Effective Patient-Provider Communication Across Language Barriers:

A Focus on Methods of Translation

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I. Introduction

A. Purpose

Effective communication between health professionals and those they serve is essential for health maintenance as well as disease control and treatment. The Patient's Bill of Rights (AHA, 1990) emphasizes the right to relevant information, made available in language the patient can understand. This implies consideration of dialect and level of literacy and the use of Braille or of audio or video recordings for individuals who are illiterate. But it also clearly, and perhaps even more broadly, makes explicit the need for making information available in the many languages spoken and read by those individuals and communities with limited proficiency in English (LEP). From a legal point of view, linguistic access to public services is regarded by the federal government as a right of "all persons living within the United States" under the "national origin" provision of Title VI of the Civil Rights Act (OCR 2002, Perkins et al., 1998).
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Communication between providers of health care services (hereafter, "providers") and their clients or patients occurs both in spoken (or signed) interactions and in written form. To facilitate oral communication between providers and patients who do not have a language in common, trained bilinguals can be used to accurately convey what is said by each party to the other. Dialogue interpreting of this sort is becoming increasingly available and professional as providers realize the value of open and accurate oral communication across the barrier of language difference. Written communication, usually in one direction, from provider to patient or client, in the language most easily understood by the patient, is equally important. Such communication frequently requires the assistance of bilinguals who can translate a text written in English into the other languages in use in the community or who can create an original text in another language that serves the communicative needs.

This paper begins with the assumption that providers of health care services to the public have a need to communicate in writing, in one or more languages other than English, in order to reach patients or clients who have limited ability to read English. It addresses the choice of directly translating an English text, adapting an English text for a new audience, or creating a new text in another language. For those who choose translation, it aims to promote understanding of the complexity of translation and the qualifications needed by the translator, as a basis for undertaking a translation project. Finally, in a closing section and an appendix, it offers guidance for designing and managing the work of translation to a successful conclusion.

B. The Need

Data from the 2000 Census clearly demonstrate the increasingly multi-ethnic and multi-lingual make-up of the U.S. population. According to a June 4, 2002, press release (U.S. Census 2002a), the foreign-born population of the U.S. reached 31.1 million (11.1% of the population) in 2000, a 57% increase over 1990. The foreign-born population has increased steadily over the past three decades, and their proportion of the population is at its highest since the 1930 census. Foreign-born residents from Latin America now make up slightly more than half of the total foreign-born population ((51.7%), and those from Asia make up more than a quarter (26.4%).

The 2000 Census also revealed an increase in the number of U.S. residents speaking a language other than English at home. In 2000, according to census figures, 46.9 million, or 17.9% of people 5 years of age or older, spoke a language other than English at home, up from 13.8% in 1990. The proportion of people reporting that they spoke English less than "very well" also increased slightly: 8.1% in 2000 compared to 6.1% in 1990.

Of U.S. residents who reported speaking other languages at home, 59.9% speak Spanish, 21.3% speak another Indo-European language, 14.8% speak Asian and Pacific Island languages, and 4.0% speak other languages. The states with the greatest numbers of residents speaking languages other than English at home were Arizona, California, Hawaii, New Mexico, New Jersey, New York, and Texas. In nearly every part of the country, however, providing access to health care for the general population or even for a selected service population requires the ability to communicate in one or more languages other than English. (For detailed information on language use and the foreign-born population, see U.S. Census 2002b.)

One sees increasing efforts by health care organizations to deal with the growing diversity of languages in the United States, but existing language services have not caught up with the need (Ginsberg et al., 1995; see also Bowen 2001 with reference to Canada). An essential first step is the establishment of standards for both oral and written communication across language barriers (COSSMHO 1988; Riddick 1998; Resources for Cross Cultural Health Care 1999; OCR 2002). Research has shown the need for better, more appropriate, translations (Massett 1996) and some of the consequences of inadequate translations (e.g., Berkanovic 1980).

C. Writing and Speech; Translation and Interpreting

Written communication differs in many ways from oral interactions. Although writing can be used for two-way communication, as with e-mail or text-based chat rooms on the Internet, it is most often one-way rather than interactive. In medical settings it is usually health care providers or other professionals such as administrators or public health workers who seek to communicate to clients (patients and their families) in writing.

Thus translation is also generally one-way: texts that have been written by providers for English-speaking patients or clients are translated to reach patients or clients who speak other languages. Only occasionally do texts such as medical records in other languages get translated into English, and in these relatively rare cases the translation is often for information only, not for publication.

