Optimizing English to Croatian Terminology for Cochrane's Plain Language Summaries Translation

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Contents

Abstract

The centre of this thesis are Cochrane's English to Croatian terminology and set of instructions for volunteer translators. The main aim was to optimize the mentioned termbase and instructions, so that future volunteer translators have an organized and coherent foundation for the translation of Cochrane's plain language summaries. In the beginning, theoretical preliminaries of terminology are explored, as well as terminological principles. Those principles provided a background for the optimization of the termbase. After checking and correcting the termbase and instructions, the analysis was divided into five and four main categories of errors.

Key words: terminology, Cochrane, term, analysis, termbase

Sažetak

Središte su ovog diplomskog rada Cochraneova englesko-hrvatska terminologija i upute za prevoditelje volontere. Glavni cilj bio je optimizirati spomenutu terminološku bazu i upute, kako bi budući prevoditelji volonteri imali organiziranu i koherentnu osnovu za prijevod Cochraneovih laičkih sažetaka. U početku su opisana teorijska obilježja terminologije, te terminološka načela. Ta su načela služila kao pozadina za optimizaciju terminološke baze. Nakon provjere i ispravljanja terminološke baze i uputa, analiza je podijeljena u pet i četiri glavnih kategorija pogrešaka.

Ključne riječi: terminologija, Cochrane, termin, analiza, terminološka baza

1. Introduction

Translation is a complex process that is often misunderstood and viewed as easy and something that anyone could do, even without much experience in the translation field. Although some texts that are being translated do not require to be translated in an exact way, for some, it is only natural that the translation process follows a set of rules and has an exact goal and target audience. Some of those rules are just common sense in the translation world, more like unwritten translation rules, and sometimes, they are set by the clients and need to be followed to achieve a successful translation.

The mentioned rules come in the form of a client termbase and client instructions. The most common example of a termbase is an Excel table with terms/phrases in the source and target language. Big opuses of vocabulary exist in languages today, and thus, there are so many ways of translating words in a text; however, sometimes, a client wants or needs to have certain words translated in a certain way. Therefore, the client may create a simple glossary or a proper termbase with exact solutions for the translator and instructions to offer guidance in other aspects of translation, such as grammatical coherence, style, etc. Those termbases and instructions also need to follow a set of rules or principles, in this case, terminology principles.

This thesis aims to prove that setting up a good terminology foundation is a crucial and complex process by analysing all the steps it took to optimize Cochrane's English to Croatian terminology and instructions.

The thesis is divided into four main parts: the theoretical section, the methodology section, the analysis section, and the appendices. To explain the main goal of the thesis, the first section begins by stating all the reasons and motivation for creating an updated version of Cochrane's termbase and instructions for volunteer translators. The following section focuses on the methodology. It is divided into two parts; the first part gives a deeper insight into the history and present of the Cochrane Project. The second part presents all the concrete steps and instructions for optimizing Cochrane's termbase and instructions. The following section introduces the theoretical part. It is again divided into two parts. The first part focuses on the history and modern terminology, its relationship with translators, and the terminology principles that were the basis of the optimization of Cochrane's termbase and instructions. The second part focuses on the praxis of translating medical texts. After that, the next section describes in detail the analysis of the process of optimizing Cochrane's termbase and instructions. Subsequently, the conclusion section offers a

conclusive summary of the thesis. Then, the subsequent section contains the attached final versions of the termbase and instructions. Lastly, all the sources used in this thesis are listed.

2. Rationale

Cochrane is a medical-based project where volunteer translators are given an opportunity to simplify complex medical language and bring medical knowledge closer to the broader public. To do that, the volunteer translators receive guidance in the form of a termbase and instructions. The translation revolves around the termbase and instructions, and it is of great importance to keep them up to date and check for any possible errors.

The purpose of this thesis is to optimize Cochrane's English to Croatian termbase and instructions, follow and apply the terminology principles, and tackle the most frequent problems that occur during translation. This will create the most accurate terminology and instruction for the translators and ease their participation in the Cochrane project.

The focus of this thesis will be the optimization process and the problems that occurred during that process. Cochrane's English-to-Croatian terminology was not aligned with the terminology principles, and this thesis aims to show how it breached the terminology principles and how that problem was solved. In addition, the thesis also shows a detailed analysis of the corrections of the term entries in order to avoid confusion among translators and to create a clean and easy-to-use termbase. Moreover, it will highlight the instruction's lack of information and the newly added content to keep the translations more coherent.

Addressing all of the mentioned research problems was essential for creating a termbase and instructions will benefit future volunteer translators. Each approached problem gave deeper insight into the challenges that translators face, and this thesis was done with the intention of easing those challenges.

3. Methodology

The most important step in optimizing Cochrane's English to Croatian terminology and instructions was to collect the corpus. The corpus consists of a termbase, which is in the form of an extracted Excel table document with three columns: en_us, part of speech and hr (some instructions were also written in the table), and of a one-paged pdf document with written instructions on what to take into consideration while translating. The termbase was extracted on July 2, 2024, via the CAT tool Phrase and was sent by Ružica Tokalić, the coordinator for Cochrane Croatia.

Table 1 below shows the process for the optimization of Cochrane's termbase and instructions:

Table 1. Methodology of optimizing Cochrane's termbase and instructions

STEP 1	SEARCHING FOR SOURCES
STEP 2	EXTRACTION OF THE TERMBASE FROM THE PHRASE
STEP 3	ANALYSIS OF THE TERMBASE
STEP 4	ANALYSIS OF THE CLIENT'S INSTRUCTIONS
STEP 5	OPTIMIZATION OF THE CLIENT'S INSTRUCTIONS
STEP 6	REVISION OF THE TERMBASE AND INSTRUCTIONS
STEP 7	RECOMMENDATIONS AND CONCLUSION

The results will be a clean termbase and updated instructions for future volunteer translators.

This section and its chapters will explore the significance of the Cochrane project and introduce the methodology of this thesis.

3.1 Cochrane

This subchapter will introduce the goals of the Cochrane project and my personal experience with it. Unless stated otherwise, all information is taken from the official Cochrane website or given by Cochrane's personnel.

Cochrane is a not-for-profit organization. It is a diverse and international network with headquarters in the UK and a member of the UK National Council for Voluntary Organizations. Cochrane's work is globally known as "the benchmark for high-quality information about the effectiveness of health care". Cochrane generates reliable information because it does not accept commercial or conflicted funding. Therefore, the work at Cochrane is done freely and without constraints of commercial and financial interest. The Cochrane project is for everyone who is interested in using high-quality information for health reasons. Whether a patient, carer, researcher, clinician, or even a student wants to gain healthcare knowledge, Cochrane welcomes everyone who wants to learn and understand more. Not only that, anyone who is interested in Cochrane can also become an active member alongside health professionals and researchers. The Cochrane Collaboration was launched in 1993 and has been active for almost 30 years, with members from more than 190 countries worldwide.

In this modern digital age, people can access everything, even health information. However, even false information can be put on the Internet, and people cannot know if the information is accurate. That is why the Cochrane project publishes health evidence summaries (plain language summaries, abstracts of Cochrane Reviews and related content, such as podcasts or blogshots). As most health documents and information are published in English, Cochrane's groups, local funders, and volunteer translators take care of translations so everyone can access health information. The information can be found in Cochrane's Library: "The aim of the library is to make the results of well-conducted controlled trials readily available, and it is a key resource for evidence-based medicine" (Gibson 2012). There are now over 49,000 translated health evidence summaries in Cochrane's Library in 20 languages: Simplified Chinese, Traditional Chinese, Croatian, Dutch, English, Farsi, French, German, Hindi, Hungarian, Indonesian, Japanese, Korean, Malay, Polish, Portuguese, Romanian, Russian, Spanish, Tamil and Thai. The most translated Cochrane reviews are "Vitamin C for preventing and treating common cold" (16 languages), "Smoking reduction interventions for smoking cessation" (15 languages), "Acupuncture and related interventions for smoking cessation" (15 languages) and "Pilates for low back pain" (15 languages). Of particular

interest for this thesis are the translations into Croatian. Till July 2024, there were 3377 health evidence summaries translated into Croatian (Ružica Tokalić, coordinator of Cochrane Croatia). The translation is done using the CAT tool Phrase, using the terminology and instructions provided by Cochrane. When the translation is done, several reviewers and supervisors check the translation, including language and medical experts. It is important that the translations rely on the "Strategy for Change" key principles:

- **Collaboration**: ensure Cochrane maintains the global collaboration that underpins the value of Cochrane reviews;
- **Relevance**: ensure the evidence Cochrane produces addresses priority issues for the world and so maximizes our impact on global health;
- **Integrity**: be clear about why Cochrane prioritizes topics and avoid becoming subject to vested interests;

Lastly, **Quality**: maintain and extend Cochrane's reputation for providing the best evidence for global health questions through prioritization and focus.

It is important to update Cochrane's English to Croatian terminology and instructions for translating plain language summaries because they serve as a foundation for making important health information correct, reliable, and accessible to everyone.

3.1.2 Personal experience with Cochrane

I chose Cochrane because it is a topic that is familiar and relevant to me. I enjoyed translating for Cochrane because of the importance of making medical health knowledge more accessible in Croatia.

