

© 2014
Patricia González-Darriba
ALL RIGHTS RESERVED

**ENGLISH TO SPANISH TRANSLATED MEDICAL FORMS:
A DESCRIPTIVE GENRE-BASED CORPUS STUDY**

by

PATRICIA GONZÁLEZ-DARRIBA

A thesis submitted to the

Graduate School-New Brunswick

Rutgers, The State University of New Jersey

In partial fulfillment of the requirement

For the degree of

Master of Arts

Graduate Program in Spanish

Written under de direction of

Miguel A. Jiménez-Crespo

And approved by

New Brunswick, New Jersey

January 2014

ABSTRACT OF THE THESIS

English to Spanish translated medical forms:

A descriptive genre-based corpus study

by PATRICIA GONZÁLEZ-DARRIBA

Thesis Director:

Miguel A. Jiménez Crespo

Medical translation in the US has received increasing attention in recent years (Colina 2008; 2009). This trend can be observed in the passing of legislation that supports equal access to healthcare regardless of language, the development of training programs in different educational institutions, and also in the emergence of private initiatives in this field. In this context, this paper aims to classify, describe and analyze a genre with the highest volume of translation within medical practices, the Patient's Personal and Medical Information Form (PPMIF).

This departs from a genre approach based on ESP and Discourse Analysis approaches applied to translation (i.e. Gamero 2001; García Izquierdo 2009). Methodologically, it uses a corpus-based approach: the compilation and description of the parallel corpus (100 English PPMIFs and their translations into Spanish). Then, a genre-based approach is applied to describe the superstructure of the textual genre following previous studies that focused on forms (i.e. Jiménez-Crespo 2010). In the last part of the study, a contrastive error-based quality analysis following previous TS studies such as Jiménez-Crespo (2011, 2012) and De Rooze (2003) is presented. This quality analysis intends to shed light into the current state of medical translation in the United States.

Dedication

To my loving husband Javier, who was with me and patiently supported me every step of the way.

TABLE OF CONTENTS

Abstract.....	ii
Dedication	iii
Table of contents	iv
List of figures	vi
List of tables	vii
1. Introduction	1
2. Theoretical framework	3
2.1.Notion of genre	4
2.1.1. Genre conventions	7
2.1.2. Genre system and genre colony	9
2.2.Medical genres	10
3. Empirical study	13
3.1.Methodology	13
3.2.Considerations on corpora and corpus compilation	14
3.3.Analysis of the texts compiled in the corpus	16
3.4.Selection of textual population for corpus and corpus description	17
4. Results	20
4.1.Description of the genre “Patient’s Personal and Medical Information Form”	20
4.1.1. Conventions	20
4.1.2. Sociocultural context	22
4.1.3. Text function	23

4.1.4. Communicative situation	24
4.1.5. Intratextual elements	25
4.1.5.1. Superstructural analysis	25
4.2. Quality in translated medical forms	28
5. Conclusions	36
6. Further research	37
References	39
Appendix 1. Search structures and URLs for the original and translated forms	43
Appendix 2. Breakdown of the sections found in the studied corpus	51

LIST OF FIGURES

Figure 1. Genre description model	7
Figure 2. Forms most commonly found online while compiling the corpus	11
Figure 3. English text offered first, Spanish translation added next to English text	19
Figure 4. English text offered first, Spanish translation available in following pages ...	19

LIST OF TABLES

Table 1. Major sections and percentages of forms in which they appear	26
Table 2. Translated PPMIF prototypical structure	27
Table 3. Error typology	29
Table 4. Quality assessment summary	30
Table 5. Distribution of the errors found in the analyzed sample	31
Table 6. Distribution of errors by percentage	32

1. Introduction

Medical translation in the US has received increasing attention in recent years. This new interest can be observed in the passing of legislation that supports equal access to healthcare regardless of language, the development of training programs in different educational institutions, and also in the emergence of private initiatives in this field, affecting both translation and interpretation in the medical field.

As far as legislation is concerned, and according to the National Council on Interpreting in Health Care, a number of laws and policies mandate the provision of interpreting services in the health care setting in order to promote equal access to health care (namely, (1) Title VI of the Civil Rights Act of 1964, (2) HHS Policy Guidance on the Prohibition Against National Origin Discrimination as it Affects Persons With Limited English Proficiency, (3) DOJ Guidance to Federal Financial Assistance Recipients Regarding Title VI Prohibition Against National Origin Discrimination Affecting Limited English Proficient Persons, (4) Culturally and Linguistically Appropriate Services Standards for Health Care, (5) Executive Order 13166, and (6) Strategic Plan to Improve Access to HHS Programs and Activities by Limited English Proficiency Persons). These federal laws and policies ensure access to services for LEP patients.

Secondly, numerous colleges, universities, professional associations and private institutions now offer medical translation courses, medical interpreting courses, certificates and training programs in this field.

Lastly, a good example of private projects that are working towards the improvement of medical translation status is the one nationally led and funded by The Robert Wood

Johnson Foundation, “*Hablamos Juntos*”¹ (Colina 2008, 2009; *Hablamos Juntos* 2001), whose mission is “to improve communication between health care providers and their patients with limited English proficiency.” *Hablamos Juntos* has selected to work with ten existing health care organizations as “demonstration sites.” These demonstration sites are located in areas with an already high or rapidly increasing Latino population –the target audience for this project– and act as experimental sites in which to develop and implement translation models and approaches that improve health care service for Latino patients.

The focus of these aforementioned programs and projects exhibits a more practical approach while, despite vast amounts of research in other areas such as Europe or Canada, there is a scarcity of theoretical and empirical efforts to (1) either describe and explain the current situation in this country or (2) to apply existing research in Translation Studies to our sociocultural context. This is the motivation of this thesis, as it aims to categorize, describe and analyze a genre with the highest volume of translation within medical practices, the Patient’s Personal and Medical Information Form (PPMIF).

Medical textual genres have been the object of research by several authors and a large number of medical genres has been classified and studied in the European context, with some University research groups dedicated to this endeavor, such as GENTT² at Universitat Jaume I.

Genres are culture-dependent (Bazerman 1994, Swales 1990) and in different sociocultural contexts show different conventions or happen to be nonexistent all together, such as the case of the PPMIF. Therefore, a close analysis is necessary to define

¹ <http://www.hablamosjuntos.org/default.about.asp>

² <http://www.gentt.uji.es/>

this textual genre and its conventions within the sociocultural context where it is produced.

In this thesis, whose descriptive nature represents the main component and contribution, one of the most widely used medical genres in the USA has been characterized and outlined, leading to the description of the observed structural and lexical conventions, as well as a quality assessment. Methodologically, the study compiled a parallel corpus of translated forms (PPMIF) available online.

This thesis is divided into the following parts: First, the thesis reviews the existing literature on textual genres from a Discourse Analysis, ESP and Translation Studies perspective in order to lay the foundation for our study. Secondly, a close and descriptive analysis of the compiled translated medical forms will be presented. Lastly, a quality assessment task is performed on randomly selected samples from the compiled corpus.

2. Theoretical framework

Analysis of forms has been carried out applying a variety of approaches. These include Contrastive Linguistics, Discourse Analysis, English for Specific Purposes or Translation Studies (i.e., Grosse and Mentrup 1980; Gülich 1981; Nord 2001; Sánchez Nieto 2006). These studies have focused on the contrastive differences between the same type of forms in two different languages, as pointed out by Jiménez-Crespo (2010).

As it will be introduced later on, this type of contrastive analysis is not possible to perform on the medical forms under study but the use of a genre-based approach will prove useful instead for several reasons.

First of all, medical forms exhibit a somewhat common structure throughout types, clinical specialties and geographical areas, that is, medical forms present recurrent *sections, moves, steps* and *substeps* (Swales 1990) with similar questions and information exchange. Also, they are designed or organized to accomplish a certain task that needs to be solved in a specific communicative situation and they need to adjust to the expectation of the receiver. Finally, medical forms represent a communicative instrument between patient and provider, becoming a written dialog between the participants involved in this communicative setting.

These three patterns bring to mind the notion of textual genre, which will be explained in the following section. Furthermore, a genre-based approach has also been employed in Translation Studies as a helpful tool both in training future professional translators and in professional settings as it allows for the establishment of a systematic methodology to effectively tackle these documents, taking into account fundamental cross-cultural differences in their formulation. Hurtado (2001) considers genre a central notion within Descriptive Translation Studies and claims that “the description and classification of textual genres ... allows to better know the modalities and translation types, but also for the training in translation.” (Hurtado 2001:505)

2.1. The notion of genre

The concept of textual genre is anything but new and has been widely applied to different disciplines, such as Literary Theory, Film Theory, Discourse Analysis or Corpus Linguistics. It has been extensively defined by numerous scholars such as Bakhtin (1986), Halliday (1985) and Hatim and Mason (1990).

The models most relevant to Translation Studies will be now reviewed in order to understand the impact they had in shaping the current state of the discipline, both in theory and in practice.

Within the Linguistics field, this notion has been examined from different angles, mainly the following three: Discourse Analysis, Language for Specific Purposes and Systemic Functional Linguistics (Luzón 2005).

From Discourse Analysis, Bazerman (1994) framed genre from the perspective of the New Rhetoric. According to this scholar, genre has been explored from three different standpoints: genre as text, genre as rhetoric, and genre as practice, being this last perspective the one he focuses on the most in order to understand this concept. He claims that genres are organized social actions, textual practices related to generic actions that are fundamentally dynamic, fluid, heterogeneous and situated (Bazerman and Prior 2005). In this definition, social practices take paramount importance, over direct, straightforward textual analysis.

Additionally, also from a Discourse Analysis perspective, Martin (2002:269) defines textual genres as “configurations of meaning [...] recurrently phased together to enact social practices,” equally underscoring the importance of the social context over the textual analysis.

On the other hand, when examining genre through the Language for Specific Purposes lens or that of Systemic Functional Linguistics, it is the textual analysis the feature that is capitalized.

Swales (1990) and Bathia (1993) bring to the table another factor, the discursive community, and anchor the notion of genre within that community both stressing the

importance of the communicative action being performed by the genre and introducing the crucial role of the communicative purpose, which determines the textual lexical and grammatical features.

These two perspectives (Discourse Analysis and LSP) are underscored in this study since they have proved to be more relevant and productive within Translation Studies.

In an effort to integrate the different aspects set forth by the scholars previously mentioned, it is necessary to mention Gamero's definition (2001) from a Translation Studies perspective, which encompasses the subtle differences present in the previous approaches and is applicable and specific to Translation Studies. Gamero integrates social practices, communicative purpose and textual analysis in order to produce a comprehensive definition of this multifaceted concept. From Gamero's standpoint, genre must be characterized using a dynamic model – a genre description model – that involves an array of factors (namely, (1) conventional features, (2) text function, (3) communicative situation, (4) sociocultural context and (5) intratextual elements) rather than utilizing a rigid definition that is supposed to fit every existing text. In this sense, genre classifications are understood in terms of prototype theory (Rosch, 1977) with instances of genre being more or less central to the prototype shared by any given discourse community³.

³ A discourse community, as defined by Swales (1990), exhibits the following characteristics:

1. has a broadly agreed set of common public goals.
2. has mechanisms of intercommunication among its members.
3. uses its participatory mechanisms primarily to provide information and feedback.
4. utilizes and hence possesses one or more genres in the communicative furtherance of its aims.
5. in addition to owning genres, has acquired some specific lexis.
6. has a threshold level of members with a suitable degree of relevant content and discorsal expertise.