Interpreters working in health care settings are normally involved in facilitating two-way professional-client interviews where the interlocutors are both speakers and listeners. By contrast the translator may not know the author of the text being translated and even more rarely does he or she know the individuals to whom the message is directed. Whereas in speech situations meanings are normally negotiated through interaction between the speakers and addressees, in written communication there is generally no opportunity for questions or clarifications. Thus written communication, taking place between writers and readers who are not in contact with each other and have no opportunity for interactive clarification of meaning and intent, demands much more than speech with respect to clarity of intent, content, and the unstated implications of what is said. At the same time, while spoken utterances are retained only in the memories of the hearers, if at all, writing remains a durable record of what has been said, and can be read by any number of people, even over expanses of space and time. If there are errors or misinformation in written materials, it is very difficult to correct them once the materials are distributed. This again shows how important it is that the intent and meaning of written texts be as clear as possible. Writing is a skill generally learned only through formal schooling. Because of this, and because writing typically uses standardized forms of language quite different from the forms of speech, the ability to write effectively is a much rarer skill than is fluent speech and conversational interaction.

Translating written texts differs from interpreting oral discourse in all the ways that writing differs from speech. Just as a person able to speak two languages fluently may not be qualified to interpret for others or to translate texts, an interpreter may not have the literacy skills or sufficient knowledge of translation principles to translate effectively. (Likewise, the individual who is skillful at producing a translation, sitting alone at a desk surrounded by reference books and dictionaries and with time to perfect the text, may find it difficult and distasteful to work as an interpreter, interacting with real people who have immediate personal needs and quirks of personality, and converting messages from one language to the other and back as fast as the interlocutors choose to speak.)

The point here is that quality translation requires a specialized set of skills that may not be found among most bilinguals or even among skilled interpreters. The essential qualifications of a competent translator include the following (Sofer 1999, 33-37):

- a thorough knowledge of both the source and the target language
- a comfortable familiarity with both cultures
- an up-to-date knowledge of styles and dialects, and of linguistic innovations and changes
- exceptional reading and writing skills, to achieve accuracy, clarity and style in the target language
- flexibility to translate appropriately in different genres, media, and subject areas
- research and reference skills
- ability to use computer hardware and software effectively and efficiently for translation, communication, and research.

D. Special considerations

In designing written communications directed to speakers of diverse languages, one must recognize the diversity within and among the various groups. **Rates of literacy** among speakers of various languages may range from almost zero to near 100 percent. **Levels of literacy also vary.** Some communities can be reached more effectively using video and dramatizations, for example, than through the possibly unfamiliar medium of flyers or descriptive texts. And there are special communication needs within all populations. Just as in English-speaking communities, there will be individuals with hearing impairments or loss of sight among groups that speak other languages.

It is important also to recognize that it is not unusual for different languages to be used for speaking and writing within the same community. Hmong people coming from Laos as refugees in the 1980s often spoke the Hmong language at home but were literate, if at all, in Lao, the national language of Laos. Similarly, immigrants from Mexico may speak a Mayan language but read only Spanish. Literary and commercial Arabic is far removed from the spoken varieties of Arabic prevalent among speakers from Cairo, Beirut, or Tunis.

II. Background: What is a good translation?

Translation is often thought of as essentially a matter of converting a source-language text into an equivalent target-language text. But, like any good writing, translation must be guided by a communicative purpose and a strategy for fulfilling that purpose, and must be written for a known or imagined audience. The audience for a translation may be rather different from that of the original text, and thus the communication strategies that are appropriate and even the purpose of communicating may be different. These differences are likely to affect what may be considered a good (i.e., appropriate) translation. Least likely to be changed in a good translation is the content, the factual information conveyed, although even this may sometimes be adapted in a translation for a particular audience. Seen from this perspective, the idea of (in some sense) maintaining the wording or phrasing of the original text is generally of little importance. *A good translation is one that draws upon a source text to effectively fulfill a communicative purpose.* To the extent that the source text was written for the same purpose, in terms of content, aims, strategies, and audience, the translated text will replicate the original, within the limits imposed by the resources of the target language.

Criteria used to guide a translation and to judge the finished product are largely the same as those used to evaluate any written text. The translation must be:

- Comprehensible (at a suitable reading level, but also clear with respect to implications, concepts, and references that may be culture-bound)
- Appropriate (in content, approach, directness, style)
- Accurate (faithfulness to the source text, or to the facts, or the intent; see discussion in Section III.)

Faithfulness to the source text is most important for questionnaires, forms, and other documents to be used by English-speaking staff members, who need to know exactly what is being said in the other language and match it up with the English version. Adherence to the style of the source text (relative "literalness") may be important if one is more concerned to respect and reflect the authority or personality of the author than to accommodate the reader. For example, replicating the style of the original may be more important if one is translating editorial commentary or opinion than if one is translating a set of discharge instructions or a description of symptoms.