In 2023, I and my 14 colleagues took the elective course "Introduction to Terminology" by Professor Marija Omazić. One of the requirements for the course was participation in the Cochrane project as a volunteer medical translator. To join the project, we were asked to translate from English into Croatian. After successfully completing the task, we had to create a Phrase account, where we later received our three real translation tasks. We translated plain language summaries (PLS). "Plain Language Summaries (PLSs) help people to understand and interpret research findings and are included in all Cochrane Reviews. PLSs are created using standard content, structure, and language to ease understanding and translation." The summaries were relatively

short, ranging from 400-900 segments in Phrase. The summaries I received were “Hypothermia for neuroprotection in adults after cardiac arrest”, “Methylphenidate for children and adolescents with attention deficit hyperactivity disorder (ADHD)” and “Pharmacological interventions for pruritus in adult palliative care patients”. The professor provided us with plenty of online medical sources on the Moodle page of the course, e.g., HALMED, MDS priručnici, Struna, Pliva, OpenMD medical dictionaries, etc. From Cochrane we received instructions on what to pay special attention to (e.g., translate “study” as “*istraživanje*” and not as “*studija*”) and a termbase, with terms and phrases accumulated from Cochrane summaries in English and its Croatian equivalents. Everything was helpful, but we had some struggles with the termbase. The termbase was full of duplicates, conjunctions, and several possible translations for the same term, and no indication of their status, i.e., which one was preferred. It was out of line and not following the terminology principles, which will be analysed later in the text. Upon inquiry regarding the potential topic for a master’s thesis on Cochrane, it was suggested by the professor that optimizing Cochrane’s terminology and instructions would be a suitable focus. This proposal was subsequently accepted, leading to the assignment of responsibility for optimizing the disorganized termbase.

4. Theoretical preliminaries

The theoretical section of this thesis focuses on terminology and translation of medical texts.

According to the Cambridge Dictionary, terminology consists of "special words or expressions used in relation to a particular subject or activity". In other words, terminology is the foundation of expert fields, because language is the core of communication between experts. The development of specific terms ensures that scientific concepts are effectively transferred between experts. Terminology also ties "the service of science, technology and communication" (Cabré 1992:9) together.

The expert field concerned in this thesis is medicine and medical language. Medical translation can be done without a medical college degree, but accuracy and implementing quality assurance of the translation is imperative for the safety of patients and doctors. In order to do that, medical translators need to consider every detail and do research on their own to produce quality text for lay readers and experts.

This section and its chapters will analyse modern terminology, its history, the translation of medical texts, and the problems a translator faces during the process.

4.1. Terminology - history

This subchapter contains a historical overview of terminology as a discipline. It is focused on the beginning, evolution, and growth of terminology's importance.

Terminology has been a part of the world of linguistics since the 1930s, but in the 1990s, the significance of terminology started to grow in a scientific matter. "Terminology, as we understand it today, first began to take shape in the 1930s and has only recently moved from amateurism to a truly scientific approach" (Cabré 1999:1). This was evident because the attention was shifted to "[terminology] principles, bases, and methodology" even on "an international scale". (Cabré 1999:1). The rise in interest in terminology occurred because of scientists and technicians (Cabré 1999:2). Thanks to the rapidly growing internalisation of science, scientists found themselves in need of some kind of set of rules for formulating a collection of terms for their respective science fields (Cabré 1999:1). Botanists, zoologists, and chemists voiced their wish at international meetings, and so they have become the "leaders in terminology" (Cabré 1999:1). But it was not

for long that scientists were the only ones in need of terminology, engineers, and technicians joined them soon after (Cabré 1999:1). Times were changing, and so the world advanced also in the technological aspect. The technicians needed established unity in the new technical oriented language (Cabré 1999:2). Because of the development and change society was going through (all aspects), terminology has also gained the status of a social need:

> During the simultaneous expansion of knowledge and the growth of technology and communications in the eighteenth century, terminology was seen as a necessary tool for overcoming some of the difficulties associated with these multiple developments. Only in the twentieth century has terminology acquired a scientific orientation while at the same time being recognised as a socially important activity—(Rey 1995, as cited in Cabré 1999:1)

It is no wonder that terminology became important in the second half of the 20th century; encouraged by scientific and technical advancement, society was changing and developing into a new form of civilization, and subject matter and methodology develop where there is a need for it, and this shows how terminology is not a science for the sake of science, but it improves the quality of life (Cabré 1999:2).

Later on, the concept of terminology inspired three classical schools of terminology. The Vienna or Austrian School, The Czech or Prague School, and The Russian School (Brenes 2017:28-29). The Austrian School considers terminology as an "interdisciplinary but autonomous subject at the service of scientific and technical disciplines" (Cabré 1999:7). The founder of the Austrian School, Eugen Wüster, is also considered the founder of terminology (Brenes 2017:28). He was also an engineer. In 1931, he presented his thesis on the international standardization of technical language, focusing on electrical engineering, at the Technical University of Berlin (Brenes 2017:28). This dissertation marked "a turning moment for terminology as a science" (Brenes 2017:28). The Prague school is focused on philosophy, "which is primarily interested in the logical classification of concept systems and the organization of knowledge" (Cabré 1999:7). According to Cabré (1999:13), the Prague School was a result of the multilingual nature of its area; "it was founded on the theory of literary language and the theory of cultural language" (Brenes 2017:28-29). Its main focus was on the standardization of languages and terminology and the theoretical and applied research of terminology (Brenes 2017:29). The founders were Eduard Benes, Vilém Mathesius, Josef Vachek, Nikolai Trubetzkoy, Lubomir Drodz, and Ferdinand de Saussure (Brenes 2017:29). The Russian School considers terminology "a subcomponent of a language's

lexicon and special languages as subsystems of general language" (Cabré 1999:7). Its founders were Dmitrij Semënovič Lotte and Sergej Alekseevič Čaplygin (Brenes 2017:29). The School was formed as a result of the translation of Wüster's thesis into Russian (Brenes 2017:29). Later, Lotte and Čaplygin established the Scientific and Technical Committee on Terminology, which published the "Guide for the Preparation and Regulation of Scientific and Technical Terminologies" (Brenes 2017:29).

The schools collaborated, and thanks to them, they established terminology as we know it today. Later on, some new approaches shaped the theory of terminology to fit into the societal context of the changing world (Brenes 2017:29).

4.2 Modern terminology

Today, terminology is a widely accepted science, and thanks to Wüster, it branched out from linguistics as its own discipline. "Wüster gave Terminology its own scientific theory, the General Theory of Terminology, which clearly defined its object of study and concepts (in contrast with words, which are the object of study of Linguistics). His theory completely differentiates Terminology from Linguistics on different fronts" (Brenes 2017:19).

There are two approaches to analysing terminology work: synchronic and diachronic approaches (Brenes 2017:35). The synchronic approach suggest that terms and concepts should be analysed in the present only, and on the other hand, the diachronic approach analyses the history and evolution of language (Brenes 2017:35). Wüster's theory was the first theory on terminology and it used the synchronic approach for terminological analysis (Brenes 2017:36). New Theories of terminology, such as the Communicative Theory (Cabré) and Sociocognitive Theory (Temmerman), moved away from the synchronic approach (Brenes 2017:36). For example, Temmerman studied the history of the word "splicing" "to identify its meaning, particularly its evolution over time, its use by different cultural groups, and its presence in both general and specialized language" (Brenes 2017:36). In Siqueira's et al., (2009:161) words, Temmerman (2000) described language as something that "cannot be reduced to a conscious and literal level, and that diachronic analyses are often essential to understanding the meaning of a term at a certain moment in a given discipline". Metaphors take part in the making of new ideas, and that is why concepts and ideas need to be studied diachronically "Attention has been given to how cognitive models (e.g. metaphorical models) play a role in the development of new ideas. It therefore makes

sense to study concepts and terms diachronically" (Temmerman, Kerremans 2003:2). Moreover, Temmerman decided to focus on the dynamics of term creation in multilingual communication, because of how the translators struggle between the source text adequacy norm and target language acceptability norm (Temmerman 2011:154). This is the case of the European Union, although the multilingual terminological resource IATE is available, there are still some variations in it (Temmerman 2011:154). In many languages, French for example, in order to find equivalents to English terms, international bodies publishing French documents and national authoritative sources need to be consulted (Temmerman 2011:154). Temmerman (2011:154-155) aimed her focus on the analysis of the standardization of terminology in the past and how it is studied in theory and practice nowadays.

Terminology exists in the form of three concepts: terminology as the study of terms, terminology as the practical aspect of doing terminographical work, and terminology as a set of specialized terms (Brenes 2017:14). As a study of terms, terminology is a "science studying the structure, formation, development, usage, and management of terminologies in various subject fields" (ISO 1087-1:2000, as stated in Brenes 2017:15). Terminographical work entails the gathering of terms covered in a specialized field in one or more languages, selection of a term or producing a new one, and compiling them in a terminological collection that can be recorded in terminological databases for future use (Brenes 2017:15). It consists of five steps: 1. Definition and delimitation of the work; 2. Preparation of the work; 3. Elaboration of the terminology; 4. Work supervision; 5. Presentation of the work. (Brenes 2017:15-16).

The main units of terminology, as the name suggests, are called terms. To explain what a term is, Suonuuti (2001:12) describes it in the following words: when we think of something, e.g. a tree, we also think about properties that define it, in this case we call those properties "characteristics". A bunch of characteristics then forms a "unit of thought" called "concept". There are two types of concepts: individual concepts (connected to one object) and general concepts (linked to more similar objects). Concepts are abstract, and to explain them, we need to create definitions and terms. Terms refer to our mental constructions so that we can talk about them. To avoid misunderstanding, correctly using terminology is crucial.

Terms that are collected are then organized into termbases or glossaries – a termbase or a glossary includes "specialised-language words or phrases" (Brenes 2017:17). Words that are only characteristic and used by professionals in an expert field are found in a termbase or glossary. The main distinction between a glossary and a termbase is in the amount of information they contain:

"A glossary is a simple list containing words and their translations to other languages… termbase is managed in a software program, and it also typically contains far more information than a glossary, such as definitions, subject, context, source, etc." (Frederkisen 2018). Translators use both, although translators (especially in the context of this thesis, volunteers) do not need too specific information like the experts of the named subject field.