This description model, which will be later used to describe the genre of the analyzed forms, can be visualized in Figure 1:

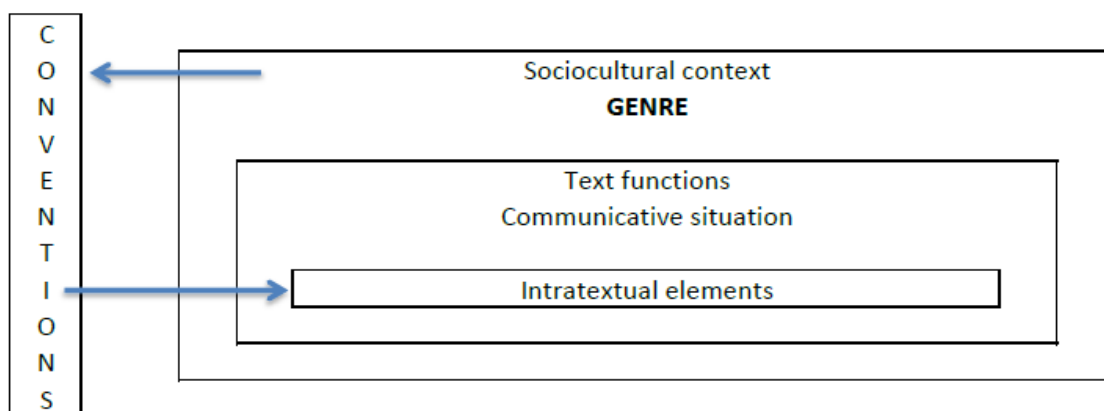


Figure 1. Genre description model (from Gamero (2001:60))

As seen in the previous figure, genres are framed within specific sociocultural contexts. These contexts dictate what conventions will be found in the textual exemplars. These conventions in turn mandate the appropriate intratextual elements.

2.1.1. Genre conventions

The fact that genres are conventionalized is the main feature that helps members of a discourse community both produce and identify instances of textual genres. According to Gamero (2001:51), genre conventions are “aquellos rasgos textuales sancionados por los hablantes de una lengua y que éstos utilizan, a pesar de que existan otras opciones lingüísticamente correctas para la situación.”

Gamero resorts to Psychology and Philosophy theory in order to explain the elements that make conventions happen. She follows Lewis's work (1969) on more broadly defined conventions.

Lewis claims that these repeated social norms appear when 1) several people take part in a situation, 2) the situation happens repeatedly, and 3) the people involved share a purpose only possible to achieve if they all conform to the norm.

Gamero then states that communicative situations in which genres occur meet the three previously mentioned criteria:

1. At least a sender and a receiver are involved,
2. The situation repeats itself, given that the genre format is used recurrently, and
3. The participants exhibit a common behavior and work towards the fulfillment of a certain purpose.

Conventions in a textual genre can manifest themselves in different manners. They can affect the lexical choices in the text, the grammar or the syntactic forms. They also determine the textual structure and layout, what we will call here the "superstructure." Lastly, conventions dictate to some extent the macrostructure or contents (what must and must not be included) in the text. For the purpose of this study, these features will be the focus of the analysis. The building blocks and sub-blocks of the textual genre under study will be evaluated in terms of recurrence to determine if they might be considered conventional or merely occasional.

2.1.2. Genre system and genre colony

Genres do not exist in a vacuum or represent completely independent entities. Rather, closely related genres normally co-exist in what is normally known as “genre systems” (Bazerman 1994) or “genre colonies.” (Bathia 2002)

These related textual genres interact among them, overlapping one another and making it difficult to tease them apart. When this occurs, we encounter “genre colonies.” Bathia clarifies this blurry concept using the promotional genre as an example. Promotional texts can include advertising, promotional letters or book blurbs but also reference letters and job application letters.

This same interaction phenomenon was also explained by Bazerman (1994) using the notion of “genre system,” defined as “interrelated genres that interact with each other in specific settings.” (97) This concept introduces the idea of having a particular genre following upon another in a particular setting and he illustrates this interaction using the following example:

A patent may not be issued unless there is an application. An infringement complaint cannot be filed unless there is a valid patent. An affidavit [...] will not be sworn unless a challenge to the patent is filled. (1994:98)

In other words, the occurrence (or lack thereof) of each genre will have consequences in the general state of affairs due to this interrelation.

In the particular case of the type of textual genre studied by this thesis – the medical one – the possible “genre colony” would consist of the different instances of textual genres that have been identified to this day.

2.2. Medical genres

As previously indicated, medical genres have been studied and defined by several authors and research groups, presenting them as effective tools for different purposes (Montalt and González Davies (2007), García Izquierdo (2009), Forés (2004-2005), Bawarshi (2003), GENTT).

Montalt and González Davies (2007) briefly describe different types of medical genres according to their overall social purpose. Examples of their suggested genres are fact sheet for patients, informed consent, case report or clinical guidelines, to name a few. According to these scholars, these texts can serve a double purpose: to bridge the communication gap between the participants (doctor-patient, doctor-researcher, and patient-researcher) and as a pedagogical instrument to train new medical translators.

Additionally, García Izquierdo has extensively researched and described from a more theoretical standpoint the “Fact sheet for patients” medical genre in her 2009 book *Divulgación médica y traducción: El género Información para pacientes*. This work has later been used by Forés (2004-2005) to justify the application of textual genres on translation pedagogy.

On the other hand, Bawarshi (2003) claims that the analysis of medical genres can give access to the discourse community that produces them, which can be translated into teaching students different language uses and ways of participation in various language sites.

The aforementioned research group GENTT has proposed a comprehensive medical genre taxonomy⁴ in which medical texts are classified into 6 categories: (1) clinical, (2) informative, (3) meta-genre, (4) educational, (5) promotional, and (6) research.

When compiling the corpus for this study, different medical forms available online were encountered. The ones shown in Figure 2 are the most commonly found forms:

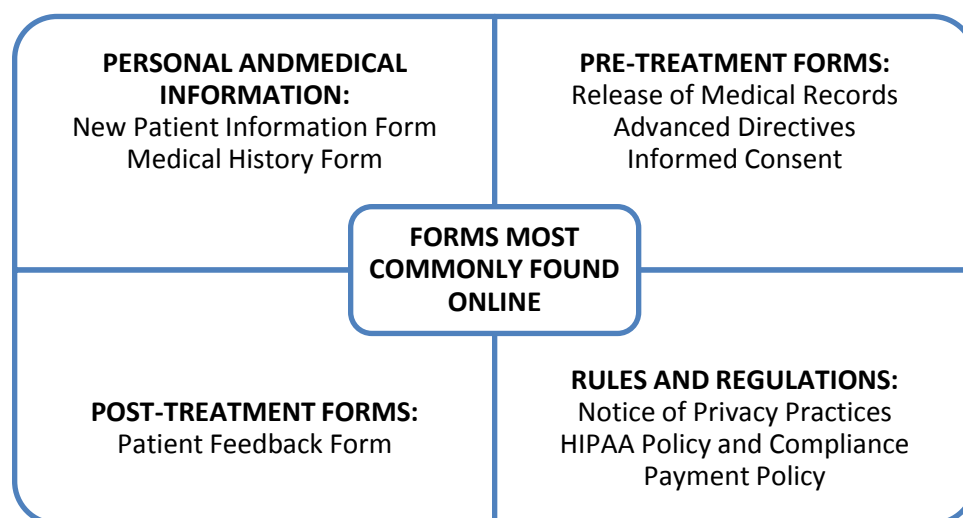


Figure 2. Forms most commonly found online while compiling the corpus

Note that this intuitive classification presented in Figure 2 does not correspond to the one put forth by GENTT. This is due to two reasons: (1) the previously mentioned research group focuses mostly on the analysis of forms in Spain and the United Kingdom – countries where the sociocultural context and communicative situation demand other medical genres – and (2) some of the forms encountered in the US respond to legal needs established by federal, state or local patient protection laws.

⁴ For the full taxonomy, please refer to García Izquierdo 2009: 129-134.

Only “New patient information” forms and “Medical history” forms have been compiled and included in our study because they share several features that make them suitable for grouping them in a genre colony:

1. In terms of content, they exhibit very similar items and sometimes it is very difficult to tease them apart since most of the information asked from the patient coincides.
2. As far as the purpose⁵ is concerned, both form types are designed to accomplish the same function: mediate and facilitate the first encounter between new patients and medical providers, whether this process of getting acquainted pertains to their personal and social backgrounds or if it relates to their medical information.
3. For many of the other aforementioned forms, it can be observed that what is needed from the patient in order to complete the form and fulfill its purpose (conveying some policy or practice to the patient) is just a signature. There is no interaction or dialog, no questions asked and answers provided. It is as simple as getting the patients to sign their names. But in the case of the studied forms, it becomes obvious that a written conversation is taking place and the purpose behind the form is to gather as much information from the patient as possible. This is only possible with a Q&A format where the questions are preset and the answers have to be entered by the patient, creating a written dialog that does not exist in the other form types. This particular

⁵ “Purpose” here is used to mean “intention,” not as “text function.” For details on text function, please refer to section 4.1.3.

form does not exist in other cultures or countries where this information exchange is realized orally.

According to these facts and based on the features they share, hereinafter, both the “New patient information” form and the “Medical history” form will be considered to belong to the same textual genre, which has been denominated “Patient’s Personal and Medical Information” form (PPMIF) for the purpose of this study.

The goal of this thesis is to produce a descriptive characterization of the studied forms. Later on, drawing from Gamero’s genre description model, Bawarshi’s work on Patient Medical History Forms (PMHF) and the data collected and analyzed, a description for the PPMIF genre will be provided.

3. Empirical study

The following sections describe the methodology for the study and its empirical results.

3.1.Methodology

The methodology for this empirical study follows that employed by Jiménez-Crespo (2008, 2009, 2010, 2011) and has three main components: (1) a corpus-based methodology to compile, classify and study the textual population under study using the Internet, (2) a Discourse Analysis approach to the description of the superstructure of the textual genre, and (3) a contrastive error-based analysis of a random sample of forms,

following quality-based approaches in Translation Studies such as Jiménez-Crespo (2011, 2012b) or De Rooze (2003).

3.2. Considerations on corpora and corpus compilation

In order to understand and validate the corpus compiled for the study, it is critical to discuss what a corpus is and assess the most pressing issues in corpus compilation.

The notion of corpus in Translation Studies comes from Corpus Linguistics, which at the same time emanates from the definition put forth by Sinclair (1991):

A corpus is a collection of naturally-occurring language text, chosen to characterize a state or variety of a language. (Sinclair 1991:171)

This definition remarks the need for collection of natural instances of language. But natural occurrence is not the only requirement that must be met or the only criterion to be observed. In this sense, Biber (1998) claims that corpora need to be both “a large and principled collection of natural texts.”

Probably the most extended definition is the one proposed by EAGLES (Expert Advisory Group on Language Engineering Standards) and it includes both the natural-occurring factor and the need for compilation principles:

A collection of pieces of language that are selected and ordered according to explicit linguistic criteria in order to be used as a sample of the language. (EAGLES 1996:4)

More recently, taking into consideration the technology component, Laviosa claims that a corpus can be defined as “a collection of authentic texts held in electronic form and assembled according to specific design criteria.” (Laviosa 2010:80)

In order to compile a valid and replicable corpus, certain criteria must be followed. As pointed out by Pérez Hernández (2002), the main criteria are representativity, standardization and corpus typology, the first criterion being the one that holds paramount importance, as put by Biber (1993):

A corpus is put together in a principled way as to be representative of a larger textual population, in order to make it possible to generalize findings concerning that population. (Biber 1993:243)

Representativity is achieved by including in the corpus “the full range of variability in a population.” (Biber 1993:243)

Standardization refers to the necessary filters that need to be applied to the texts that are collected while compiling the corpus.