Close linguistic equivalence may be valued when consistency of content across versions is of utmost importance, such as when producing a questionnaire or mental status examination protocol in several languages.[1] On the other hand, when the purpose is to inform and perhaps persuade or influence behavior of the audience (as in a publication regarding STDs or smoking cessation) it may be undesirable to force a Spanish-language text into the same rhetorical mode as used for an English-speaking audience. For this purpose, either what is sometimes called a "transadaptation" or a Spanish-language original text may be more effective than a strict translation.

As is the case with writing in general, the appropriateness of different genres (story-telling or factual description, poster or brochure, etc.) as well as reading level and other factors, may also come into the picture.

In the next section we will show how theories of translation have evolved. The direction of movement has been from considering translation as an operation performed on a source text to a more dynamic conception of translation as a type of writing based on a source text but heavily focused on achieving particular communicative purposes with respect to a particular projected readership. This view of translation results in a process that generally requires teamwork between *the initiator of the translation* and those who will carry it out, and, ideally, consumer testing of the final product for reading level, clarity, cultural acceptability, persuasiveness, etc.

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[1] There is a very sizeable literature concerning the translation of research and assessment instruments. A basic resource in this area is Brislin 1980 *Translation: Applications and research*. Sperber, Devellis, and Boehlecke (1994) and Prieto (1992) address translation methods. Herrera, DelCampo, and Ames (1993) advocate what they call a "serial approach" to the translation of assessment instruments, incorporating back-translation. Carroll et al. (2001) propose a "modified serial approach" designed to avoid some problems identified by the authors in the previously mentioned model. Cramer et al. 1998 and Hendricson et al. 1989 are examples of the many published reports on the translation and validation of particular instruments. Among these, Carroll et al. 2001, Cella et al. 1998, and Collins et al. 2001 are concerned with translation and validation of specific Spanish-language instruments. Besides those already mentioned, a number of studies utilize or critique the technique of back-translation for the purpose of verifying accuracy and cross-cultural equivalence of translated instruments; these include Brislin 1970, Herrera, DelCampo, and Ames 1993, and Carroll et al. 2001 (mentioned above). Finally, Marin and Marin 1981 is concerned with the conduct of research with Hispanic populations in general and addresses translation issues.

III. Approaches to translation and translation theories

A. "Literal" translation

People sometimes refer to "literal" or "word-for-word" translation as a desirable process or outcome when they mean to say that the translation product should accurately convey the content of the source text and even, to the extent possible, express the content through the same linguistic means. The term is used as the opposite of "free translation" – creation of a target-language text which deviates freely from the form and content of the source. But if we take the term literally, to mean translating word-for-word, "literal" translation is impossible. Languages differ from one another so much in the way they express meaning that in order to maintain the content or meaning it is generally necessary to change the linguistic form, sometimes radically. Even if a similar form is grammatically correct in the target language, it may be an unusual or unnatural way to express that meaning—one that would call attention to itself. We are all aware of idiomatic forms of self-introduction in different languages: "I'm Maria," "My name is Maria," "I call myself Maria." What is conventional in one language may be odd or impossible in another – either grammatically or culturally.

Word-for-word translation is what one gets by looking up words in a bilingual lexicon or word list and simply replacing each word with the matching word (or one of the matching words) on the list. French "Il y avait beaucoup de gens" becomes "It there had many of folks", where an accurate and idiomatic rendition might be "There were a lot of people (there)." Obviously, literal or word-for-word translation fails with respect to both accuracy of meaning and naturalness of style. Yet there are uses of literalness in translation (for example, when the purpose is to show how meanings are expressed in another language) and, as we will see below, there are occasions when it is desirable for the translation to be as literal **as possible**.

The difference between "literal," "verbatim," and a true or adequate translation (or interpretation) is clearly laid out in this passage from the *Best Practices Manual* prepared by the Minnesota Supreme Court Interpreter Advisory Committee (1999, 6-7):

> Literal Interpretation/Translation
> To interpret/translate literally means to convey the primary surface meaning of the source word while preserving the word order and parts of speech of the source language. This means that context plays no role in providing cues to what an utterance means or how it should be interpreted/translated. It also means that the word order of the source language is imposed upon the target language. Finally, meaning embedded in idioms, for example, is completely lost, unless the target language has exactly the same idiom with the same word order. A literal interpretation/translation is so bound by the source language that renderings in the target language will often be completely unintelligible, not to mention unfaithful to the source language. Lawyers and judges sometimes ask for a literal interpretation without realizing what they

would get. An accurate, or "proper interpretation" (defined below) should be requested.