Terminology is also considered as a standalone field of work. People whose job it is to update terminology are called terminologists and they have an important role in the world of translation "By providing information on the meaning and the use of terms, terminologists contribute to the accuracy and consistency of translations" (europa.eu). Many translators have decided to become terminologists, some of them even full-time terminologists (Brenes 2017:24). According to Michael Beijer, as stated in Brenes (2017:25): "Translation and Terminology are inextricably intertwined"; when we look for a term and find out that the sources use the same term for different things, we become frustrated and realise it would be better to manage our own terminology to avoid inconsistency and confusion during the translation process (Brenes 2017:25). When translators are authors of terminology databases, they become more involved in the specific subject field they are translating and thus gain even more expert knowledge.

Regarding the ties between terminology and computer science, Wüster points out the possibilities that technology provides. "Wüster claims that computer science is one of the keys to terminology because of the enormous possibilities it offers to store and retrieve information and to order conceptual systems" (Cabré 1999:8). Computers, and technology in general, advanced terminology work in many ways. With the tools and sources technology offers, making decisions about terms has become easier and faster (Cabré 1999:164). Having access to all information, like access to term banks, made terminology work more reliable and easier, but also more complex. (Cabré 1999:165). It also connected specialists and terminologists who can collaborate and produce quality content (Cabré 1999:165). Before the technical modernization, a terminologist used to keep everything on paper, which often led to a big pile of mess. "Glossaries and specialized dictionaries have been in existence for hundreds of years, and individual translators used to keep boxes of paper slips or index cards detailing the results of their research" (Bowker 2015:304). This made it harder to search for a specific term compared to the tools we have today. Some of the international, useful, reliable, and easy-to-use Internet-based termbases are IATE, Eurotermbank, UNTERM, WIPO Pearl, TermFinder, and many more. The Croatian language has also established reliable termbases such as *Struna* and *Hrvatski terminološki portal.* No sources are stated here because those are the most frequent result on Google when searching for termbases. To manage

terminology, terminology management must be applied. Terminology management is described as "the set of activities carried out to ensure that the correct terms are used consistently across the organization, in support of end-to-end product development, communication, translation/localization, and distribution" (TerminOrgs 7). Good terminology management is the foundation of the development of new industries. According to Schmitz (2015:451), new industries need new terminology in order to communicate new concepts and products. Terminology management carries the success of a product "Effective and diligent terminology management is critical to the development and use of software products" (Schmitz 2015:451). Terminologists and others who deal with terminology use terminology management systems (TMSs). (TerminOrgs 7). A TMS is a computer software that stores terminology information, which we can organize how we want, when we want, and share it with others (TerminOrgs 7). Regarding the structure of a meta terminology management system, Schmitz (2005:5) also mentions that there are three iso standards that act as a foundation of a meta terminology management system:

> ISO 12620 (1999) lists and defines more than 200 data categories that could be serve as a repertoire and proposal for selecting data categories for the own terminology management system design. ISO 12200 (1999) and ISO 16642 (2003) provide not only interchange formats or terminological mark-up frameworks but also a terminological meta model that defines the basic architecture of a terminology management system.

A TMS can be exported and then used in a CAT tool – according to the Trados website, a CAT tool is a "Computer-assisted translation software, commonly known as CAT tools, provide a range of features to help translators convert the meaning of text from one language into another consistently and with speed". Some of the most famous CAT tools are: Phrase (used in the Cochrane project), Trados, memoQ, and SmartCat. To conclude, terminology and technology go hand in hand; they complement each other.

4.2.1 Terminology and translators

Translators gather knowledge from translation jobs from various expert fields, but to do that, they must face the unknown. An expert field is full of specific terms that are communicated between experts and are unique to them. Understandably, the translator knows little about it, and in that case, research is imperative. A part of that research and knowledge gathering is linked to terminology, whether it is collected and organised by the translator or he/she received it from the

client “As part of any translation project, translators must identify appropriate equivalents for the specialized terms that they encounter in a source text. In some cases, they must also take into account the particular terms preferred by their clients” (Bowker 2015:304). The previous chapter mentions the ties between the translator and terminology, but this chapter offers an extensive look into it.

In the words already mentioned by Michael Beijer, a translator fixes the chaos of unaligned terms and their meanings (and translations) that he sees in various sources (as stated in Brenes 2017:52). This can bring satisfaction and a feeling of better organisation to the translator, but it also means more work. As Bowker (2015:304) stated “Researching the specific terminology needed to complete any given translation can be a time-consuming and labour-intensive task”. Translation and terminology management work is a paradox – creating a termbase for a translation is an extra job that makes the translation job faster and somewhat easier. That is one of the reasons why the fear of terminology is common among translators, as Brenes (2017:14) stated. Moreover, terminology management is not a separate cost, it is included in the price of the translation process. This is a negative characteristic, which affects the financial aspect of the translator: “The terminology research conducted by a translator is not usually broken down as a separate cost but is calculated as part of the overall translation process” (Champagne 2004:9, as stated in Bowker 2015:305). On the other hand, when the client handles terminology management, there is no risk of misunderstanding and misinterpreting terminology, thus portraying the wrong message in the translated text, which could even lead to legal consequences: “Moreover, it is being increasingly recognized that terminology has an important role to play in contexts such as ensuring better communication of a company’s brand and avoiding potential legal liabilities that could result from imprecise or incorrect interpretation of a company’s documentation” (Bowker 2015:306). Apart from the legal reasons, the wrong terminology could damage the cooperation between the translator and the client. This would destroy the client’s company’s image and ensure a bad reputation for the translator, as stated by Bowker: “For example, terminological inconsistency could hinder communication, create confusion, damage a company’s image” (2015:306). A translator always has to be careful. A translator could face some differences during terminology management because terminology management was taught from the terminologist’s perspective: “Historically, the way that terminology has been taught on many translator training programmes has been from the point of view of a terminologist, and many of the text books used on these courses are written from the perspective of terminologists rather than translators” (Bowker

2015:316). According to Bowker (2015:316), translator trainees should consider adapting their teaching approaches in the following three areas:

1. evaluation skills and judgement – teaching a translator how to recognize reliable sources on the world wide web;
2. working with integrated systems – teaching a translator how to use terminology tools and incorporate them into their translating tools;
3. sharing and collaborating in the production of terminology resources – teaching a translator to exchange terminology sources with other users.

To conclude, terminology is of great importance for translators. Terminology was first reserved only for terminologists, but later, translators decided to manage terminology on their own terms. When a translator manages terminology alongside translation, it is hard work, and it is time-consuming, but the reward is a reflection of the gained knowledge, and it can be used for future translation projects. By focusing on the key aspects of terminology, translators can produce precise and culturally appropriate translations.

4.2.2 Terminological principles

While managing terminology, many little details must be taken into consideration. To facilitate the adaptation of term entries, a set of common principles needs to be followed to create a consistent termbase or glossary. This subsection contains common terminological principles that will also be applied to the practical part of this thesis, the optimization of Cochrane's terminology.

Regarding Brenes, who created a termbase cheat sheet, managing term entries can become somewhat of a complex process because it needs to be done consistently. She compiled the following data categories in her termbase cheat sheet (2017:50):

• Term usage (preferred, admitted, prohibited [deprecated] —as per ISO 0241-1

• Terms (one term, not two), don't include more information

(Additional information should be placed in a separate field). All validated?

• Phrases

• Verbs

• Synonyms

• Trademarks, product names

• Country ID

• Abbreviations/acronyms

• Different spelling or hyphenated words

• Terms with more than one possible translation or meaning

• Definitions (make them short, not encyclopaedic; only one definition)

• Additional information that explains the term

• Translated terms in every language (validated)

• Source

• Author

Regarding the number of categories, there are no rules, it depends on the project and the expert field (Brenes 2017:50). Some common categories are: subject field, term ID, term, term usage, part of speech, definition, context (example), source, author, and date (Brenes 2017:50). Minimum categories per ISO 12616 (requirements and recommendations related to fundamentals of translation-oriented terminography): Term, Source, Date (as stated in Brenes 2017:50).

This cheat sheet contains useful information and data categories for a proper termbase, but for a translator, who is not an expert in a specific field of the text that they are translating, this is excessive. In their termbase, translators need: "the source language term, the target language equivalent, source information indicating where the terms came from, and a date with the initials of the person who made or updated the entry", and other categories, which they can choose themselves. (Eckmann 1995:4). It does not contain too much information because a translator termbase "clarifies terms that are otherwise hard to translate. It is basically a list of terminologies with fixed meaning and translation" (Phrase.com). The source language term and its translation are enough for a glossary, especially for a volunteer translator, like in the Cochrane project. To create termbase or glossary entries for a translator (or by a translator), Brenes (2017:51-54) listed some advice.

First of all, there needs to be one entry per concept; according to the univocity principle, a concept should refer to one term only. Homographs must have different entries, while synonyms must be in the same entry. Avoid "doublettes", more term entries for the same concept. Moreover, spelling

errors must be taken into consideration; they can happen easily, and are common, but they need to be checked for and corrected to keep the entries truthful and to avoid any further confusion. Separate entries are not to be used for: singular and plural forms ("asset" not "assets"), longer and shorter forms ("full absorption costing" versus "absorption costing"), hyphenated and non-hyphenated forms ("Euro-bond" versus "Eurobond"). Basic terminology rules need to be incorporated, such as: no plurals, checking terms in upper/lower case (terms begin with a lower-case letter except for any capital letters required by the normal written form), complex terms (e.g., compounds and multiword terms) need to retain the natural word-order (ISO 0241-1), verbs in simple form, and alphabetical order of the terms. Last but not least, entries should be written in the basic grammatical form: nouns in the singular and verbs in the infinitive.

It is difficult to create a termbase without any errors and that is completely normal. Barbara Inge Karsh, (as stated in Brenes 2017:52), suggests exporting the database into a spreadsheet program (Excel) and do a QA to check the entries, which we did for this thesis. Revision is very important to keep the termbase clean and ready for use.