Corpora can be broken down into different categories and subcategories as specified by Laviosa’s typology (2002: 34-38). In our case, a “bilingual parallel corpus,” which means it comprises several texts in language A (English) and their translations in language B (Spanish) (Laviosa 2002) has been used.

These corpora have also been denominated “translation corpora” (Johansson 1998) or “bitexts” (Bowker 2002) and can also be described as corpora “that contain a series of source texts aligned with their corresponding translations.” (Malmkjaer 1998:539) They allow for translation units or terminology samples to be compared across texts and to consult previously translated units.

Despite being widely used within Translation Studies and by translation practitioners, they also present some drawbacks. This type of corpus exhibits a non-natural language variety (McEnery and Xiao 2007) and it might represent idiosyncratic solutions produced by just one translator (Teubert 1996). This last drawback can be partly overcome by using a sufficiently large sample.

Some examples of multilingual parallel corpora are the Europarl corpus of European Parliament procedures⁶, the JRC-Acquis of European legislation⁷ or the Open Subtitles corpus⁸ of movie subtitles.

The compilation criteria employed in order to account for corpus representativity and standardization while gathering the study's corpus will be addressed later on.

3.3. Analysis of the texts compiled in the corpus

The methodology used for this analysis is based on a manual identification and count of the individual *sections*, *moves*, *steps* and *substeps* (Swales 1990) that are present in each document. Examples of these sections and moves could be illustrated as follows: it is very frequent to find forms that start with a section that asks the patient to provide some personal information. This information can then be broken down into different moves, such as basic personal information, insurance information or emergency contacts. In turn, the basic personal information move might contain steps (name, last name, date of birth...) and substeps (cellular phone number, home phone number). (Note that this organization is done intuitively as the identification and count of items progresses and could have taken other shape).

⁶ <http://www.statmt.org/europarl/>

⁷ <http://optima.jrc.it/Acquis/>

⁸ <http://opus.lingfil.uu.se/OpenSubtitles.php>

As previously established and applied by Jiménez-Crespo (2008, 2009, 2010, 2011) and Gamero (2001), different levels of recurrence are set using percentage thresholds to decide whether an item that appears in the forms is conventional or not:

- 70% or higher: highly recurrent (Hoffman 1988)
- Between 50% and 70%: recurrent (Hoffman 1988 and Gamero 1998)
- Below 50%: occasional (Gamero 1998)

Following this methodology, a prototypical superstructure of the textual genre will be obtained by discarding the elements that appear in less than 50% of the forms and keeping all recurrent and highly recurrent items.

3.4. Selection of textual population for corpus and corpus description

For the purpose of this study, a corpus of original English medical forms and their translations in Spanish has been compiled using the World Wide Web. When compiling this bilingual corpus, the issues of representativity and standardization were addressed in the following ways:

1. Forms were only selected from states with higher percentage of Spanish-speaking population. In order to determine which states were to be analyzed, two variables were considered: a) states with highest percentages of population with Hispanic or Latino origins⁹, and b) states with highest percentages of households where Spanish is spoken. These states, according to the 2010 US Census and the 2007 US Census are California, Nevada, New Mexico, New York, New Jersey, Florida,

⁹ Definition of Hispanic or Latino Origin Used in the 2010 US Census: "Hispanic or Latino" refers to a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.

Colorado, Illinois, Texas, Arizona. 77.9% of the population with Hispanic or Latino origins resides in these ten states, each of them having more than 15% of this social group.

2. Forms were found and downloaded using Google search engine. The search structures were similar across the analyzed states in order to find documents that match the same searching criteria regardless of the geographic area. Examples of this are “formulario paciente español texas,” “new patient form new jersey Spanish,” “new patient form Nevada Spanish.”¹⁰
3. The first 10 forms that belonged to the textual population under study were downloaded.
4. Forms were only included in the corpus if they belonged to state-specific medical institutions; forms from interstate and federal institutions were disregarded.
5. Forms were only included in the corpus if the original and translated texts were available in separate documents, i.e., forms with both English and Spanish versions presented in the same document were not taken. See figures 3 and 4 for examples.

¹⁰ Full list of search structures along with URLs for the original and translated forms is available in Appendix 1.

PATIENT REGISTRATION FORM / INFORMACION DE REGISTRO		TODAY'S DATE / FECHA DE HOY	
P A T I E N T / P A C I E N T E	LAST NAME / APELLIDO		FIRST NAME / PRIMER NOMBRE
	SOCIAL SECURITY NO / NUMERO DE SEGURO SOCIAL		BIRTHDATE / FECHA DE NACIMIENTO
	MAILING ADDRESS / DIRECCIÓN DEL CORREO		APT NO / NUMERO DE APARTAMENTO
	CITY / CIUDAD	COUNTY/CONDADO	STATE / ESTADO
PLEASE CHECK THE NUMBER WHERE WE MAY CONFIDENTIALLY CONTACT YOU AND/OR LEAVE A MESSAGE / PORFAVOR MARQUE EL NUMERO DE TELEFONO DONDE PUEAMOS DEJAR UN MENSAJE CONFIDENCIAL.			
<input type="checkbox"/> HOME PHONE / TELEFONO DE LA CASA		<input type="checkbox"/> WORK PHONE / TELEFONO DE TRABAJO	<input type="checkbox"/> CELL PHONE / TELEFONO DE CELULAR
<input type="checkbox"/> MALE / HOMBRE <input type="checkbox"/> FEMALE / MUJER		RACE/RAZA: <input type="checkbox"/> AMERICAN INDIAN OR ALASKA NATIVE <input type="checkbox"/> ASIAN <input type="checkbox"/> BLACK OR AFRICAN AMERICAN <input type="checkbox"/> MORE THAN ONE RACE <input type="checkbox"/> WHITE <input type="checkbox"/> NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER <input type="checkbox"/> UNREPORTED/REFUSED TO REPORT	
<input type="checkbox"/> MARRIED / CASADO(A) <input type="checkbox"/> SINGLE / SOLTERO(A) <input type="checkbox"/> DIVORCED/SEPARATED / DIVORCIADO(A)/SEPARADO(A) <input type="checkbox"/> WIDOWED / VIUDO(A)		HOW DID YOU HEAR ABOUT PCC / COMO <input type="checkbox"/> FRIEND/AMIGO <input type="checkbox"/> FAMILY MEMBER/MIEMBRO FAMILIAR <input type="checkbox"/> PHYSICIAN/DOCTOR <input type="checkbox"/> INSURANCE/ASEGURANZA <input type="checkbox"/> HOSPITAL/HOSPITAL: <input type="checkbox"/> OTHER/OTHER	
PRIMARY INSURANCE NAME / ASEGURANZA PRIMARIA		ID#	POLICY HOLDER / POSEEDOR DE SEGURO
SECONDARY INSURANCE NAME / ASEGURANZA SECUNDARIA		ID#	POLICY HOLDER / POSEEDOR DE SEGURO

Figure 3. English text offered first, Spanish translation added next to English text (full form available in https://www.austinpcc.org/documents/patientforms/Patient_Registration_Form.pdf)

DESERT FAMILY PHYSICIANS, P.C. - NEW PATIENT REGISTRATION		DESERT FAMILY PHYSICIANS, P.C. - REGISTRO DE PACIENTE INICIAL	
Social Security #: _____		No Seguro Social: _____	
Name: Last, First, Middle Initial	Date of Birth: _____	Apellido, Nombre	Fecha de Nacimiento
If Child, Parent's Guardian's Name:		Si es niño, Nombre de Padre:	
Address:		Dirección:	
City, State, Zip Code:	Home Phone: _____	Ciudad, Estado, Zona Postal:	Teléfono Casa:
Marital Status:		Estado Civil:	
Employer:	Work Phone: _____	Nombre Empleador:	Teléfono Trabajo:
Employer Address:	Occupation: _____	Dirección Empleador:	Ocupación:
City, State, Zip Code:		Ciudad, Estado, Zona Postal:	
Emergency Contact:		En caso de Emergencia llamar:	
Name:	Phone: _____	Nombre:	Teléfono:
Address:		Dirección:	
City, State, Zip Code:	Relationship to You: _____	Ciudad, Estado, Zona Postal:	Relación con el Paciente:

Figure 4. English text offered first, Spanish translation available in following pages (full form available in http://www.desertfamilyphysicians.com/patient_forms.pdf)

The corpus was compiled during March 2013. It includes 100 original English forms and their Spanish translations, for a total of 200 documents.

The corpus consists of 94 PDF files, 4 Microsoft Word files and 2 HTML files. The total word count is not available because some of the files are dead text or scanned from hard copy. It could have been done using OCR tools but the total word count is not so relevant for the purpose of this thesis and at the same it would have been misleading, since the downloaded documents not only contain the analyzed *moves*, *sections*, *steps* and

substeps, but they also include a large amount of legal terms, conditions as well as policies and fine print that fall out of the scope of this descriptive study.

4. Results

4.1. Description of the genre “Patient’s Personal and Medical Information Form”

After the corpus was compiled, a manual quantitative analysis of the structure of all forms was carried out. This analysis had as a goal to quantitatively identify the different conventional progression of textual segments that make up this genre: the sections, moves, steps and substeps that belong to them. The PPMIF genre will now be described applying Gamero’s genre description model.

4.1.1. Conventions

As it was previously established in the theoretical framework, conventions can present themselves in different ways: through lexical choices in the text, grammar or syntactic forms, text structure and layout or content.

It is immensely helpful for translators when translating a genre to have comparable target genres to the one translated in order to replicate conventions that have been generated spontaneously in the target culture and properly adapt the text format to one easily identified by the target users. Unfortunately, this is not the case with the PPMIF, since Spanish-speaking societies do not share this genre with the American society and sociocultural context, as it will be explained later. Consequently the translator may lack a culturally and linguistically appropriate model to serve as a guide during the translation process and might not be able to produce an instance of a genre that embodies the set of

conventional features expected by end users and, therefore, results in a translation that is not as efficient communicatively speaking as the source text. Good examples of this are the translation units “middle name” and “last name.”

The “middle name” concept is foreign to the Spanish-speaking culture, but even so, it appears on 41% of the forms (24% require a middle name initial and 17% ask about the patient’s second name). Although these percentages are not sufficient to make it a recurrent item, it is interesting to note how it appears on almost half of the corpus population, replicating or mimicking thus the source text content.

On the other hand, the majority of the analyzed forms that have separate space for the last name, use “Apellido” when asking the patient’s last name and only a very small percentage uses “Apellidos,” acknowledging that most Spanish native speakers born in Spanish-speaking countries have two last names instead of just one, as it would be expected in the American sociocultural context.

In those instances where more than one linguistic option is appropriate and accomplishes the same communicative purpose, the convention will be the one that is favored by the speakers, regardless of the reason of this unbalance. In the corpus that was compiled, these are some of the lexical conventions that were observed:

1. “Sexo” was used on 61% of the forms while “Género” was used only on 8% of them.
2. “Celular” was used on 57% of the forms while “Móvil” was used only on 2% of them.
3. “Correo electrónico” was used on 27% of the forms while “Email” was used on 22% of them.

Conventions not only determine aspects such as lexicon or content, but they also dictate intratextual elements, more specifically, textual structure. This feature will be discussed shortly and a prototypical structure for the PPMIF will be provided.

4.1.2. Sociocultural context

The sociocultural context defines the need for a genre. For this reason, some genres are common across different cultures and countries that share the need to resolve a recurrent communicative situation and some others are bound to the society that produces them and unknown outside that context. User's manuals, patents and contracts, to name a few, are examples of the first case. On the contrary, the PPMIF belongs to the latter case. It represents a form of intracultural mediation and therefore it is circumscribed to a particular setting. The way in which health care is organized in the US requires having this type of document but it does not exist in other countries with different health systems like Spain, where the same interaction is mostly realized orally. For this reason, a contrastive analysis between translated samples and spontaneously produced samples is not possible¹¹.