Verbatim Interpretation/Translation
To interpret/translate verbatim means to convey the real meaning of the source while preserving the word order of the source language. While lexical meaning is accurately preserved, meaning that is embedded in grammar may interfere with the interpretation/translation. Verbatim interpretation/translation is a significant improvement over the literal approach because lexical and contextual meanings are preserved. However, since the word order of the source language is being imposed on the natural grammar of the target language, it may sound stilted, awkward, and may from time to time introduce confusion or even misunderstanding. Instead of asking for a verbatim interpretation, judges and lawyers should request a "proper interpretation" that is complete, i.e., leaves nothing out (see below).

Proper Interpretation/Translation
To interpret/translate properly means to convey the real meaning of the source language communication, preserving all aspects of meaning, with the natural grammar of the target language. To interpret/translate properly, one has no concern for literal meanings or following the word order (or even the number of words) of the source language. The goal is to enable the recipient of the interpretation/translation to hear … the source message as if it had been communicated in the recipient's language in the first place.

B. Substitution

Substitution as a method of translation may sound very much like word-for-word translation. But it is actually a serious approach to translation, based on principles of linguistic analysis. The difference is that the concept of substitution recognizes equivalence at various levels: the word, the phrase, the sentence, etc., and equivalence of various kinds: equivalent ways of highlighting new information, cultural equivalence with respect to level of politeness, intimacy, propriety, or explicitness. English *There were* substitutes nicely for French *Il y avait* even though *were* doesn't by itself have the same meaning as French *avait*. While the notion of **equivalence** is complex and difficult in itself, the principle of substitution in translation has its place. It suggests a process of finding meaningful units of text for which a corresponding (equivalent) word, phrase or sentence can be constructed. This is a somewhat mechanical process which goes well beyond merely replacing words with words, but it works better at the level of words and phrases than when applied to finding culturally appropriate means of transmitting information. If the "equivalence" is only at the level of an entire English text being rhetorically "equivalent" to some Spanish text, the notion of substitution is not very helpful.

C. Meaning-based translation

An enormous amount of translation work has been done, both in developing theory and methods of translation and in terms of practical accomplishment, in the field of Bible translation. This work, essentially involving the translation of texts growing out of an ancient culture into highly diverse languages spoken in all parts of the world, led to the idea that it is impossible, in general, to move directly from a text in one language to the creation of a corresponding text in another language. The particularities of vocabulary and grammar, cultural assumptions, and conventions of speaking and writing in each language seemed to stand in the way of the process of creating an equivalent text in the target language by simple substitution of linguistic elements. It became evident that, in general, the conventions for expressing meaning in one language have no systematic relationship to the means of expressing a somehow equivalent meaning in a radically different language.

So the process of translation was reconceptualized as a two-part process. One first must (mentally) extract the meaning of the source text (that is, the meanings of elements of the text and the way those meaningful elements combine to form the meaning of the text as a whole) and then, as a separate second step, one must find a way to "repackage" that meaning using words, grammatical patterns, and cultural conventions peculiar to the target language (Larson, 1984). As an essential part of this approach it was also recognized that the translator would need to be aware of the purposes and assumptions of the author and the author's expectations about the cultural inferences that could be expected on the part of the reader. But the original *author*'s imagined reader might be very different from the reader for whom the translation is intended. So in recreating the message in the target language, the translator would also need to be aware of the cultural assumptions, expectations and associations that the translator could expect of the target-language reader, coming to the text as a member of a very different culture and even in a different historical era. A frequently cited example is the problem of expressing the concept behind the Biblical phrase "the Lamb of God" so that it could be grasped by an Eskimo or an inhabitant of New Guinea who had never seen a sheep. Even if a literal linguistic equivalent could be found, the cultural meaning might be lost. A rendition as "God's Little Pig" might seem incomprehensible and inappropriate to one steeped in the Christian religious tradition, and yet succeed in conveying the intended sense and feeling when read by a Pacific islander.

Eugene A. Nida, the leading theoretician among Bible translators and a linguist whose contributions are highly respected throughout the field of translation studies, emphasizes the importance of "dynamic equivalence" between source and target texts (Nida, 1964; Nida and Taber, 1969). Hatim (2001, 19) notes that dynamic equivalence

> refers to the set of procedures by means of which 'the message of the original text [will be] so transported into the receptor language that the response of the receptor is essentially like that of the original receptors' (Nida and Taber, 1969, 200). This may be compared with what Nida calls formal equivalence: an

orientation to translation which ‘focuses attention on the message itself, in both form and content’ (1964, 159).