Adhering to these rules and principles can create a practical termbase that can be updated and used for future projects.

4.3 Translation of medical texts

As mentioned before, the Cochrane project is based on medical texts adjusted for the wider public, in other words, for people who are not medical experts but want to participate. The main goal of the project is to inform "Cochrane is for anyone interested in using high-quality information to make health decisions. Whether you are a clinician, patient or carer, researcher, or policy-maker, Cochrane evidence provides a powerful tool to enhance your healthcare knowledge and decision-making" (Cochrane.org). Medical texts can be long and full of medical jargon that and full of medical jargon that only professionals understand, but there are also plain language summaries that contain no medical jargon and are easier to read. Although a plain language summary does not contain specific medical terms, the translation still must be done in a specific professional way to keep the scientific importance and aspect of the text. "The medical industry is a highly specialized industry that requires accuracy, precision, and professionalism when it comes to translating medical texts" (Abdullah 2023). Medical translation is required because of new drugs that are being put on the market, immigration and because new medical findings are published in

English (Karwacka 2015:272). In the second part of the theoretical section, the following subchapters will analyse the translation process of medical texts and the issues the translator face.

4.3.1 Issues in medical translation

According to Heruela (2024), the most translated types of medical texts are clinical trials, medical device instructions, pharmaceutical data, and patient records. Karwacka (2015:272) also adds other types of medical publications: "The translated texts include popularizations, such as textbooks for medical students, popular science book on medicine, but also research papers, conference proceedings, case studies, case histories, discharge summaries, reports and relatively simple texts for patients: information leaflets, consent forms, brochures". Although every text type is different, translators face the same problems in every text. Major issues in medical translations include the medical language, translation of medical texts for lay readers, problems in the translation of specialized medical texts, qualifications of medical translators and verification and review in medical translation (Karwacka 2015:272-291).

Medical language is a specialised language used in the expert-expert and expert-lay communication, which depends on the situation (Karwacka 2015:272). Expert-expert communication is used in case studies, case notes, imaging reports and research papers, while expert-lay communication is used in package leaflets, consent documents, patient factsheets etc., which contain less of medical terminology (Karwacka 2015:273). English is the dominant language in the world of science, and around 90% of scientific papers are published in English (National Library of Medicine). Before English, it was Latin and Greek. Greek medical advances were imported to Rome with the help of physician translators (Fischbach 1998: 2, as stated in Karwacka 2015:273).

The biggest problems that translators face in the medical language are eponyms, acronyms and abbreviations, word compounding, affixation and the doublet phenomenon, and polysemy and synonymy (Karwacka 2015:274-280). According to the Cambridge Dictionary, an eponym is "the name of an object or activity that is also the name of the person who first produced the object or did the activity". Eponyms are a big part of the medical language; they include anatomical parts (Adam's Apple), diseases (Parkinson's disease), procedures (Heller myotomy), etc. (Karwacka 2015:275). The problem is that the correspondence between the eponymous term and its equivalent does not always mean that the source and target term will be eponymous (Karwacka 2015:275). It is possible that one term will be eponymous, and the other one will be descriptive or based on Latin or Greek (Karwacka 2015:275); for example, in English and Croatian, *Fallopian tube* –

jajovod. The next problem is acronyms and abbreviations. Even when we look at a medical test result, we can see some acronyms and abbreviations because those are characteristic in the medical language (Karwacka 2015:276). Although English is the main language of science and English abbreviations are used in other languages, sometimes there is a target language equivalent (Karwacka 2015:276). An example in English and Croatian: *X-Ray – RTG.* Another problem is word compounding, affixation and the doublet phenomenon. Those three are features of fundamental medical English (FME) (Salager-Meyer 1983, as stated in Karwacka 2015:277). When a compound nominal phrase (heart failure, patient safety etc.) is being translated, there may occur some syntactic shifts (Karwacka 2015:277). An example in English and Croatian: *orbital injuries – ozljede orbite,* in a literal translation it would be *orbitne ozljede.* The problem with affixation is that sometimes in the translating pair one term is a multi-word term (Karwacka 2015:278). An example in Croatian and English: *upala krajnika – tonsilitis.* In this case, recognizing multi-word terms as single translation units is a skill that a medical translator needs (Karwacka 2015:278). The third characteristic is the doublet phenomenon; terms (Greek or Latin origin) that have counterparts in the general language: *search – investigate, myocardial infarction – heart attack* (Karwacka 2015:278). This can be seen in the case of the use of noun roots vs. adjectives, for example, the use of noun roots vs. adjectives, for example, *eye – optic nerve, fat – adipose tissue, kidney – renal artery* (Karwacka 2015:279). The last problem in this section is polysemy and synonymy. The problem with polysemy is that one term can present more concepts, and that is, of course, a problem in medical translation, because, without much context or knowledge, it is hard to know what is meant exactly (Karwacka 2015:280). Here is an example - discharge: secretion (hr *izlučivanje*) or release from hospital (hr *otpust*). As for synonyms, some eponyms are also synonyms, such as "*osteoarthritis* also referred to as or degenerative joint disease" (Karwacka 2015:280). These are some of the most important problems regarding medical language in translation.

The next section of the problem is the translation of medical texts for lay readers. Expert-lay communication takes up a large part of medical documentation, especially documents for patients that are made by medical professionals in order to comply with regulatory requirements (Karwacka 2015:280). For example, informed consent forms (ICF) / informed consent documents (ICD) are documents that explain the procedure a patient has to undergo, and they are frequently translated (Karwacka 2015:280). The ICF is often written in complex medical language, and it needs to be in the patient's first language. The important advice for the translator is that "The text needs to be clear and easily understood. Readability and user-friendliness are of key importance in the case of

informed consent forms as ambiguity undermines the "informed consent" concept" (Karwacka 2015:280). The translator's goal must be the simplification of the medical language. It is a translator's job to do all the research and understand the complex language, but to translate in a simple way for the lay reader. Although translators often need to produce a target text that closely mirrors the original, shifts are common in translating research papers. Pragmatic shifts can enhance readability without misleading expert readers, who likely understand the implied information (Karwacka 2015:285). To conclude, the translation of a specialised medical text needs to be very faithful to the original.

The next translation problem lies in the qualifications of medical translators. Medical development is on the rise and thus medical translation is becoming more and more important, but the question is, who should translate medical texts; a medical professional or a linguist, or a linguist with medical knowledge (O'Neil 1998; Heine 2003; IMIA 2009; Nisbeth and Zethsen 2012, as stated in Karwacka 2015:288). IMIA (2009:3) (International Medical Interpreters Association) suggests that medical texts should be translated by professionals who have "native or near-native, formal level of language proficiency, analytical capabilities, and deep cultural knowledge in the source and target languages" (as stated in Karwacka 2015:288). Other requirements include:

> proficiency in the source and target languages, expert knowledge of the subject matter terminology, terminology research skills, and adequate writing skills. Other components of medical translator competence include: application of translation strategies, relevant procedures, conventions or standards, use of medical databases, text banks, dictionaries, CAT tools, etc. as well as certain psycho-physiological features such as decision making, thoroughness, honesty etc. (PACTE 2011; Nisbeth & Zethsen 2012; Karwacka 2012, 2014, as stated in Karwacka 2015:288)

But, when it comes to volunteer translators, all of the mentioned conditions are relaxed. Some projects, like Cochrane, give volunteer translators, without much medical background, a chance to translate medical texts. The volunteer translators get simpler texts and help in the form of a termbase/glossary, instructions and the translated texts are also checked by reviewers and supervisors afterwards.

A lot is expected from a translator who deals with medical texts. The translator needs to be capable of simplifying the text intended for lay readers and producing a close translation of the medical text intended for professionals.

The last problem is verification and review in medical translation. Quality assurance of a translation of a medical text is of grave importance because a wrong translation could lead to clinical consequences (Flores et al. 2003, as stated in Karwacka 2015:289). After the translation, the last step needs to be the verification:

> the translated document is reviewed and edited by another professional, who ideally should have more subject area expertise and be more experienced than the translator. It is then proofread, ideally by a third person. That, however, is not actually the final stage of the process, as it may be necessary to adapt the TT to local requirements concerning informed consent documents and other medical texts. (Fernández Piera and Ardura Ortega 2012: 291, as stated in Karwacka 2015:290)

Another method is back-translation; another translator translates the target text into the source text (Karwacka 2015:290). The IMIA (2009:2) is against this method because it might not reveal "the target language contextual nuances" (as stated in Karwacka 2015:290), although in some countries this method is applied because it is required by the "Ethics Committees and regulatory authorities in a number of countries" (Karwacka 2015:290). Another method is parallel translation. It is a method where two parallel translations are produced and then are compared and adjusted; the target text is a compilation of the two translations (Karwacka 2015:291). This also affects the budget, but it has a more positive effect on the quality of the translation than the back translation method (Andriesen 2006:16, as stated in Karwacka 2015:291). The last method is cognitive debriefing. It is done in the form of a questionnaire or scales; a group of patients gives feedback on how they understood the wording of the questions (Ploughman, Austin, Stefanelli & Godwin 2010; Karwacka 2014, as stated in Karwacka 2015:291). The purpose is to see if the translation is adjusted to the target audience.

It is crucial that a professional reads the source and target text to spot medical language errors that could lead to problems, or a patient who is part of the target audience to see if the translation is understandable for a lay reader.

5. Analysis

After optimizing Cochrane's English to Croatian terminology and instructions for volunteer translators, an analysis of the corrected errors was made. The analysis of the optimization of the English to Croatian terminology revealed deviations from terminological principles and rules of the Croatian language, which will be divided into five categories in this section. The initial termbase version had 559 entries and one spreadsheet in Excel. After the optimization, the consolidated version now has 382 entries in the "Terms" sheet, and 118 entries in the "Phrases" sheet. The errors or lack of information in Cochrane's instructions will be listed in a plain but coherent way, without categorization such as in the analysis of Cochrane's terminology. The analysis is divided into two chapters *Terminology* and *Instructions*, with corresponding examples of the corrected errors.