The sociocultural context in which these forms are embedded is one where English is the dominant language. Spanish speakers with English as a second language living in the US seek medical assistance for themselves or a family member at an English-speaking medical office. Access to health care becomes impossible due to a language barrier unless health care providers offer language-appropriate solutions. The first option is to have

¹¹ Medical history forms might be found in other sociocultural contexts as a requirement for individuals who participate in clinical trials or research, but the form that has been analyzed in this study is specifically the one that generally accompanies "New Patient Information" forms in the first visit to a medical practice and not in other possible situations.

translated medical forms available for this population. This can also be complemented by offering interpreting services at the office.

4.1.3. Text function

Text function is another important variable when defining a genre but, as Gamero points out, it has to be noted that a genre can accomplish more than one function at the same time, exhibiting a primary or dominant function and one or more secondary functions.

Text function refers to the reaction that the sender wants to elicit from the receiver. According to this intention, and as Hatim and Mason (2001) noted, texts can be expositive, argumentative, or instructive (also denominated exhortative or persuasive).

The first type, expositive texts, presents information in a non-evaluative manner. These texts focus mainly on description of spatial information, narration of temporal information, or rendering of concepts. Secondly, argumentative texts evaluate concepts and/or beliefs. Lastly, instructive texts focus on shaping future behavior (whether giving the receiver an option or not to act).

The PPMIF clearly exhibits an instructive function: once the patient receives the form, he/she must act. The patient is expected to fill out the form as quickly and accurately as possible. By doing so, the inherently dialogic document is then complete and the text is realized. If the patient does not behave as needed, the text does not accomplish the goal for which it was written in the first place.

The form is designed to solicit personal and medical information including symptoms and reasons to go to the doctor, as well as past medical history and insurance information,

in the first visit to the medical practitioner. It should compile all relevant information needed for a successful appointment and an appropriate diagnosis and treatment.

Although this study does not attempt to describe or analyze the fine print on the forms or the legal terms that are part of them, the patient personal and medical information form also serves as a legal contract and upon the patient's signature it becomes a binding document that links patient and physician throughout their interaction. With his signature, and depending on the specific form, the patient is agreeing to be treated, to share information between providers as well as acknowledging different practices such as payment, appointment and privacy policies. As Bawarshi (2003:551) posits, the PPMIF is "at once a patient record, a legal document, and an element in bureaucracy, helping the doctor treat the patient and presumably protecting the doctor from potential lawsuits."

4.1.4. Communicative situation

The PPMIF comes into play within the discourse community framed by the medical office the new patient enters. In this discourse community, several players interact: the new patient (receiver), who goes to the medical practice for the first time and needs to effectively communicate with the doctor in order to receive treatment; the doctor (sender), who needs to gather different pieces of information in order to properly treat the patient; and the office staff, who act as a liaison between both communication ends. The topic and information discussed on the form is mainly medical and the exchange is carried out in a written form. The language utilized can be considered semi specialized, since some basic knowledge about the medical terminology is expected on the part of the

patient. When this knowledge is perceived as too specialized to be mastered by the patient, non-specialized language or some sort of explication is employed.

4.1.5. Intratextual elements

Among the various intratextual features that can be analyzed when characterizing a textual genre (such as terminology, syntax, cohesion or tone), researchers agree that superstructure is the most important of all since it is normally conventionalized in most genres and it provides the necessary cohesion to the document (Gamero 2001; Göpferich 1995, cited in Jiménez-Crespo 2012a). It also makes sense to apply a top-down approach to the textual analysis in order to subsequently complete a microstructure analysis. For these reasons, the following section focuses on a superstructural analysis of the studied genre.

4.1.5.1. Superstructural analysis

A manual identification and count of the sections, moves, steps and substeps present in the studied corpus determined that the following seven major sections are common across a large percentage of the forms (in order of appearance):

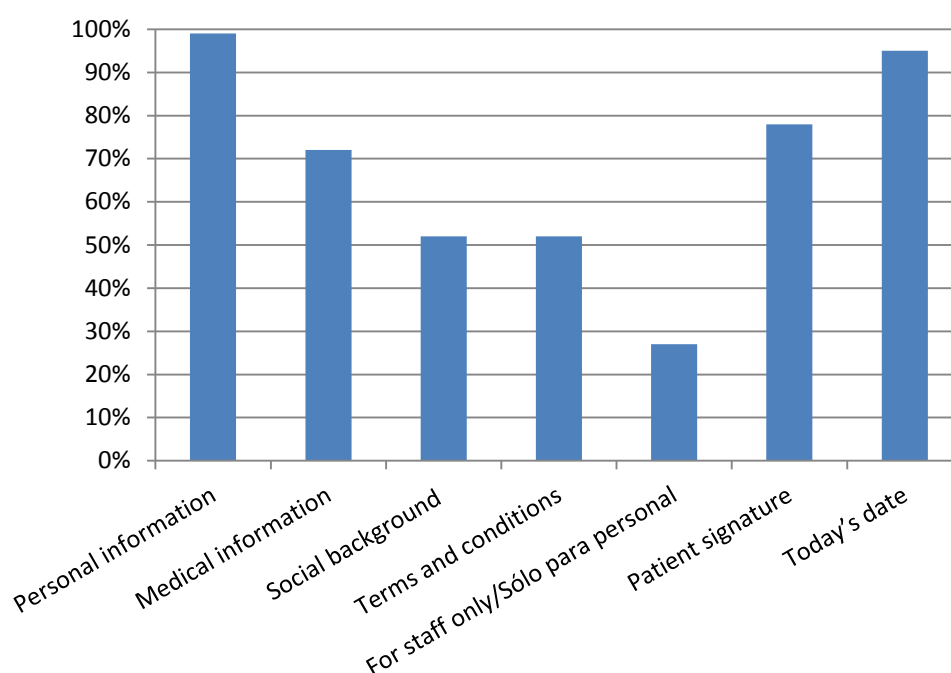


Table 1. Major sections and percentage of forms in which they appear

Table 1 shows the seven major sections present in the studied genre and the percentage in which they appear: (1) Personal information (99%), (2) Medical information (72%), (3) Social background (52%), (4) Terms and conditions (52%), (5) For staff only/Sólo para personal (27%), (6) Patient' signature (78%), and (7) Today's date (95%).

Although each of these major sections is comprised of a number of moves, and these in turn consist of several steps or substeps, this analysis will focus only on those that appear with a frequency of 50% or higher, that is, recurrent and highly recurrent items. In doing so, a prototypical superstructure of the genre can be outlined. For a full list and count of the items encountered in the corpus, please refer to Appendix 2.

Table 2 offers the prototypical structure of the translated PPMIF, that is, the result of applying the percentage thresholds previously mentioned to each individual item. Out of the seven major sections presented above, only six reached the minimum percentage required to be considered recurrent or highly recurrent.

Section	Move	Step	Substep	% in translated forms
Personal information				99
	Basic information			99
		Nombre		99
		Apellido/Apellidos		58
		Estado civil		54
		Fecha de nacimiento		90
		Sexo/Género		69
		Teléfono		75
			Casa	55
			Celular/Móvil	59
		Empleador		53
		Dirección		74
			Primaria	74
		No. SS		64
	Contacto de emergencia			56
	Información del seguro			54
		Primario		54
Medical information				72
	Alergias			57
	Tratamientos previos o actuales			60
		Medicación		59
	Historial médico previo			59
Social background				52
Terms and conditions				52
Patient signature				78
Today's date				95

Table 2. Translated PPMIF prototypical structure

It is interesting to mention that in the corpus analyzed, the number of forms that ask if the patient needs an interpreter is surprisingly low (only 4%). It would be expected and understandable to find such question on a recurrent or highly recurrent manner since this document is geared to patients with English as a second language and designed to bridge the communication gap that exists based on language differences.

4.2. Quality in translated medical forms

In order for translators to produce textual exemplars that are efficient communicatively speaking, a high degree of quality is required. Forms need to be clear, univocal and concise in order to fulfill their communicative function.

Quality and the measurement of quality are recurrent and controversial topics in Translation Studies, with most of the recent research focusing on quality seen from two perspectives: the professional and the didactic (Jiménez-Crespo 2013).

When facing the issue of quality in translation, two main approaches can be applied in order to evaluate such quality.

The first approach would be an error¹²-based analysis in which said errors are identified with certain categories (accuracy, terminology, style, mistranslation...) and can also be assigned weights according to the seriousness (critical error, major error, minor error) (Jiménez-Crespo 2013). Several error typologies that follow this model have been developed by different professional associations and organizations (i.e., Sical, American

¹² According to Nord (1996: 96-100), a translation error is “a translation problem that has not been appropriately solved” (as opposed to a random misspelling or punctuation violation, which would be considered a translation mistake).

A translation problem is defined as “an objective problem which every translator [...] has to solve during a particular translation task.” (Nord 1991:151)

Translators Association, LISA QA, MeLLANGE¹³) and are widely used in the translation industry.

The second would be a “holistic evaluation,” one that tries to take into account errors that are not so easy to pinpoint and evaluate as grammar, meaning or spelling and tend to be absent in error-based systems (mainly, pragmatic and functional features) as well as functionalist principles (Colina 2008). This evaluation is done on the text as a whole rather than on individual segments or fragments.

A study by Waddington (2001) concludes that error-based and holistic approaches were equally effective in order to establish internal quality rankings of translation. For the purposes of this study, an error-based approach that implements the error typology put forth by Jiménez-Crespo (2013) has been adapted and employed to evaluate the errors found on the forms selected from the corpus (see table below).

Error typology					
Lexical	Syntactic	Stylistic	Typographic	Pragmatic	Translation
Loan words	Syntactic calque	Phrasing/ wording	Cacography	Appellative function	Opposite sense
Barbarisms	Formal/informal	Short sentence	Diacritical marks	Sociocultural norms	Wrong sense
Calques	Subject/verb agreement	Appellative function	Inconsistent capitalization	Explicitation	Non-sense
False friends	Dialectal syntax	Register	Borrowings/capitalizations	Genre conventions	Addition
Lexical coherence	Prepositions	Ambiguity	Capitalized sentences	Cloned structure	Omission
	Gender or number agreement	Omission/ incomplete	Capitalization/months, languages,etc.	Other	
Wrong lexical item	Pluralization of acronyms		Decades		
Acronyms/Punctuation	Ambiguity		Punctuation/numbers		
Acronyms/Capitalization		Quotation marks			
Acronyms/Anglicisms		Capitalization/ Abbreviations			

Table 3. Error typology (adapted from Jiménez-Crespo 2013)

¹³ ATA: <http://www.atanet.org/>

LISA: website not available anymore

MeLLANGE: http://corpus.leeds.ac.uk/mellange/mellange_corpus_resources.html

As suggested by Table 3, this error typology is a componential one, in the sense that it acknowledges many aspects of quality, and resembles the componential error analysis that is mostly used in the translation industry.

In the present study, the forms that underwent the quality assessment were randomly selected using the Microsoft Excel function “RANDBETWEEN.” The quality analysis was carried out by manually analyzing the target text against the source text using the error typology by Jiménez-Crespo (2013).

After performing this analysis, the results were normalized by number of errors per 100 words, as can be seen in Table 4:

Form Number	Word Count	Error Count	Errors/100 words	Percentage
22	234	27	11.5	7.44%
73	1156	86	7.4	23.69%
96	250	46	18.4	12.67%
54	909	133	14.6	36.64%
11	419	71	16.9	19.56%
Total	2968	363	12.2	100.00%

Table 4. Quality assessment summary

Table 4 presents a summary of the quality assessment. Individual error rates for each form are indicated in this table, along with word count and error count. The error rate in the analyzed sample ranges from 7.4 to 18.4 errors per 100 words, yielding an average error rate of 12.2. These error rates will be compared to that of previous studies momentarily.

