part of the source text corresponds to the translation. However, when the formatting is difficult to reproduce, the translator may spend more time desktop publishing than translating.

#### What can we do?

There is no general solution to this problem. Tables tend to be the easiest element to format, although they may require some alterations as languages tend to have different space requirements. For example, “units” in English is five characters, whereas the Spanish equivalent “unidades” is eight characters, which can affect how much space is required to convey the same information across languages. Images that include text tend to pose a greater challenge. One solution is to copy the original image and superimpose a text box with the translation over the source language text. When there is not much text to translate, this can be an effective solution, however the use of multiple superimposed text boxes can affect

the aesthetic quality or intelligibility of the image. In such cases, adding a legend to the image with the translation of each term can be an effective way to convey the information. If the format is too difficult to reproduce, the translator should try to be as faithful to the original format as possible and add any non-textual information in square brackets or add a translator’s note, which is a footnote to explain a specific aspect of the translation.

#### Quality assurance

Implementing effective quality assurance measures in medical translation is vital, as any mistake could have very serious consequences.

This issue of illegibility also occurs when the source text is a scanned document or a photograph of the original text, as low-quality photographs or scans can result in blurry and thus hard-to-read text.

#### Computer-aided translation (CAT) tools

While it is beyond the scope of this article to discuss CAT tools in detail, we believe they must be mentioned as they form an important part of our quality assurance process. At the most basic level, CAT tools work by splitting the source text into more manageable chunks, usually sentences or paragraphs, and act as an interface for all the different resources and quality assurance tools used by translators, such as termbases, machine translation engines, translation memories, among others. For more information on CAT tools and their

features, we would recommend reading Routledge Encyclopedia of Translation Technology, and in particular Chapter 3 – Computer-aided translation: systems.<sup>1</sup>

#### CAT tools and termbases

Termbases, or glossaries, in the context of translation, are bilingual databases of terms and their translation into one or more languages. They are especially useful when translating acronyms, as once the translation of an acronym has been confirmed through research, it can be added to a termbase for future reference, both in the current translation task and in future tasks. Depending on the termbase programme used, additional information can be added to a given entry, for example, we use the termbase feature in the CAT tool Memo Q, and we are able to add images, examples of sentences where the term is used in both the source and target languages, and any additional notes, among other information.

We believe that termbases are more effective when used within a CAT tool as opposed to a stand-alone termbase, because the CAT tool will indicate when a term in the termbase appears in the source text, and it will also create a warning message if the corresponding term in the target language is not used, thus ensuring that terminology is translated consistently and accurately.

While we would recommend using CAT tools to translate medical reports, there are some document formats which are not compatible with CAT tools, particularly the aforementioned scanned documents and photographs, as the



CAT tool is unable to extract the text from the images. There are solutions to this problem, such as optical character recognition software, however it is beyond the scope of this article to discuss this in detail. If a CAT tool cannot be used, the translator can (and should) still use a termbase, but they will need to manually crosscheck the termbase with the source and target document to ensure an accurate and consistent translation.

#### Bilingual revision of translation

The final quality assurance step that should be carried out, regardless of whether a CAT tool is used, is a bilingual revision of the translation against the source text. This involves reading the source and target text side by side to ensure that

the translation has been performed correctly. The translator should first perform a self-check of their own work to ensure the translation is correct, and whenever possible, the text should also be bilingually reviewed by another medical translator. Bilingual revision is listed as a translation workflow requirement in the ISO 17100 international translation standard,<sup>2</sup> and therefore we would always recommend implementing this step. When translators work with Language Service Providers, it is the responsibility of the latter to organise the bilingual revision of the file, but when working with patients or healthcare professionals directly, translators should consider collaborating with colleagues to implement this step.

#### Final remarks

Based on our own experiences, we have discussed some of the challenges involved in the translation of medical reports, such as the translation of acronyms and handwritten and scanned documents, as well as additional desktop publishing requirements. This list is of course not exhaustive, as translators may experience challenges inherent to their language combinations, as well as the unique challenges posed by individual texts. By using the resources available to them, and by implementing effective quality control measures, medical translators are able to facilitate the communication of information between patients and healthcare professionals across different languages and cultures.

#### Disclosures and conflicts of interest

The authors declare no conflicts of interest.

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