5.1 Terminology

As mentioned before, to deliver a successful translation, the translator must follow the termbase received from the client. The termbase acts as a foundation of a good translation and is vital for a translation according to the client's demands. Sometimes, the termbase does not follow the basic terminology principles due to technological or human factors. Many errors were found in Cochrane's termbase. Although the termbase is meant for volunteer translators and must be somewhat simpler and does not need to contain copious information, there were many confusing entries which needed more consulting with external sources and were causing issues more than offering help. Therefore, a revision and optimization of Cochrane's terminology was indeed necessary, in order to create a better and clearer terminological environment for volunteer translators.

The five subchapters present the categories of errors found in Cochrane's terminology. Moreover, the subchapters show examples of said errors and their corrected versions and state sources where solutions for some mentioned errors were found.

5.1.1 Technical errors

After reviewing the list of corrected errors in Cochrane's terminology, it was decided that some of them did not fall under the category of morphological or semantic error. This subchapter deals with corrected errors of a technical nature.

The first set of errors that was obvious after the first glance was the capitalization of basic entries. By basic entries are entries that are not official names (denominations) which should be capitalized. Here are some examples of basic noun entries:

Table 1: Capitalized entries

Bladder
Protocol
Result
Patient

As mentioned before, according to Brenes (2017:52), one of the basic terminology rules is checking terms in upper/lower cases. Even in printed dictionaries, basic entries are not capitalized, and that is just the way how terms are entered into termbases, there is no need for capitalization. Another problem in the same area was that the terms were not in the alphabetical order. After the revision, all entries were corrected and organized into the alphabetical order A-Z.

The next issue was that everything was put in one Excel spreadsheet. The termbase consisted of terms (one-word or multi-word entries), but also phrases important for the Cochrane project. Here are some examples of phrases in English and Croatian which were put into another spreadsheet:

Table 2: Phrases

More like this	*Više radova slične tematike*
We found no studies	*Nije bilo istraživanja prikladnih za uključenje u ovaj sustavni pregled.*
Summary of the evidence	*Sažetak dokaza*

The table shows examples of phrases taken over from Cochrane's old collection of frequent phrases. Some phrases (headlines) and expressions are translated differently from the original; the Croatian version kept the message of the source language, but more information was added: "We found no studies - *Nije bilo istraživanja prikladnih za uključenje u ovaj sustavni pregled*" – the

reason for this is because the client decided it should be this way. There are many phrases and expressions like that in the termbase, and it is crucial that the translator respects that to keep the translations consistent. The termbase seemed just piled up, and there was no order among the entries. Two spreadsheets were made to create a clearer termbase with a distinct division of terms and phrases and expressions: "Terms" and "Phrases and Expressions". This eases the search for specific terms or phrases for the translator, and the termbase seems more put together.

Moreover, according to Brenes (2017:51-54), there is the previously mentioned univocity principle. According to that principle, there needs to be one entry per concept; homographs must have different entries, while synonyms must be in the same one. The best examples of this are the following English synonyms and homographs:

Table 3: Univocity principle, homographs and synonyms

adverse reaction, adverse effect, side effect	*nuspojava*
adverse effect	*štetni učinak (samo kada se odnosi na (ne)klinička ispitivanja)*
healthcare	*zdravstvo*
healthcare	*zdravstvena zaštita*

The first example shows synonyms in one entry. All of the English expressions were scattered across the termbase. The solution to this was also found in HALMED's termbase document, where those specific synonyms are also in the same entry (HALMED). The second example shows a homograph: "words spelled the same but not necessarily pronounced the same and having different meanings" (Oxford Languages). This example was also found in HALMED's termbase document, with the description in which context to use *štetni učinak* (HALMED). The third example shows the homograph "healthcare"; the first one, *zdravstvo* is the business of providing medical services, the second one, *zdravstvena zaštita*, is the medical service (explanations found at *Hrvatska enciklopedija* and Cambridge Dictionary).

As stated before, there were phrases and expressions in the termbase which needed to be put in another spreadsheet in order to keep the termbase better organized. Apart from that, some entries were too long and it seemed as if they did not belong in the termbase. After reading them, it became clear that those entries also did not belong in the "Phrases and Expressions" spreadsheet. They were instructions for some technical areas in the translation of Cochrane texts. Here are some examples of such entries:

Table 4: Instructions in the termbase

Translation notes	*Hrvatski Cochrane Preveo/la: Ime Prezime Ovaj sažetak preveden je u okviru volonterskog projekta prevođenja Cochraneovih sažetaka. Uključite se u projekt i pomozite nam u prevođenju brojnih preostalih Cochraneovih sažetaka koji su još uvijek dostupni samo na engleskom jeziku. Kontakt: cochrane_croatia@mefst.hr*
Check if your spelling is correct, or try removing filters. Remove quotes around Phrases to match each word individually: "blue drop" will match less than blue drop. You can require or exclude terms using + and -: big	*Provjerite jeste li dobro napisali svaku riječ ili pokušajte ukloniti filtere. Uklonite navodnike oko fraze kako bi pretraživali pojedinačne riječi: "blue drop" podudarno*

The first example is actually the end note (segment) written in every PLS. Although the note is important, its place is not in the termbase or "Phrases and Expressions" spreadsheet, but in the instructions for volunteer translators, which will be analysed later. The second example was confusing, too long, and only half-translated. The confusion occurs in the "+ and -: big" part. Rather than causing more confusion, the sentence is excluded from the termbase and instructions.

There were fewer errors of a technical nature than in other categories, but they still affected the quality of Cochrane's termbase.

5.1.2 Orthography

The types of errors discussed in this subchapter are related to orthography. According to Cambridge Dictionary, orthography is "the accepted way of spelling and writing words" (Cambridge Dictionary). In plain words, this subchapter deals with spelling issues found in Cochrane's termbase.

As mentioned in the previous subchapter, according to the terminology principles, entries should not be capitalized unless they are official names of methods, organizations or eponyms. Here are some examples of needed capitalization of entries found in Cochrane's termbase:

Table 5: Correct capitalization of terms

Effective Practice and Organisation of Care	*Učinkovita praksa i organizacija skrbi*
GABHS	*BHS-A*
What are the findings?	*Koji su rezultati ovog sustavnog pregleda?*

The first example shows the name of Cochrane's group that "aims to prepare and maintain systematic reviews of professional, financial, organizational, and regulatory interventions that are designed to improve professional practice and the delivery of effective health services" (National Library of Medicine). It is an official name and therefore it needs to be capitalized either way. The second example shows a mix of an acronym and initialism "an acronym is made up of parts of the phrase it stands for and is pronounced as a word, and initialism is an acronym that is pronounced as individual letters" (Centers for Disease Control and Prevention). This type of abbreviation needs to be written in upper case (HEMED). The third example is actually a frequent headline in Cochrane's summaries. The client decided that the headlines should be capitalized, and technically the "Phrases and Expressions" spreadsheet is not a classical termbase, therefore the headlines can be capitalized, as this does not deviate from terminological principles.

The next problem is caused by the Croatian language and its various shades of vocabulary. Sometimes a term is confused with other terms, because they are similar and have similar meaning:

Zable 6: Vocabulary

cancer	*tumor, rak, karcinom*

The example shows a term whose translation was inconsistent in the termbase. According to Kreni Zdravo, in the medical area, the distinction between the three terms is clearly set. Instead of the translation in the table above, the terms should be divided and translated like this:

Table 7: Corrected vocabulary

cancer	*rak*
tumor	*tumor*
carcinoma	*karcinom*

According to Harvard's medical dictionary (Harvard Health Publishing), a tumor is "Any type of swelling or enlargement of tissues; most often used to describe an abnormal growth of tissue, which can be cancerous or noncancerous", cancer is "A group of diseases in which abnormal cells grow in an uncontrolled way, sometimes forming tumors", and carcinoma is "A cancerous tumor that develops in the tissue that lines the organs of the body (the epithelium)". Although those definitions are more on the medical side and a bit confusing for a lay reader or translator, there really is a distinction between the three terms, and "tumor" and "carcinoma" have been added to the termbase.

Another difficulty caused by the Croatian language are differences in meaning when all solutions sound similar, but do not mean the same. Here are some examples:

Table 8: Differences in meaning

currently	*trenutačan > trenutnan*
immune system	*imunosni sustav > imunološki sustav*

The first example shows a mistake which is often made in the Croatian language, and it was of importance to correct it in the termbase. According to Jezični savjetnik, *trenutačan and trenutan* have very similar meanings, but *trenutačan* is the preferred term. The second example of an also often made mistake. Klječanin Franić (2020:48) delivers a solution by stating that "Pridjev imunosni izveden je od imenice imunost (imunost + –ni > imunostni, pri čemu suglasnik –t ispada iz suglasničke skupine –stn i dobivamo imuno sni). Upotrebljava se u značenju onoga što se odnosi na imunost: imunosni sustav, imunosna reakcija, imunosni odgovor itd" and "Pridjev imunološki izveden je od imenice imunologija (nastavak –ija odbacuje se i dodaje odnosni sufiks –ski), koja označuje znanost i djelatnost…pa se tako imunološki odnosi i na struku (imunologija) i osobu koja se tom strukom bavi (imunolog). Imunološke su primjerice pretrage, testovi i dijagnostika". Briefly explained in English: the adjective *imunosni* refers to immunity, on the other hand, the adjective *imunološki* refers to everything connected to the science branch immunology. In this case, *imunosni sustav* is the correct translation.