The error typology employed has now been simplified in the following table to show the instances that were encountered in the analyzed forms (see Table 5).

Error typology Total (2968 words, 363 errors, 12.2 errors/100 words)				
Lexical	Syntactic	Stylistic	Typographic	Translation
Calques 5	Syntactic calque 24	Short sentence 1	Cacography 18	Wrong sense 7
False friends 2	Subject/verb agreement 1	Register 2	Diacritical marks 140	Non-sense 18
Lexical coherence 2	Prepositions 3		Inconsistent capitalization 78	Addition 6
Wrong lexical item 2	Gender or number agreement 7		Capitalization/months, languages,etc. 1	Omission 25
Acronyms/Anglicisms 9				Untranslated 12

Table 5. Distribution of the errors found in the analyzed sample

Table 5 displays the type and quantity of errors found in all five analyzed forms. In order to better interpret these numbers, Table 6 shows the aforementioned categories in Table 5 by percentage.

On the left-hand side of Table 6, the error category is indicated (lexical, syntactic, stylistic, typographic, and translation). On the right-hand side, the percentage of each error category and error type is presented. Typographic errors are by far the most numerous (65.29%), followed by translation-related errors (18.73%) and syntactic errors (9.64%).

The six more frequent types are: (1) diacritical marks (38.57%), (2) inconsistent capitalization (21.49%), (3) omission (6.89%), (4) syntactic calque (6.61%), (5) cacography (4.96%), and (6) non-sense (4.96%). These six error types accumulate 83.47% of the errors out of the total number in the samples.

	Total error count	363	100%	
Lexical	Calques	5	1.38%	5.51%
	False friends	2	0.55%	
	Lexical coherence	2	0.55%	
	Wrong lexical item	2	0.55%	
	Acronyms/Anglicisms	9	2.48%	
Syntactic	Syntactic calque	24	6.61%	9.64%
	Subject/verb agreement	1	0.28%	
	Prepositions	3	0.83%	
	Gender or number agreement	7	1.93%	
Stylistic	Short sentence	1	0.28%	0.83%
	Register	2	0.55%	
Typographic	Cacography	18	4.96%	65.29%
	Diacritical marks	140	38.57%	
	Inconsistent capitalization	78	21.49%	
	Capitalization/months, languages, etc.	1	0.28%	
Translation	Wrong sense	7	1.93%	18.73%
	Non-sense	18	4.96%	
	Addition	6	1.65%	
	Omission	25	6.89%	
	Untranslated	12	3.31%	

Table 6. Distribution of errors by percentage

Examples for the 6 most common error types found across the forms (in decreasing order) are provided below:

1. **Diacritical marks:** **Compañía* (missing diacritical mark on ñ), **vehiculo* (missing diacritical mark on i)
2. **Inconsistent capitalization:** **Perdida de Peso*, **Anteriormente Visto por* (In these documents, many main words or words in titles are capitalized, but others are not, without exhibiting a clear rule behind this phenomenon).

3. **Omission:** Fragments of the original text are omitted in the translated form.
For instance, the Spanish-speaking patient is not asked for his/her SSN# or cell phone number, while the English-speaking patient is.
4. **Syntactic calque:** *¿Ha usted padecido de dolor de espalda antes? (Translation for “Have you suffered from back pain before?” that maintains the English word order – Auxiliary/Subject/Verb – although it is dispreferred in standard Spanish; an appropriate alternative would be ¿Ha padecido de dolor de espalda antes?); *¿Fuma usted? (Translation for “Do you smoke?” that displays an overt subject that is not necessary in Spanish and does not appear in similar translation units in the same document where null subjects are implemented; an appropriate alternative would be ¿Fuma?).
5. **Cacography:** *Cougulation (misspelling; correct form would be Coagulación), *Aseguransa (misspelling; correct form would be Aseguranza)
6. **Non-sense:** *Casa# (Translation for “House #” that uses the pound symbol in Spanish – although it does not express the same concept it does in English – and displays wrong word order) , *AHCCCS Número del niño (Translation for “AHCCCS #” that displays wrong word order and a misplaced diacritical mark, which makes comprehension from the reader very difficult)

As seen in Table 5, a new error type named “Untranslated” has been added to the “Translation” category based on what has been observed in the selected forms. Examples of these untranslated units are “refused” or “female” (utterances that appeared in the translated forms in English with no Spanish translation equivalent).

The use of the English term, both in regular text words as well as in acronyms, could be considered an error but might also be a decision made consciously by the translator in order to make the document clearer and easier for the target audience. For instance, the translator might assume that the patient has heard repeatedly the term “PKU test” and is already familiar to him. Therefore, it is translated as “*prueba de PKU*” instead of “*prueba del talón*” or “*prueba de fenilcetonuria*.”

Translation quality and quality assessment are controversial topics in part because they are influenced by subjective criteria dependent upon the quality raters. It is therefore interesting to mention that, despite these individual differences, the error categories with higher numbers are those that could be considered more or less objective, such as misspellings, diacritical marks or capitalization.

Research on quality assessment using error-based scales has been carried out previously by others such as De Rooze (2003), Jiménez-Crespo (2012b) or Göpferich (2010), who explored the errors made by novice and professional translators in different settings from a cognitive-experimental perspective. The results on these studies were the following:

- A) De Rooze (2003) compared the error rate displayed by professional translators and translation students. Both groups had to produce the best translation possible within a given time frame. In general, the study yielded 5.06 errors per 100 words.
- B) Göpferich (2010) compared the error rate exhibited by professional and novice translators. The error rate for professionals ranged between 4 and 5.1 errors per 100 words, while that of novices ranged between 6.9 and 7.9 errors per 100 words.

C) Jiménez-Crespo (2012b) analyzed the quality of professional translations of Obama's inaugural speech produced under time pressure. In the analyzed sample, the error rate ranges from 2.6 to 3.9 errors per 100 words.

As indicated on Table 4, the average error rate in the analyzed corpus sample is 12.2 errors per 100 words, significantly higher than the results presented by De Rooze (2003), Jiménez-Crespo (2012b) or Göpferich (2010).

It is extremely risky and complicated to compare the results obtained in this study to other quality assessment studies mainly due to three reasons:

1. The error typology used in those studies is different from the one used in the present one, which can seriously distort the number of errors per 100 words.
2. Data about who was commissioned to produce the translations compiled in the present corpus (e.g., professional translators, novice translators, bilingual staff, family members) is not available.
3. The conditions and environments in which the evaluated translations in those studies were produced can be assumed to be significantly different to those of the translations that comprise our corpus (which unfortunately remain unknown).

However, the main focus of this thesis is a descriptive analysis of Spanish translations of these forms and therefore, this quality index can be of interest in order to characterize the current situation of the medical translation field in the United States, especially if comparisons with professionally translated medical forms becomes possible. At the same

time, a close examination of the errors found might be used as a starting point for the development of future teaching strategies used in translation training.

5. Conclusions

This study was initiated to describe the translated PPMIF genre and evaluate the quality of real exemplars available online. To do so, a corpus-based analysis was performed and Gamero's genre description model was employed. Additionally, a componential error-based analysis was implemented.

Using this methodology, it has been established that the translated PPMIF exhibits an instructive function, since it attempts to elicit a certain reaction from the receiver: getting the patient to fill out the document as quickly and accurately as possible.

It represents a form of intracultural mediation and it is circumscribed in a sociocultural context in which Spanish speakers with English as a second language living in the US seek medical assistance for themselves or a family member at an English-speaking medical office. It is a document that compiles all relevant information needed for a successful appointment and acts at the same time as a patient record and a binding legal document. It comes into play within the discourse community framed by the medical office the new patient enters. The PPMIF prototypical structure shows recurrent and highly recurrent sections, moves, steps and substeps, necessary in order to collect pertinent information for a prosperous medical practitioner-patient interaction. It also exhibits certain lexical conventions, such as "sexo" or "celular." At the same time, these translated forms also present some interference exerted by the English originals, thus

incorporating lexical units that do not conform to the sociocultural norm of the target population (i.e. “apellido,” “segundo nombre”).

As it can be concluded from the quality assessment analysis, the error rate is very different from the one yielded by previous studies but, as explained before, these results are not comparable for several reasons. In order to quantify how far from a professional rate these results are, further research will be needed and professionally translated forms will be necessary to establish reliable comparisons.

A possible cause for the low quality index in the socioprofessional context of the US could be attributed to the fact that, despite the emergence of training programs for medical translators and interpreters, the extended misconception that claims that being bilingual makes a person suitable for this type of jobs is still present within the community that deals in the workplace with these professionals. The use of non-professionally trained translators is fairly common and causes miscommunication and distrust between patients and providers.

6. Further research

This study was conducted to provide a descriptive characterization of the translated PPMIF genre and was consciously restricted to the genre analysis and quality assessment previously explained. Nevertheless, it can be expanded using the same compiled corpus and carrying out different analyses on it.

First of all, it would be very interesting to perform a lexical variation analysis in order to reveal differences among speakers of Spanish and English and note different appropriate solutions for the same language situation. Additionally, such analysis might

reveal linguistic variation from one geographical area to another within the US. This variation might reflect lexical choices preferred by the specific discourse community present in that area and it may tell us if these translations are adapted or not to the target population. For instance, syntactic or lexical choices may vary from New York to Florida or from California to New Jersey based on the origins of the Hispanic populations that reside in these states – Puerto Rican versus Cuban or Mexican – and their linguistic practices.

It would also be compelling to conduct a larger contrastive analysis between the English originals and the Spanish translations to shed more light on the PPMIF genre from a comparative perspective, especially given the fact that this contrastive analysis cannot be performed using spontaneously created PPMIF for the reasons already mentioned.

On the other hand, following in the footsteps of scholars who have applied the methodology employed in this study, this approach could be implemented in order to descriptively analyze other medical forms of the same or different nature in order to expose their conventional features.

Lastly, it would be very interesting to apply the results of this study to Translation teaching methodology and pedagogy in order to come up with classroom strategies based on the conventions exhibited by the PPMIF and the outcome of the quality assessment analysis.

References

- Bakhtin, M. M. (1986). *Speech genres and other late essays*. Austin, TX: University of Texas Press.
- Bazerman, C. (1994). Systems of genres and the enactment of social intentions. In A. Freedman & P. Medway (Eds.), *Genre and the New Rhetoric* (pp. 79-101). London: Taylor and Francis.
- Bazerman, C., & Prior, P. (2005). Participating in emergent socio-literate worlds: Genre, disciplinarity, interdisciplinarity. In J. Green & R. Beach (Eds.), *Multidisciplinary Perspectives on Literacy Research* (pp. 133-178). Urbana, IL: National Council of Teachers of English.
- Bhatia, V. K. (2002). Applied genre analysis: A multi-perspective model. *Ibérica: Revista De La Asociación Europea De Lenguas Para Fines Específicos (AELFE)*, (4), pp. 3-19.
- (1993). *Analysing genre – Language use in professional settings*. London, Longman, Applied Linguistics and Language Study Series.
- Biber, D. (1993). Representativeness in corpus design. *Literary and Linguistic Computing*, 8 (4), pp. 243-257.
- Biber, D., Conrad, S., & Reppen, R. (1998). *Corpus linguistics: Investigating language structure and use*. Cambridge: Cambridge University Press.
- Bowker, L. (2002). *Computer-aided translation technology: A practical introduction*. Ottawa: University of Ottawa Press.
- Colina, S. (2008). Translation quality evaluation: Empirical evidence for a functionalist approach. *The Translator: Studies in Intercultural Communication*, 14 (1), pp. 97-134.
- (2009). Further evidence for a functionalist approach to translation quality evaluation. *Target*, 21 (2), pp. 235-264.
- De Rooze, B. (2003). *La traducción, contra reloj* [Translating Against the Clock]. PhD Dissertation. University of Granada, Spain.
- Devitt, A. J., Bawarshi, A., & Reiff, M. J. (2003). Materiality and genre in the study of discourse communities. *College English*, 65 (5), pp. 541-558.
- Forés, B. (2004). “*Información para pacientes*” como género idóneo en la introducción a la traducción médica. *Jornades de Foment de la Investigació. Universitat Jaume I*.

- Gamero Pérez, S. (1998). *La traducción de textos técnicos (alemán-español). Calificación textual: Tipos y géneros*. PhD Dissertation. Universitat Autònoma de Barcelona.
- (2001). *La traducción de textos técnicos*. Barcelona: Ariel.
- García Izquierdo, I. (2009). *Divulgación médica y traducción: El género Información para pacientes*. Bern: Peter Lang.
- Göpferich, S. (1995). *Textsorten in naturwissenschaften und technik. Pragmatische Typologie - Kontrastierung - Translation*. Tübingen, Narr.
- Göpferich, S., Alves, F., & Mees, I. (2010). The translation of instructive texts from a cognitive perspective: Novices and professionals compared. *New Approaches in Translation Process Research* 39. Kopenhagen: Samfundslitteratur.
- Grosse, S., & Mentrup, W. (1980). *Bürger, formulare, behörde: Wissenschaftliche arbeitstagung zum kommunikationsmittel" formular"*. Mannheim, Oktober 1979. Tübingen.
- Gülich, E. (1981). *Formulare als Dialoge*. In Ingulf Radtke (Bearb.). *Der öffentliche Sprachgebrauch. Die Sprache des Rechts und der Verwaltung*, pp. 322-356. Stuttgart: Klett-Cotta.
- Halliday, M.A. K.(1985). *An Introduction to Functional Grammar*. London: Edward Arnold.
- Hatim, B., & Mason, I. (1990). *Discourse and the translator*. London: Longman.
- (2001). *Discourse and the translator*. Shanghai: Shanghai Foreign Language Education Press.
- Hoffmann, L. (1988). *Vom fachwort zum fachtext. Beiträge zur Angewandte Linguistik*. Tübingen: Forum für Fachsprachen-Forschung 5.
- Hurtado Albir, A. (2001). *Traducción y traductología: Introducción a la traductología*. Madrid: Cátedra.
- Jiménez-Crespo, Miguel A. (2013). *Translation and Web Localization*. New York-London: Routledge.
- (2008). *El proceso de localización web: estudio contrastivo de un corpus comparable del género sitio web corporativo*. PhD Dissertation. University of Granada.
- (2009). Conventions in localization: a corpus study of original vs. translated web texts. *JoSTrans. The Journal of Specialised Translation* 12, pp. 79-102.

- (2010). The Intersection of Localization and Translation: A Corpus Study of Spanish Original and Localized Web Forms. *Translation and Interpreting Studies*, 5 (2), pp. 186-207.
 - (2011). To adapt or not to adapt in web localization: a contrastive genre-based study of original and localized legal sections in corporate websites. *Jostrans: The Journal of Specialized Translation*, 15: pp. 2-27.
 - (2012a). Loss or lost in translation: a contrastive corpus-based study of original and localised US websites. *Jostrans: The Journal of Specialized Translation*, 17: pp. 136-173.
 - (2012b). Translation under pressure and the Web: a parallel corpus-study of Obama's Inaugural speech in the online media. *Translation and Interpreting*, 4: pp. 56-76.
- Jiménez-Crespo, M.A., & Tercedor, M. (2010). Theoretical and methodological issues in Web corpus design and analysis. *International Journal of Translation* 22 no. 2: pp. 37-57.
- Johansson, S., & Oksefjell, S. (1998). *Corpora and cross-linguistic research: Theory, method, and case studies*. Amsterdam: Rodopi.
- Laviosa, S. (2002). *Corpus-based translations studies: Theory, findings, applications*. Amsterdam: Rodopi.
- Lewis, K.D. (1969). *Convention: A Philosophical Study*. Cambridge, MA: Harvard University Press.
- Luzón, M. J. (2005). Aplicación del concepto de "colonia de géneros" a la enseñanza de inglés para fines específicos. *Ibérica: Revista De La Asociación Europea De Lenguas Para Fines Específicos (AELFE)*, 10, pp. 133-144.
- Malmkjaer, K. (1998). Love thy neighbour: Will parallel corpora endear linguists to translators? *Meta*, 43 (4), pp. 534-541.
- Martin, J. (2002). A universe of meaning — How many practices? In A. M. Johns (Ed.), *Genre in the Classroom: Multiple Perspectives*, pp. 269-278. Mahwah, NJ: Lawrence Erlbaum.
- McEnery, A., & Xiao, R. (2007). Parallel and comparable corpora: What are they up to? In G. M. Anderman & M. Rogers (Eds.), *Incorporating Corpora: Translation and the Linguist. Translating Europe*. Clevedon: Multilingual Matters.
- Montalt, V., & Davies, M. G. (2007). *Medical translation step by step: Learning by drafting*. Manchester: St. Jerome.

- National Council on Interpreting in Health Care. (2012). OD FAQs – Healthcare Professionals. Retrieved September 12, 2013, from <http://www.ncihc.org/faqs-for-healthcare-professionals>.
- Nord, C. (2001). *Lernziel: Professionelles Übersetzen Spanisch – Deutsch. Ein Einführungskurs in 15 Lektionen*. Wilhelmsfeld: Gottfried Egert.
- (1991). *Text analysis in translation. Theory, methodology, and didactic application of a model for translation-oriented text analysis*. Amsterdam/Atlanta, GA: Rodopi.
- (1996). *El error en la traducción: Categorías y evaluación*. In A. Hurtado Albir (Ed.), *La Enseñanza de la Traducción*, pp. 91-108. Castellón: Universitat Jaume I.
- Pérez Hernández, C. (2002). *Explotación de los corpórea textuales informatizados para la creación de bases de datos terminológicas basadas en el conocimiento. Estudios de Lingüística del español*, 18.
- Rosch, E. (1977). Classification of real-world objects: Origins and representations in cognition. In P. N. Johnson-Laird & P. C. Wason (Eds.), *Thinking: Readings in Cognitive Science*, pp. 212-222. Cambridge: Cambridge University Press.
- Sánchez Nieto, M. T. (2006). *Un estudio contrastivo del género "formulario de inscripción a congreso" (español-alemán) con aplicación didáctica para la clase de traducción*. *TRANS: Revista de Traductología*, 10, pp. 113-136.
- Sinclair, J. (1991). *Corpus, concordance, collocation*. Oxford: Oxford University Press.
- (1996). EAGLES. Preliminary Recommendations on Corpus Typology. Retrieved September 12, 2013, from <http://www.ilc.cnr.it/EAGLES/corpus/typ/corpus.html>.
- Swales, J. (1990). *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.
- Teubert, W. (1996). Comparable or parallel corpora? *International Journal of Lexicography*, 9 (3), pp. 238-264.
- US Census (2011). The Hispanic Population: 2010. (US Census Briefs no. C2010BR-04). Retrieved September 12, 2013, from <http://www.census.gov/prod/cen2010/briefs/c2010br-04.pdf>
- (2010). Language Use in the United States: 2007. (American Community Survey Reports no. ACS-12). Retrieved September 12, 2013, from <http://www.census.gov/hhes/socdemo/language/data/acs/ACS-12.pdf>
- Waddington, C. (2001). Different methods of evaluating student translations: The question of validity. *Meta*, 46 (2), pp. 311-325.

Appendix 1: Search structures and URLs for the original and translated forms¹⁴

SEARCH STRUCTURE	ENGLISH FORM	SPANISH FORM	FILE FORMAT (PDF, doc, html...)	FORM TYPE
forma paciente español florida	http://www.gastronaples.com/patients/patient-forms/PDFs/Combined%20Form%20with%20PIF%20-%20english.pdf	http://www.gastronaples.com/patients/patient-forms/PDFs/Combined%20Form%20with%20PIF%20-%20spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.miamiorthodontics.com/Portals/0/PatientForms/Adult%20Acquaintance%20Form.pdf	http://www.miamiorthodontics.com/Portals/1/PatientForms/Informacion%20de%20Paciente%20Adulto.pdf	PDF	Formulario de paciente nuevo
	http://floridalungdoctors.com/forms/MEDICAL%20Hx%20FORM%20Oct2011%20PDF.pdf	http://floridalungdoctors.com/forms/Medical%20History%20-%20Spanish%20Version.pdf	PDF	Historia médica
	http://floridalungdoctors.com/forms/Patient%20Registration.pdf	http://floridalungdoctors.com/forms/Patient%20Registration%20Spanish%20Version.pdf	PDF	Formulario de paciente nuevo
	http://www.florida-allergy.com/wp-content/uploads/2011/10/2013-NP-FORMS-eng1.pdf	http://www.florida-allergy.com/wp-content/uploads/2011/10/2013-NP-FORMS-spa1.pdf	PDF	Formulario de paciente nuevo
formulario paciente español florida	http://www.memorialrehab.com/assets/pdf/adult-patient-information-form.pdf	http://www.memorialrehab.com/assets/pdf/adult-patient-information-form-spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.orthopaedicsoffloridacom/sites/oscf.fpmg-drupalgardens.com/files/Patient%20Information%20and%20Consent%20for%20Evaluation%20or%20Treatment.pdf	http://www.orthopaedicsoffloridacom/sites/oscf.fpmg-drupalgardens.com/files/Informacion%20C3%B3n%20del%20Paciente_1.pdf	PDF	Información del paciente
	http://www.baptisteorthodontics.com/new-patients/Baptiste-Adult-English-Forms_v2.pdf	http://www.baptisteorthodontics.com/new-patients/Baptiste-Adult-Spanish-Forms_v2.pdf	PDF	Formulario de paciente nuevo
	http://orthomercy.com/wp-content/uploads/2010/07/Hommens-Questionnaires-English.pdf	http://orthomercy.com/wp-content/uploads/2010/08/Dr.-Hommen-Initial-Questionnaire-Spa.pdf	PDF	Historia médica
	http://www.retinaassociatesmiami.com/docs/patient-forms-en.pdf	http://www.retinaassociatesmiami.com/docs/patient-forms-es.pdf	PDF	Formulario de paciente nuevo