Another problem for Croatian translators is the influence of another language, in this case, English. That is the reason why word-for-word translation happens often. Examples from the exported termbase:

Table 9: Word-for-word translation

blood disorder	*krvni poremećaj*

This mistake can happen when in a hurry or under the influence of other factors, but is important to preserve the uniqueness of the Croatian language when possible, and always check everything. In this case, Hemed is a great source for checking names of disorders, diseases etc. According to the information found on Hemed, the translation must be *poremećaj krvi*, which makes more sense in the Croatian language.

Another issue is that some foreign terms have established themselves and are adjusted in the Croatian language. We call those terms internationalisms. Those terms are well known, and although there are still mother tongue terms, foreign terms seem to be preferred in Croatian. Examples from Cochrane's termbase:

Table 10: Internationalisms

anxiety	*anksioznost*
randomised controlled trial	*randomizirano kontrolirano istraživanje*

The first example shows the term anxiety which could easily translate to *tjeskoba.* Although it is common sense that Croatian terms should be prioritized*, anksioznost* is accepted in the Croatian language, and it is used in everyday language. Even *Hrvatski jezični portal* has "*anksioznost"* listed as a Croatian term. On the medical website Hemed, the expression "*anksiozni poremećaj"* is used, which translates to "anxiety disorder". Therefore, "*anksioznost"* is the preferred term in the termbase. The second example shows a phrase with the word "randomised", which could be translated as "*nasumično".* But again, medical sources use the word "*randomizirano*" in this context, because "*randomizacija"* is a medical term in the Croatian language that means "svrstavanje ispitanika u eksperimentalnu ili kontrolnu skupinu slučajnim odabirom kako bi se izbjegla nenamjerna pristranost" (Struna). If not researched enough, such mistakes could easily occur, because the goal of prioritising the Croatian language could stand in the way.

5.1.3 Clarity

Although a term is entered in a termbase, and at first glance everything seems to be correct and according to the terminology rules, sometimes, the meaning of the entry is not clear or some

translations just do not make sense. This subchapter analyses the errors that are corrupting the clarity of Cochrane's terminology.

To begin with, some entries are pure medical terms, and for a volunteer translator those terms may be problematic because of the lack of medical language knowledge. This mainly refers to medical abbreviations. The problem lies in the possibility that the abbreviation is not widely spread in the medical community, and therefore it is harder to find out for what it stands for. Here are two examples of medical abbreviations from Cochrane's termbase:

Table 11: Abbreviations

PEARLS
GABHS

The first example is an acronym, PEARLS, and if it were not written in upper case, it could have been mistaken for a noun in plural. The second example shows the already mentioned mix of an acronym and initialism, GABHS. It is true that translators need to do research while translating a text in order to inform themselves about the unknown subject and area of the text, and that they could google PEARLS and GABHS, but the purpose of this thesis is to perfect Cochrane's termbase and ease the volunteer translator's job. In order to solve this problem, all of the words that the abbreviations stand for were added in brackets. The entries look like this now:

Table 12: Corrected Abbreviations

PEARLS (Practical Evidence About Real Life Situations)	
GABHS (group A beta-hemolytic streptococci)	*BHS-A (β-hemolitički streptokok skupine A)*

Unfortunately, there is no official translation of PEARLS in the Croatian language. In this situation, it is suggested that "acronyms may be replaced "with an explanation"" (Cintas and Remael 2020:138) and that the acronym is put in brackets, example:

stvarni dokazi o situacijama iz stvarnog života (engl. akronim PEARLS)

Translators should never invent a medical acronym (or medical abbreviations), because they are not medical experts, and especially because, in this case, they are translating a text for a lay reader. The second example is an official translation found on Hemed, and therefore, safe to use in a translation.

Another problem that is when the medical and lay name of a disease appear in the same entry in a termbase. Examples from the termbase:

Table 13: Brackets

cervix	*vrat maternice (cerviks)*
pharyngitis	*upala grla (faringitis)*
peritonitis	*upala potrbušnice (peritonitis)*

In this case, in all three examples, the medical term is in brackets, and the everyday expression is in front of it. As mentioned before, Cochrane's texts are for lay readers and volunteer translators, and the main goal is to achieve clarity in the text. If we were to approach this from the terminological perspective, when two translation equivalents exist for the same term (the same concept), one should be marked as preferred. The terms in the brackets need to be entered as separate entries. Another suggestion would be that translators enter the medical terms with the lay term in the brackets in the text.

Furthermore, there was an issue with the client's suggestions for translating the most frequent phrases/expressions. The problem was repetition. Here are some examples:

Table 14: Repetition

Why is this important?	*Zašto je ovo važno?*
Why is this question important?	*Zašto je ovo važno?*
What did the studies show?	*Ključni rezultati*
What did the researchers find?	*Ključni rezultati*
What evidence did we find?	*Ključni rezultati*

The repetition of the same translation for different sentences caused confusion because in some cases, more than one of those sentences appeared in the same text. Not only that, also some important parts were omitted. According to the client, "question" should be translated as

"*istraživačko pitanje*", but it was omitted in the second example in the table. Although the client's suggestions should not be changed, in this case a few changes were needed in order to make a distinction between those different sentences that were to be translated all the same:

Table 15: Corrected repetition

Why is this question important?	*Zašto je ovo istraživačko pitanje važno?*
What did the researchers find?	*Što su autori pronašli?*
What evidence did we find?	*Koje su dokaze autori pronašli?*

The changes shown in the table help to make the translations clearer and the translator not to get stuck in the repetitions. This type of correction should, of course, be discussed with the client to arrive at a mutually acceptable and logical conclusion.

The purpose of a clear termbase is to ensure that the information reaches the translator without obstacles that could impact the quality of his work.

5.1.4 Excess

The main purpose of a termbase is to present a clear and concise list of terms. The termbase should contain only the most important terms that are useful to a translator, but that is not always the case. Sometimes, a termbase contains unnecessary types of entries which do not belong there. In this subchapter, the excess entries in Cochrane's terminology will be analysed.

There was a lot of excess entries in the termbase, but something that was really odd is the following example:

Table 16: Odd entries

reduction	*termin*

It could be that due to some technical issues, the two terms got combined, or maybe someone made a mistake while translating. However, there was no similar match on the Internet, and therefore, the source and intention remain unknown. The translation was of course corrected to "*smanjenje*", even though it is not necessarily a medical term in its own right.

Another issue was duplicates, conjunctions and interjections. The duplicates were removed after sorting the terms alphabetically. There is no need for identical entries, it just disturbs the coherence

of the termbase. The interjections were entered as terms by someone who thought that they seemed fit to be an entry in a termbase. Some of the conjunctions and interjections included: although, or, and, however etc. Conjunctions and interjections were also removed from the termbase.

The termbase was also full of everyday easy-to-translate entries without specific contexts, which were unnecessary, because no special research or sources were needed in order to translate terms like that. Here are some examples:

Table 17: Unnecessary entries

23 hours	*23 sata*
January	*siječanj*
normal	*normalan*

A translator is expected to translate expressions/words like that without having to look for help.

Last but not least, different or similar terms were put in the same entry, when they need to be in separate entries. Some of the words were even redundant. Here are some examples from the termbase:

Table 18: Combined entries

acupuncture for symptomatic gastroparesis	*akupunktura za simptomatičku gastroparezu*
pregnancy and childbirth	*trudnoća i porod*
cystic fibrosis and genetic disorders	*Cistična fibroza i genetski poremećaji*

After optimization, the entries look like this:

Table 19: Split entries

symptomatic gastroparesis	*simptomatska gastropareza*
acupuncture	*akupunktura*
pregnancy	*trudnoća*
childbirth	*porod*
cystic fibrosis	*cistična fibroza*
genetic disorder	*genetski poremećaj*

In the five examples, the terms were split so that they could be placed in separate entries. The last term was also originally written in plural. The terms can stand alone and have their own meaning, but they are not redundant and enrich the termbase.

The initial form of Cochrane's termbase contained many excess entries. These do not contribute to anything and, therefore, were either removed or modified in the termbase.

5.1.5 Grammar

One of the important terminology principles is also the usage of the correct grammatical form. Including correct grammatical forms in a termbase helps achieve a correct termbase that follows all terminological principles and rules of the Croatian language. This subsection analyses the grammatical problems found in Cochrane's terminology.

To start with, the organizer of this translating project is Cochrane, and it is only suitable that the name of the organizer is written correctly and according to the rules of the Croatian language, but this was not the case in the initial version of the termbase:

Table 20: Declension

The Cochrane Library	*Cochrane knjižnica*

Under the influence of the English language, it is easier to leave a foreign name as it is and not to decline it. That is just not the case in the Croatian language. Here is the corrected example:

Table 21: Correct declension

The Cochrane Library	*Cochraneova knjižnica*

From the perspective of the Croatian language, Cochrane is masculinum. According to Badurina et al. (2007:209), if a foreign male name ends in a consonant when pronounced, then that name is to be declined in the same way as the Croatian name Ivan „Ona imena koja izgovorno završavaju na suglasnik sklanjaju se kao Ivan" (Badurina et al. 2007: 209).