¹⁴ Websites were last accessed on March 27th 2013 and all files downloaded

SEARCH STRUCTURE	ENGLISH FORM	SPANISH FORM	FILE FORMAT (PDF, doc, html...)	FORM TYPE
forma paciente español texas	http://www.ntfootdocs.com/docs/Patient%20Registration%20Form%20B2010.pdf	http://www.ntfootdocs.com/docs/Formas+del+Paciente1.pdf	PDF	Formulario de paciente nuevo
	http://ra-stx.com/bwhAdmin/wp-content/uploads/newpatienthistoryform.pdf	http://ra-stx.com/bwhAdmin/wp-content/uploads/paciente-nuevo-historial-medico.pdf	PDF	Formulario de paciente nuevo
	http://www.wyliekidsdds.com/assets/docs/newpatientpacket11.pdf	http://www.wyliekidsdds.com/assets/docs/New_Patient_Packet_Spanish_Wylie.pdf	PDF	Formulario de paciente nuevo
	http://www.weetotspediatrics.com/patient-forms/	http://www.weetotspediatrics.com/patient-forms/	PDF	Formulario de paciente nuevo
	http://www.drmatorin.com/pdfs/TO_PsPersonalHealthHx2007[2].pdf	http://www.drmatorin.com/pdfs/TO_PsHealthHxSpaForms.pdf	PDF	Historia médica
formulario paciente español texas	http://www.gainesvilleped.com/forms/Patient_Informationform2010.pdf	http://www.gainesvilleped.com/forms/Patient_Information_form_span2010.pdf	PDF	Formulario de paciente nuevo
	http://www.ntorthospecialists.com/pdfs/PatientReg072307.pdf	http://www.ntorthospecialists.com/pdfs/PatientRegSp072307.pdf	PDF	Formulario de paciente nuevo
	http://www.texaschildrenspediatrics.org/uploadedFiles/Forms/1%20Registration-form_012511.pdf	http://www.texaschildrenspediatrics.org/uploadedFiles/Forms/TCPA_Spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.ausrad.com/wp-content/uploads/Patient-Information-Form-Eng.pdf	http://www.ausrad.com/wp-content/uploads/Patient-Information-Form-Spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.texasallsmiles.com/sharedobjects/doc/New%20Patient%20Info%20with%20Privacy%20ENGLISH.pdf	http://www.texasallsmiles.com/sharedobjects/doc/New%20Patient%20Info%20with%20privacy%20SPANISH.pdf	PDF	Formulario de paciente nuevo
forma paciente español California	http://altosoaks.weebly.com/uploads/7/8/7/6/7876806/new_registration_eng.pdf.pdf	http://altosoaks.weebly.com/uploads/7/8/7/6/7876806/new_registration_spn.pdf.pdf	PDF	Formulario de paciente nuevo
	http://altosoaks.weebly.com/uploads/7/8/7/6/7876806/patient_portal_health_hx_form_12-2011_eng.pdf	http://altosoaks.weebly.com/uploads/7/8/7/6/7876806/patient_portal_health_hx_form_12-2011_spn.pdf	PDF	Historia médica
	http://media.sesamehost.com/docs/patient-form-child-adult.pdf	http://www.orthotime.com/spanish/docs/patient-form-child-adult.pdf	PDF	Formulario de paciente nuevo
	http://www.premierescan.com/webdocuments/Premiere-Patient-Registration-Form.pdf	http://www.premierescan.com/webdocuments/Premiere-Patient-Registration-Form-Spanish.pdf	PDF	Formulario de paciente nuevo

SEARCH STRUCTURE	ENGLISH FORM	SPANISH FORM	FILE FORMAT (PDF, doc, html...)	FORM TYPE
	http://www.sanluisoralsurgery.com/media/pdf/health_history_english.pdf	http://www.sanluisoralsurgery.com/media/pdf/health_history_spanish.pdf	PDF	Historia médica
formulario paciente español California	http://www.mammothhospital.com/services/sport/NeuroNewPtNewPro b.pdf	http://www.mammothhospital.com/services/sport/NeuroNewPtNewPro bSp.pdf	PDF	Formulario de paciente nuevo
	http://www.shermanoaksradiationoncology.com/pdf/ShermanOaksFormsAll.pdf	http://www.shermanoaksradiationoncology.com/pdf/ShermanOaksFormsAllSpanish.pdf	PDF	Formulario de paciente nuevo
	http://www.hapybear.com/wp-content/uploads/2012/06/hapybear-new-patient-english.pdf	http://www.hapybear.com/wp-content/uploads/2012/06/hapybear-new-patient-espanol.pdf	PDF	Formulario de paciente nuevo
	http://www.hapybear.com/wp-content/uploads/2012/06/hapybear-med-history-english.pdf	http://www.hapybear.com/wp-content/uploads/2012/06/hapybear-med-history-espanol.pdf	PDF	Historia médica
	http://www.root66endo.com/editor/assets/A9FE181D-F795-49B2-8D30-1DFFBE4AEDF2.pdf	http://www.root66endo.com/editor/assets/19E16F06-DD02-437F-A6F5-ACE401965B01.pdf	PDF	Historia médica
formulario paciente español new jersey	http://ugnj.com/wp-content/uploads/2012/12/registration_form.pdf	http://ugnj.com/wp-content/uploads/2012/12/registration_form_spanish.pdf	PDF	Formulario de paciente nuevo
new patient form new jersey Spanish	http://www.nj-spineinstitute.com/images/newpatient_english.pdf	http://www.nj-spineinstitute.com/images/newpatient_spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.vallejogilmoredentist.com/reg-health-history-english.pdf	http://www.vallejogilmoredentist.com/reg-health-history-spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.morriscardiology.com/LinkClick.aspx?fileticket=tLIwmYYKvnc%3d&tabid=20756	http://www.morriscardiology.com/LinkClick.aspx?fileticket=gugB6M%2bH8F8%3d&tabid=20756	PDF	Formulario de paciente nuevo
	http://www.ramospodiatry.com/docs/new-patient-form-eng.PDF	http://www.ramospodiatry.com/docs/new-patient-form-esp.PDF	PDF	Formulario de paciente nuevo
medical history form new jersey Spanish	http://www.plannedparenthood.org/ppmnj/patient-forms-30562.htm	http://www.plannedparenthood.org/ppmnj/patient-forms-30562.htm	Doc	Historia médica
patient forms new jersey Spanish	http://www.lawrencevilleneurologycenter.com/new-patient-registration-forms.pdf	http://www.lawrencevilleneurologycenter.com/patient-forms-spanish-2-2011.pdf	PDF	Formulario de paciente nuevo

SEARCH STRUCTURE	ENGLISH FORM	SPANISH FORM	FILE FORMAT (PDF, doc, html...)	FORM TYPE
patient forms new jersey español	http://www.capitalhealth.org/medical-services/maternity/high-risk-prenatal/maternal-fetal-medicine/~media/Files/medical%20services/maternal-fetal-medicine/MFM%20ENG%20Patient%20Forms%2010%202012.ashx	http://www.capitalhealth.org/medical-services/maternity/high-risk-prenatal/maternal-fetal-medicine/~media/Files/medical%20services/maternal-fetal-medicine/MFM%20SPA%20Patient%20Forms%2010%202012.ashx	PDF	Formulario de paciente nuevo
	http://www.palisadeplasticsurgery.com/wp-content/uploads/2012/11/Patient_Registration_Form_Eenglish.pdf	http://www.palisadeplasticsurgery.com/wp-content/uploads/2012/11/Patient_Registration_Form_Spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.drdeaninsana.com/wp-content/uploads/2012/09/newpatient-1.pdf	http://www.drdeaninsana.com/wp-content/uploads/2012/09/nuevo-1.pdf	PDF	Formulario de paciente nuevo
formulario paciente español new york	http://www.performancerehabny.com/forms/PatientInformation.pdf	http://www.performancerehabny.com/forms/PatientInformation-Spanish.pdf	PDF	Formulario de paciente nuevo
new patient form new york Spanish	http://www.gastroenterologistnewyork.com/webdocuments/NYGA-new-patient-registration-2012.pdf	http://www.gastroenterologistnewyork.com/webdocuments/NYGA-Patient-Reg-Spanish-form.pdf	PDF	Formulario de paciente nuevo
	http://www.suffolkpediatricdentistry.com/forms/newPatientInfo.pdf	http://www.suffolkpediatricdentistry.com/forms/newPatientInfo-Spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.hometownhealthcenters.org/regeng.pdf	http://www.hometownhealthcenters.org/regspan.pdf	PDF	Formulario de paciente nuevo
	http://www.noahscheinfeldmd.com/pdf/ONLINEPATIENTREGISTRATION2013.pdf	http://www.noahscheinfeldmd.com/pdf/Patient%20Registration%20Spanish.pdf	PDF	Formulario de paciente nuevo
patient forms new york spanish	http://www.aucofny.com/img/Patient_Registration.pdf	http://www.aucofny.com/img/Patient_Registration_Spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.aucofny.com/img/Female_Patient_Form.pdf	http://www.aucofny.com/img/AUCNY_Female_Patient_Form_Spanish.pdf	PDF	Historia médica
	http://childrensnyp.org/mschony/MungoBlobs/1013/606/pediatricorthopaedichistory.pdf	http://childrensnyp.org/mschony/MungoBlobs/276/875/pediatricorthopaedichistory_spanish.pdf	PDF	Historia médica
	http://www.valenzuelaurology.com/pdf/whu-registration-sheet-english.pdf	http://www.valenzuelaurology.com/pdf/whu-registration-sheet-spanish.pdf	PDF	Formulario de paciente nuevo
	http://preview-2.baystonemedia.com/userfiles/1882/pdf/MedicalHistoryenglish1.pdf	http://preview-2.baystonemedia.com/userfiles/1882/pdf/MedicalHistoryspanish1.pdf	PDF	Formulario de paciente nuevo

SEARCH STRUCTURE	ENGLISH FORM	SPANISH FORM	FILE FORMAT (PDF, doc, html...)	FORM TYPE
formulario paciente español arizona	http://www.newhorizonswomenscare.com/client_files/file/New_Patient_Packet_GYN.pdf	http://www.newhorizonswomenscare.com/client_files/file/New_Patient_Packet_GYN-Spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.azpeds.com/dnn/Portals/0/PDFs/New-Patient-Forms/Health-History-ENG.pdf	http://www.azpeds.com/dnn/Portals/0/PDFs/New-Patient-Forms/Health-History-SPA.pdf	PDF	Formulario de paciente nuevo
new patient form arizona spanish	http://www.avaondalepediatrician.com/docs/New%20Patient%20Packet%20-%20English.pdf	http://www.avaondalepediatrician.com/docs/New%20Patient%20Packet%20-%20Spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.pinnaclefamilydoctor.com/forms/New%20Patient%20Registration%20Form.pdf	http://www.pinnaclefamilydoctor.com/forms/New%20Patient%20Registration%20Form%20Spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.paloverdeperio.com/elements/new_patient_forms/medical_history_form.pdf	http://www.paloverdeperio.com/elements/new_patient_forms/spanish_health_history.pdf	PDF	Historia médica
	http://www.stayonestepahead.com/docs/NEW-PATIENT-FORMS.pdf	http://www.stayonestepahead.com/docs/NEW-PATIENT-SPANISH.pdf	PDF	Formulario de paciente nuevo
	http://www.pptsonline.com/newPatientEN.pdf	http://www.pptsonline.com/newPatientSP.pdf	PDF	Formulario de paciente nuevo
	http://www.suncitypodiatrist.com/docs/Dr_%20Withrow%20New%20Patient%20Packet%202012-1.pdf	http://www.suncitypodiatrist.com/docs/patient_forms_spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.ponderosapediatrics.com/wp-content/uploads/2011/09/011-Patient-Registration.pdf	http://www.ponderosapediatrics.com/wp-content/uploads/2011/09/011-S-Patient-Registration.pdf	PDF	Formulario de paciente nuevo
	http://www.melmedcenter.com/uploads/9/5/3/0/9530176/registration_adult_form_8-30-2012.pdf	http://www.melmedcenter.com/uploads/9/5/3/0/9530176/spanishregistrationchildform.pdf	PDF	Formulario de paciente nuevo
new patient form nevada spanish	http://www.southernnevadahealthdistrict.org/download/tb-clinic/new-client-information-form.pdf	http://www.southernnevadahealthdistrict.org/download/tb-clinic/informacion-nuevo-cliente.pdf	PDF	Formulario de paciente nuevo
	https://www.orthoii-forms.com/HealthHistory.aspx?culture=en-US&custid=1415	https://www.orthoii-forms.com/HealthHistory.aspx?culture=es-PR&custid=1415	Html	Formulario de paciente nuevo
	http://www.idealcarelv.com/Portals/773/web_content/files/EnglishNewPatientPacket.pdf	http://www.idealcarelv.com/Portals/773/web_content/files/SpanishNewPatientPacket.pdf	PDF	Formulario de paciente nuevo