The next problem was the absence of some basic grammatical criteria. According to Brenes (2017:54), the entries in a termbase should be in the form of "the basic grammatical form, e.g., nouns in the singular, verbs in the infinitive". Quite the opposite occurred in the initial version of

Cochrane's termbase; many nouns were plural, and verbs were written in two forms other than the infinitive. Some examples from the termbase:

Table 22: Wrong verb forms and a noun in plural

caused
bleeding
benefits

The first example shows a verb written with the past participle -ed. The second example shows a verb in the infinite -ing form. The third example shows a noun in plural. All of those errors were corrected, and now it looks like this:

Table 23: Correct verb and noun form

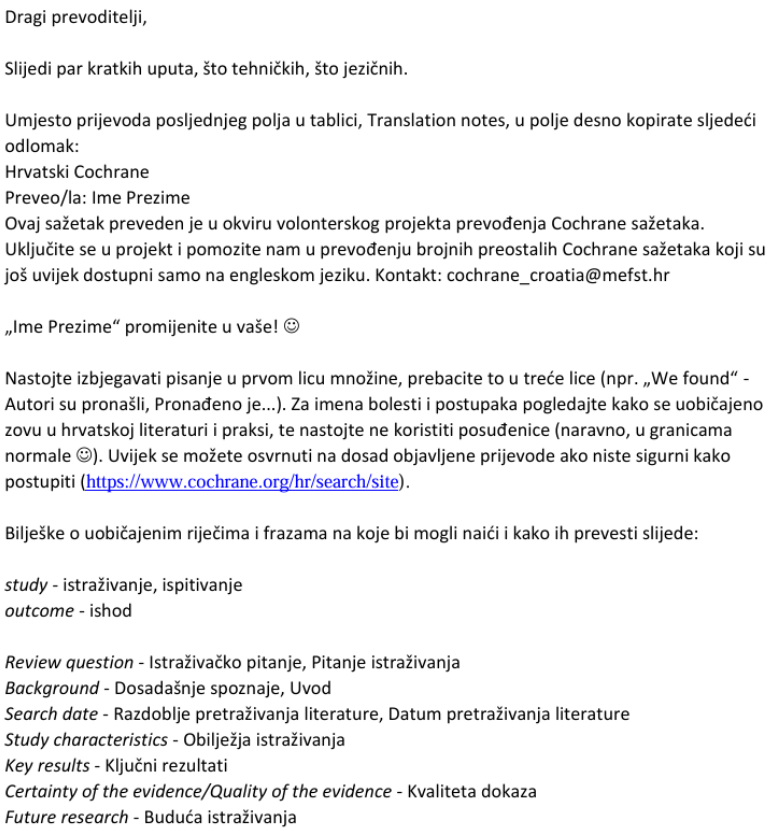
cause	*uzrokovati*
bleed	*krvariti*
benefit	*dobrobit*

The basic grammatical form is also one of the important terminological principles because it provides structure and coherency to the form of an entry.

5.2 Instructions

Behind most successful translations are the client's instructions that the translator needs to follow. In the case of the Cochrane project, the translators of medical summaries are volunteers who necessarily have no knowledge of medicine. To ease the translators' job, besides the termbase, they also receive instructions containing some useful technical information. The set of instructions was a good idea, but it lacked more useful information, and a revision needed to be done. This subchapter analyses the optimization of the Cochrane set of instructions for volunteer translators.

Below is a screenshot of the initial instructions for the volunteer translators. The screenshot is provided because the document is only one page long, whereas the termbase contains too much information and could not have been included in the thesis. After the analysis, the revised version of the instructions will be provided.



Dragi prevoditelji,

Slijedi par kratkih uputa, što tehničkih, što jezičnih.

Umjesto prijevoda posljednjeg polja u tablici, Translation notes, u polje desno kopirate sljedeći odlomak:
Hrvatski Cochrane
Preveo/la: Ime Prezime
Ovaj sažetak preveden je u okviru volonterskog projekta prevođenja Cochrane sažetaka.
Uključite se u projekt i pomozite nam u prevođenju brojnih preostalih Cochrane sažetaka koji su još uvijek dostupni samo na engleskom jeziku. Kontakt: cochrane_croatia@mefst.hr

„Ime Prezime" promijenite u vaše! ☺

Nastojte izbjegavati pisanje u prvom licu množine, prebacite to u treće lice (npr. „We found" - Autori su pronašli, Pronađeno je...). Za imena bolesti i postupaka pogledajte kako se uobičajeno zovu u hrvatskoj literaturi i praksi, te nastojte ne koristiti posuđenice (naravno, u granicama normale ☺). Uvijek se možete osvrnuti na dosad objavljene prijevode ako niste sigurni kako postupiti (https://www.cochrane.org/hr/search/site).

Bilješke o uobičajenim riječima i frazama na koje bi mogli naići i kako ih prevesti slijede:

study - istraživanje, ispitivanje
outcome - ishod

Review question - Istraživačko pitanje, Pitanje istraživanja
Background - Dosadašnje spoznaje, Uvod
Search date - Razdoblje pretraživanja literature, Datum pretraživanja literature
Study characteristics - Obilježja istraživanja
Key results - Ključni rezultati
Certainty of the evidence/Quality of the evidence - Kvaliteta dokaza
Future research - Buduća istraživanja

Figure 1 Screenshot of Cochrane's instructions to volunteer translators

The client's instructions contained some very important information for the translator. At the beginning, the translation note is mentioned, which needs to be translated a certain way in the last

segment of a translation. The translation note indicates the names of the project and the translator. Next, there are some technical instructions, such as never translating in first person, but in the third person, then the importance of checking names of diseases and procedures in reliable medical sources, prioritizing Croatian terms, and last in this section, there is a link to the website of Cochrane's Library which the translator can visit to get more information. The next section contains a mini glossary with some frequent terms or expressions that the translator needs to consider while translating. Technically, there was nothing wrong with the instructions; they just lacked information. The new version of the set of instructions is divided into five sections: *Korištenje izvora, Prevođenje u duhu hrvatskoga jezika, Pravopis, Razlike u značenju riječi* and *Tehničke upute*. The source for the optimization of the set of instructions was professor Marija Omazić's 2023/2024 feedback on the proofreading of the student's translations of Cochrane's plain language summaries, which can be found on the Moodle site of the course *Uvod u terminologiju* of the Faculty of Humanities and Social Sciences in Osijek.

The first section *Korištenje izvora* contains a much-needed list of medical sources students can consult was added. Translators need to do research on the topic of a text they are translating, and when reliable sources are provided, there is less chance of a faulty translation. Another important set of sources containing websites on the Croatian language was also added. Besides being terminologically correct, the translation must follow the rules of the target language.

The next section, *Prevođenje u duhu hrvatskog jezika* contains instructions on how to keep the characteristics of the Croatian language while translating. Sometimes, without even noticing, the translator becomes influenced by the characteristic of the source language and he translates those characteristics into the target language. This section is important because it reminds the translator of what to take into consideration while trying to make the translation suitable for the target language. The instructions in this section contain information such as: how to translate diseases, medical abbreviations and collocations, not to translate everything literally and preferred way of writing some words.

The next section *Pravopis i gramatika* contains a set of orthographical and grammatical instructions. This section contains some important and established information on writing and spelling in the Croatian language, such as: commas, declension, translation of passives, prepositions, writing units of measurement and dates, etc.

The next section, *Razlike u značenju riječi* presents instructions on how to deal with differences in meaning of words that get often mixed up or can be used in different contexts, and how to translate modal verb, which are often tricky in the Croatian language.

The last section, *Tehničke upute,* contains some important technical instructions for the Cochrane Project. The instructions include information such as: what to write in the last segment "translation note", specific translations of some words, the importance of copying tags, but also the suggestion to consult with the project managers/client, etc.

The instructions now provide other useful information and are ready to use. They will be a great starting point for future volunteer translators. Here is the final version with the added information in the optimized instructions:

Dragi i poštovani prevoditelji,

Prije nego što počnete s prevođenjem, molim vas da pročitajte sljedeće upute.

KORIŠTENJE IZVORA
Termine i fraze/izraze obavezno provjeravajte u engl. –hrv. glosaru i koristite medicinske terminološke izvore, npr.: - https://www.halmed.hr/ - https://medicinski.lzmk.hr/clanak/13967 - https://www.plivazdravlje.hr/medicinski-leksikon - https://openmd.com/dictionary/medical-dictionaries - https://hemed.hr/ - https://www.halmed.hr/fdsak3jnFsk1Kfa/ostale_stranice/Preporuceni-prijevodi-strucnih-pojmova-u-klinici-i-neklinici-farmakovigilanciji-i-kakvoci.pdf -Prednost dajete prijevodima u glosaru.
U slučaju jezičnih nedoumica, koristite: - Jezični savjetnik: https://jezicni-savjetnik.hr/?page=23 - Hrvatski jezični portal: https://hjp.znanje.hr/index.php?show=search (značenja i izvedeni oblici) - Hrvatski pravopis: http://pravopis.hr/pravila/ - Kolokacijska baza hrvatskoga jezika: http://ihjj.hr/kolokacije/search/?q=istra%C5%BEivanje&search_type=basic
Uvijek se možete osvrnuti na dosad objavljene prijevode ako niste sigurni kako postupiti: https://www.cochrane.org/hr/search/site.
PREVOĐENJE U DUHU HRVATSKOGA JEZIKA

Za imena bolesti i postupaka pogledajte kako se uobičajeno zovu u hrvatskoj literaturi i praksi te nastojte ne koristiti posuđenice (naravno, u granicama normale); koristite se izvorima iz prethodnog polja.
-Ako neki medicinski naziv/kratica nema naziv na hrvatskom, onda jezik, kraticu i puni naziv / originalan naziv stavite u zagradu, na primjer:
Low back pain (LBP) is a common and debilitating health condition. – Bol u donjem dijelu leđa (engl. *LBP – low back pain*) uobičajeno je i iscrpljujuće zdravstveno stanje.