SEARCH STRUCTURE	ENGLISH FORM	SPANISH FORM	FILE FORMAT (PDF, doc, html...)	FORM TYPE
	https://portal.smalv.com/Forms	https://portal.smalv.com/Forms	Doc Spanish/PDF English	Formulario de paciente nuevo
	http://redrockomsc.com/images/rr-Medical_History.pdf	http://redrockomsc.com/images/rr-historica-medica-espanol.pdf	PDF	Formulario de paciente nuevo
	http://edwinsuarezpt.com/wp-content/uploads/2012/03/Complete-Eval-Packet.pdf	http://edwinsuarezpt.com/wp-content/uploads/2012/03/Spanish-New-patient-package.pdf	PDF	Formulario de paciente nuevo
	http://www.carsoncitypediatricdentistry.com/NP_form.pdf	http://www.carsoncitypediatricdentistry.com/NP_form-spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.sdmi-lv.com/Documents/Newpatient.pdf	http://www.sdmi-lv.com/Documents/Newpatientsp.pdf	PDF	Formulario de paciente nuevo
	http://www.goodnightpeds.com/PatientRegistration-NV.pdf	http://www.goodnightpeds.com/PatientRegistrationSPA-NV.pdf	PDF	Formulario de paciente nuevo
	http://www.birthcontrolcarecenter.com/images/pdf/history%20bccc%20-%20-%20outlines.pdf	http://www.birthcontrolcarecenter.com/images/pdf/history%20spanish%20bccc%20-%20-%20outlines.pdf	PDF	Historia médica
new patient form new mexico spanish	http://nmheartcare.com/system/document/pdf_document/3/RegistrationForm.pdf	http://nmheartcare.com/system/document/pdf_document/4/RegistrationFormSpanish.pdf	PDF	Formulario de paciente nuevo
	http://www.mrcofnewmexico.com/Intake_forms.pdf	http://www.mrcofnewmexico.com/Spanish_Intake_Form_050510.pdf	PDF	Formulario de paciente nuevo
	http://lascrucesortho.com/images/stories/forms/general-forms.pdf	http://lascrucesortho.com/images/stories/forms/general-forms-spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.hms-nm.org/documents/english/patient_info.pdf	http://www.hms-nm.org/documents/spanish/patient_info_spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.hms-nm.org/documents/english/patient_history.pdf	http://www.hms-nm.org/documents/spanish/patient_history_spanish.pdf	PDF	Historia médica
patient forms "new mexico" spanish	http://www.luskfamilydentistry.com/wp-content/uploads/2012/10/patient-info1.pdf	http://www.luskfamilydentistry.com/wp-content/uploads/2012/10/patient-spanish2.pdf	PDF	Formulario de paciente nuevo
		http://www.luskfamilydentistry.com/wp-content/uploads/2012/10/medical-history-spanish.pdf	PDF	Historia médica

SEARCH STRUCTURE	ENGLISH FORM	SPANISH FORM	FILE FORMAT (PDF, doc, html...)	FORM TYPE
patient forms new mexico clinics	http://www.mykoolsmls.com/forms/New%20Family%20Information_English.pdf	http://www.mykoolsmls.com/forms/New%20Family%20Information_Spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.mykoolsmls.com/forms/New%20Patient%20Health%20Information_ENG.pdf	http://www.mykoolsmls.com/forms/New%20Patient%20Health%20Information_SPN.pdf	PDF	Historia médica
	http://www.pms-inc.org/hub/components/com_page/images/Docs/PMS%20Registration%20Packet%20English.pdf	http://www.pms-inc.org/hub/components/com_page/images/Docs/PMS%20Registration%20Packet%20Spanish.pdf	PDF	Formulario de paciente nuevo
formulario paciente español colorado	http://www.cmmhealth.com/sites/default/files/PatientInfo_Registration_Form.pdf	http://www.cmmhealth.com/sites/default/files/Espagnol_Registration_Form.pdf	PDF	Formulario de paciente nuevo
patient forms colorado spanish	https://www.orthoii-forms.com/HealthHistory.aspx?culture=en-US&custid=996	https://www.orthoii-forms.com/HealthHistory.aspx?culture=es-MX&custid=996	Html	Formulario de paciente nuevo
	http://www.vwhs.org/download_documents/PIF%20revised%2010-07-09.pdf	http://www.vwhs.org/download_documents/PIF%20Spanish%20Revised%2001-25-10.pdf	PDF	Formulario de paciente nuevo
	http://www.vwhs.org/download_documents/VWHS%20Health%20History%20Form%20English.pdf	http://www.vwhs.org/download_documents/VWHS%20Health%20History%20Form%20Spanish.pdf	PDF	Historia médica
	http://www.arangoorthodontics.com/images/pdfs/adult_patient_english.pdf	http://www.arangoorthodontics.com/images/pdfs/adult_patient_spanish.pdf	PDF	Formulario de paciente nuevo
	http://amicolorado.com/docs/NEW_PATIENT_REGISTRATION[1].pdf	http://amicolorado.com/docs/New_Patient_registration_form_Spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.hanger.com/prosthetics/experience/Documents/Patient%20Reg%20Form.pdf	http://www.hanger.com/prosthetics/experience/Documents/Patient%20Intake%20Form%20-%20Spanish.pdf	PDF	Formulario de paciente nuevo
medical center patient forms colorado spanish	http://www.stanthonynorth.org/workfiles/physicianpractice/familymedcinpatientpacket.pdf	http://www.stanthonynorth.org/workfiles/spanish_new_patient.pdf	PDF	Formulario de paciente nuevo
	http://www.ucdenver.edu/academic/s/colleges/dentalmedicine/PatientCare/Documents/Dental%20and%20Medical%20History%20Form%20Eng%2001-2012.pdf	http://www.ucdenver.edu/academic/s/colleges/dentalmedicine/PatientCare/Documents/Dental%20and%20Medical%20History%20Form%20Spanish%2001-2012.pdf	PDF	Historia médica

SEARCH STRUCTURE	ENGLISH FORM	SPANISH FORM	FILE FORMAT (PDF, doc, html...)	FORM TYPE
español patient forms colorado	http://www.coloradoinjurytreatment.com/images/stories/form_CITC_new_pat_info.pdf	http://www.coloradoinjurytreatment.com/images/stories/form_CITC_new_pat_info_spanish.pdf	PDF	Formulario de paciente nuevo
formulario paciente español illinois	http://www.ramirezfootandankle.com/docs/patientinfoEnglish.pdf	http://www.ramirezfootandankle-spanish.com/docs/patientinfoSpanish.pdf	PDF	Formulario de paciente nuevo
forma paciente español illinois	https://docs.google.com/file/d/0B48uMBE1k375cDl6NG9oRjNTNXVhUW1oUIV4TnhRQQ/edit	https://docs.google.com/file/d/0B48uMBE1k375V3RjUkFET1NRRTZBcWw5ZXRYSG41QQ/edit	PDF	Formulario de paciente nuevo
spanish patient forms illinois	http://www.alexianbrothershealth.org/abbhh/outpatient-providers/forms	http://www.alexianbrothershealth.org/abbhh/outpatient-providers/forms	Doc	Formulario de paciente nuevo
	http://www.alexianbrothershealth.org/abbhh/outpatient-providers/forms	http://www.alexianbrothershealth.org/abbhh/outpatient-providers/forms	Doc	Historia médica
	http://www.grayslakeortho.com/docs/Ortho%20Registration.pdf	http://www.grayslakeortho.com/docs/Ortho%20Registration%20Spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.grayslakeortho.com/docs/Ortho%20Health%20History.pdf	http://www.grayslakeortho.com/docs/Ortho%20Health%20History%20Spanish.pdf	PDF	Historia médica
	http://www.oakparkdentist.com/Account_Data/Account_436/editor/Medical%20History%20Form.pdf	http://www.oakparkdentist.com/Account_Data/Account_436/editor/Medical%20History%20Form%20Spanish.pdf	PDF	Historia médica
	http://www.advocatehealth.com/imc/documents/patient_assessment_English.pdf	http://www.advocatehealth.com/imc/documents/patient_assessment_Spanish.pdf	PDF	Formulario de paciente nuevo
	http://www.maculanchiro.com/images/REG.pdf	http://www.maculanchiro.com/images/MCC%20Registrationspa.pdf	PDF	Formulario de paciente nuevo
	http://www.maculanchiro.com/images/CONFIDENTIAL%20HEALTH%20HISTORY.pdf	http://www.maculanchiro.com/images/Historia%20de%20salud%20confidencial.pdf	PDF	Historia médica

Appendix 2: Breakdown of the sections found in the studied corpus.

Level 1	Count	Level 2	Count	Level 3	Count	Level 4	Count
Personal information	99						
		Basic information	99				
				Nombre	99		
				Segundo nombre	17		
				Inicial del segundo nombre	24		
				Apellido	54		
				Apellidos	4		
				Núm. identificación del paciente	14		
				Estado civil	54		
				Fecha de nacimiento	90		
						Edad	39
				Sexo	61		
				Género	8		
				Teléfono	75		
						Casa	55
						Celular	57
						Móvil	2
						Trabajo	45
						Otro/sin especificar	22
				Raza	25		
				Etnia	19		
				Idioma	23		
						Necesita intérprete	4
				Email	22		
				Correo electrónico	27		
				Religión	8		
				Empleador	53		
				Ocupación	42		
						Tipo de empleo	9
				Notas	1		
				Forma preferida de comunicación	7		
				Dirección	74		

Level 1	Count	Level 2	Count	Level 3	Count	Level 4	Count
						Primaria	74
						Secundaria	17
				No. SS	64		
				Apodo/Nombre preferido	14		
				Datos del cónyuge	15		
				Paciente menor de edad	21		
				Educación	6		
				Altura	12		
				Peso	13		
				Intereses	6		
		Contacto de emergencia	56				
		Motivo de la visita	33				
				Desde cuándo	13		
		Información del seguro	54				
				Primario	54		
				Secundario	32		
				Terciario	3		
		Información asegurado ppal	11				
		Persona responsable financieramente	29				
		Médico de cabecera	31				
		Médico/persona que le envía	39				
Medical information	72						
		Alergias	57				
		Tratamientos previos o actuales	60				
				Medicación	59		
				Terapia	11		
		Vacunas	16				
		Historial médico previo	59				

Level 1	Count	Level 2	Count	Level 3	Count	Level 4	Count
		Operaciones u hospitalizaciones previas	49				
		Historial familiar	34				
		Revisión completa	22				
				Dolor	10		
						Tipo de dolor	5
						Lugar	7
				Revisión de aparatos	18		
		Farmacia	17				
Social background	52						
		Situación de vivienda	16				
		Discapacidades	1				
		Problemas físicos que interfieren con su rutina diaria	4				
		Número de hijos	11				
		Alcohol	31				
		Tabaco	40				
		Drogas	27				
		Ejercicio	16				
		Problemas económicos	3				
		Ingresos anuales	3				
		Cafeína	8				
For staff only	16						
Sólo para personal	11						
Terms and conditions	52						
		HIPAA	13				
		Información compartida con otros	24				
		Política de pago	17				
		Política de citas	11				
		Autorización de pago	39				
		Política de privacidad	16				

Level 1	Count	Level 2	Count	Level 3	Count	Level 4	Count
		Consentimiento a ser tratado	25				
		Condiciones relativas a Medicare	3				
		Directivas avanzadas de salud	6				
		Condiciones relativas a especialidades médicas	7				
		Información sobre Worker's compensation	4				
		Poder médico	2				
Patient signature	78						
Today's date	95						