Pazite na to da ne prevodite doslovno, npr.:

We wanted to find out if antibiotics are effective for relieving signs and symptoms in children with AOM. - ~~Željelo se saznati jesu li antibiotici učinkoviti za ublažavanje znakova i simptoma kod djece s AOM-om.~~ - Cilj je bio saznati

…might help improve symptoms… – ~~mogu pomoći u poboljšanju~~ -…mogu ublažiti simptome…

…cystic fibrosis has led to them living longer - ~~dovela je do njihovog dužeg životnog vijeka~~ – produžila je njihov životni vijek

-a small reduction in length – ~~malo smanjenje duljine~~ – malo skraćivanje

-*Often with a gradual onset*, it affects people of all ages, reduces their quality of life and results in premature death. - ~~Često s postupnim početkom, zahvaća osobe svih dobnih skupina, smanjuje im kvalitetu života i rezultira preranom smrću~~ – Bolest se razvija postupno…

-This can help to reduce the work of breathing… - ~~To može pomoći u smanjenju rada disanja~~ - To može smanjiti napor pri disanju…

-causing a heart attack or stroke - ~~uzrokujući srčani ili moždani udar~~ - što uzrokuje, što može uzrokovati

-a small reduction in length of stay – ~~malo smanjenje duljine boravka~~ – skraćivanje boravka

-intensive care unit stay – ~~boravak na inetnzivnoj njezi~~ – boravak na jedinici za intenzivno liječenje
-sitting for long periods – ~~kroz dugi vremenski period~~ – tijekom dužeg sjedenja / dugotrajno sjedenje
-medical care – ~~medicinska njega~~ – liječenje ili medicinska skrb
-may result in – ~~može rezultirati~~ – može dovesti do
-hidratation – ~~hidratacija~~ – hidracija
-time period – ~~vremensko razdoblje~~ – razdoblje
-management – ~~upravljanje~~ – liječenje
-study methods – ~~metode studija~~ – istraživačke metode, metode istraživanja

Obratite pažnju na česte kolokacije:

-reduce pain – ~~umanjiti bol~~ – ublažiti bol
-serious side effect – ~~teška nuspojava~~ – ozbiljna nuspojava
-severe side effect – ~~ozbiljna nuspojava~~ – teška nuspojava, jaka bol
-heart function – ~~funkcija srca~~ – srčana funkcija
-draw conclusions – ~~dati zaključke~~ – zaključiti, izvući zaključke

PRAVOPIS I GRAMATIKA

Izbjegavajte uporabu 'da li' - trebalo bi pisati 'je li' u većini slučajeva.

Npr.: Is methylphenidate an effective treatment for children and adolescents? – ~~Da li je metilfenidat učinkovit tretman za djecu i adolescente?~~ --Je li metilfenidat učinkovit tretman za djecu i adolescente?

Obratite pažnju na pisanje zareza:

-međutim,
-ni niti piše se bez zareza
-ne ispred te nema zareza

Pazite na prevođenje pasivnih rečenica:

Eight trials were funded in full by one or more drug companies. - Osam ispitivanja u cijelosti ~~je financirano od strane~~ jedne ili više farmaceutskih tvrtki. – je financirala jedna ili više (izbjegavati „od strane“).

U slučaju neživog subjekta: The updated review included 14 studies with 574 people… - ~~Obnovljeni pregled uključuje 14 istraživanja s 574 ispitanika~~ - U obnovljeni pregled uključeno je 14 istraživanja s 574 ispitanika…

Deklinirajte Cochrane (i druge strane nazive), npr.:

Cochrane Library – Cochraneova knjižnica

Pazite na pisanje prijedloga, npr.:

-people with cancer – ~~osobe s rakom~~ – osobe oboljele od raka
-in children – u djece
-by mouth – ~~kroz usta~~ – na usta
-among diabetics – ~~među dijabetičarima~~ – u dijabetičara, kod dijabetičara ili samo dijabetičari

Obratite pažnju na pisanje izvedenih oblika:

preporučalo < preporučivalo (HJP izvedeni oblici https://www.lektoriranje.org/jezicni-savjetnik/16/4/2019/preporucam-ili-preporucujem)

sadrži < sadržava

Pazite na pisanje fizikalnih mjera i znaka za postotak, npr.:

~~100°C~~ – 100 °C , ~~80%~~ - 80 % RAZMAK

Pazite na pisanje datuma, npr.:

15 December – 15. prosinca (ne 15. prosinac)
U hrvatskom se naziv mjeseca piše u genitivu; veljača je jedini mjesec ženskog roda, ali broj ispred sklanja se u muškom rodu, npr.: 4. veljače (četvrtog veljače, ne četvrte veljače)

Pazite na rastavljeno i sastavljeno pisanje:

~~do nedavno~~ – donedavno (jednorječnice http://pravopis.hr/pravilo/jednorjecnice/36/)

Pazite na preferirani način pisanja nekih riječi:

podaTci > podaci

RAZLIKE U ZNAČENJU RIJEČI

Obratite pažnju na značenjske razlike:

-trenutno i trenutačno - u publicističkome, administrativnome i znanstvenome stilu daje se prednost prilogu *trenutačno* pred prilogom *trenutno* (http://jezicni-savjetnik.hr/?page=23)

-imunosni i imunološki – Pridjev imunosni odnosi se na imunost: imunosni sustav, imunosna reakcija, a pridjev imunološki odnosi se na struku (imunologiju) i osobu koja se bavi tom strukom (imunolog): imunolške pretrage, imunološki testovi.

-duži i dulji - Imenice "dužina" i "duljina" u hrvatskome standardnom jeziku u neutralnoj su upotrebi istoznačnice. U nekim strukama postoji razlika: -matematika: dužina je razmak između dviju točaka, a taj razmak je mjernom jedinicom označen kao „duljina“ (npr. razmak od 20 m je duljina).

-znatan i značajan: – znatan označuje da je nešto veliko (significant amount of money – znatan iznos
– značajan označuje da je nešto važno, bitno (significant role – značajna uloga)

-ovaj i taj: - Ako rečenica upućuje na element koji tek slijedi, riječ je o kataforičnosti: U ovom radu pisat ću o odnosu jezika i govora. (rečenica u uvodu seminarskoga rada).
- Ako rečenica upućuje na prethodni dio teksta, riječ je o anaforičnosti: U školi sam učila talijanski. To mi je najdraži jezik.

Obratite pažnju na prevođenje modalnih glagola:

…can help to improve the quality of life… - ~~mogu pomoći u poboljšanju kavalitete života~~ -mogu poboljšati kvalitetu života

-may – može se, mogu se, moguće je, postoji mogućnost

-should – Doslovni prijevod „treba“ je problematičan je može značiti nešto što je preporučeno ili se preferira Kada je to primjenjivo, preporučuju se sljedeći prijevodi u hrvatskom tekstu: “should” –„nužno je“ „potrebno je“ (iznimno u odgovarajućem kliničkom kontekstu „treba“, a ne „trebalo bi“).

-must – mora se

TEHNIČKE UPUTE

Obavezno provjeravajte termine i fraze u Excelovim tablicama.

Npr. „randomized controlled trial“ – ovo bismo na prvu preveli „nasumično kontrolirano ispitivanje“, no pravilno je „randomizirano kontrolirano istraživanje“ i tako stoji u Excel tablici.
-Ovisno o kontekstu, „adverse effect“ može biti i „nuspojava“
(https://www.halmed.hr/fdsak3jnFsk1Kfa/ostale_stranice/Preporuceni-prijevodi-strucnih-pojmova-u-klinici-i-neklinici-farmakovigilanciji-i-kakvoci.pdf).

Bilješke o uobičajenim riječima i frazama na koje bi mogli naići i kako ih prevesti slijede:

study – ~~studija~~ – istraživanje
study participant – ~~sudionik~~ – ispitanik
outcome – ishod
Review question – Istraživačko pitanje
Background – Dosadašnje spoznaje, Uvod
Study characteristics – Obilježja istraživanja
Key results – Ključni rezultati
Patient – ~~bolesnik~~ - pacijent

Umjesto prijevoda posljednjeg polja u tablici, Translation notes, u polje desno kopirate sljedeći odlomak:

Hrvatski Cochrane Preveo/la: Ime Prezime
Ovaj sažetak preveden je u okviru volonterskog projekta prevođenja Cochraneovih sažetaka. Uključite se u projekt i pomozite nam u prevođenju brojnih preostalih Cochraneovih sažetaka koji su još uvijek dostupni samo na engleskom jeziku. Kontakt: cochrane_croatia@mefst.hr

„Ime Prezime“ promijenite u Vaše!

Nastojte izbjegavati pisanje u prvom licu množine, prebacite to u treće lice (npr. „We found“ - Autori su pronašli, Pronađeno je...) Čak i kada autori tako pišu – oni jesu autori pregleda, mi uglavnom nismo. Ne morate svaki put pisati 'Autori su pronašli…'. Imajte na umu da je ovo prijevod laičkog sažetka i da jezik treba biti što jednostavniji.
Pazite na formatiranje, obavezne kopirajte sve TAGOVE.
U slučaju nedoumica, konzultirajte se s voditeljem projekta i klijentom.
Na kraju prijevoda pročitajte tekst i onda ispravite sve što vam 'iskače'.

6. Conclusion

Access to medicine is crucial for people to maintain good health or treat illness. Today, the Internet is available everywhere, containing an unimaginable amount of information. A part of that information space takes up medicine. There is also a lot of false medical information which can deceive people and be spread worldwide. The Cochrane Project is a project which provides humanity with quality and reliable medical content on the Internet. While most medical documents are written and published in English, Cochrane's goal is to provide translations of medical information to everyone. To do that, Cochrane has volunteer translators who take a part of their time and turn it into a service to humanity's need for medical knowledge.

The main goal of this thesis was to ease the job of Cochrane's volunteer translators from English into Croatian by providing them with an updated and correct termbase and instructions. The thesis consists of four main parts. The first part briefly describes the methodology used in the thesis. Then, terminology, its history, and the translation of medical texts was analysed. After that comes an analysis of the practical work of optimizing the termbase and instructions. Finally, in the next section, the final versions of the termbase and instructions are attached and ready to use.

The optimized termbase and instructions will serve as a foundation for future volunteers and help them translate Cochrane's plain-language summaries.

7. Appendices

COCHRANE'S ENGLISH TO CROATIAN TERMBASE FOR VOLUNTEER TRANSLATORS

Dikšić Omazić final termbase.xlsx

INSTRUCTIONS FOR VOLUNTEER TRANSLATORS

Dikšić - instructions for Cochrane's volunt

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