According to Hatim (2001, 19)

> dynamic equivalence procedures include:
> - Substituting more appropriate target-language cultural material for less accessible source-language items.
> - Making references which are implicit in the source text linguistically explicit in the target language.
> - Regulating **redundancy** in order to facilitate comprehension. (Emphasis in the original.)

Translation theories are sometimes described as falling into two groups: those with a *source orientation* and those with a *target orientation*. The distinction may be thought of as involving a focus on *semantics* (of the source text) versus *culture* (the culture of the intended reader): a semantic or cultural orientation. Nida’s concept of dynamic equivalence perhaps falls in between, encompassing both to some degree. The functional theories, which we will look at next, strongly emphasize the necessity to address the cultural understanding of the targeted reader.

D. Functional approaches (*skopos* theory)

Functionalist approaches further turn attention away from the source text and toward the **purpose** of the communication – the use to be made of the translation. Here we will focus on what has come to be called *skopos* theory, originally developed in Germany by Vermeer (1978) and presented as a specific translation theory in Reiss and Vermeer (1984/1991). Schäffner (1998, 235) explains:

> Like any other human action, translation has a purpose, and the word *skopos*, from Greek, is used as the technical term for the purpose of a translation. *Skopos* must be defined before translation can begin; in highlighting *skopos*, the theory adopts a prospective attitude to translation, as opposed to the retrospective attitude adopted in theories which focus on prescriptions derived from the source text.

Schäffner points out that *skopos* theory draws upon a general theory of actions and stresses factors “which were brought into sharp relief with the growing need in the latter half of the twentieth century for the translation of non-literary text types. In the translation of scientific and academic papers, instructions for use, tourist guides, contracts, etc., the contextual factors surrounding the translation cannot be ignored” (Schäffner 1998, 235).

There is no room here for a full review of this approach to translation. (A thorough explication and critique can be found in Nord 1997.) But the general significance of the functionalist view can be summarized briefly, again in the words of Christina Schäffner (1998, 236):

> The main point of this functional approach is the following: it is not the source text as such, or its effects on the source-text recipient, or the function assigned to it by the author, that determines the translation process, as is postulated by EQUIVALENCE-based translation theories, but the prospective function of the target text as determined by the initiator's, i.e. client's, needs. Consequently, the *skopos* is largely constrained by the target text user (reader/listener) and his/her situation and cultural background. (Emphasis in the original.)

This user-centered approach has been criticized for blurring the distinction between "true translation" and adaptation. But it should not be concluded that *skopos* theory gives license to the translator to deviate at will from the source text. The **purpose** of the translation is set by the initiator of the translation, and the translator is constrained by that purpose.

The initiator has the option of modifying the source text to suit a new purpose, as a preliminary to translation, or to instruct the translator as to the purpose, intended audience, and intended effect on the audience, so that the translator can work toward that purpose. If the latter option is taken, then it is essential that the translator receive not only a copy of the text to be translated but, with it, a job order or **set of specifications** to guide the creation of the target language text. The spec sheet can make it clear, in the case of a bilingual questionnaire, that the two texts must be aligned as closely as possible in both form and content. On the other hand, in planning translation of a guide to healthy living, for example, the job specifications can license the translator to substitute references and rhetorical devices familiar in the target culture that will best create acceptance and understanding of a recommended set of health behaviors.

In the next section we turn from general theories to specific steps that the translation initiator, project manager, and translator can follow to organize and streamline the complex process of creating a new text in a particular language or languages, for a specific purpose and a specific readership (intended receptors).

We will approach the task by addressing first the tasks of the initiator and the sponsoring organization and then (if translation is the chosen approach) of the translator, working with other members of a project team.

IV. The Process: Creating a Target-language (TL) Text

A. Initial Tasks of the Project Initiator

Rather than consider only the process of creating a translation, we have chosen to begin one step earlier, to consider first *the decision to create a non-English text for a particular purpose and a class of recipients*. Translation is just one of the ways to create that text. Only when the initial decision has been taken can one proceed to the choice of translation as the best means for creating the desired text.

The initial questions to be addressed include these:

Purpose:	What is the purpose of creating a particular non-English text?
Mode:	What written language(s) will be the medium of the message?
	Why writing rather than video, audio tape, etc.?
	What format: flyer, poster, brochure, booklet, manual, Web page?
Target:	Who do you want to receive the message?
	(Age, education, literacy, health status, cultural beliefs and assumptions)
Means:	How will the message be distributed?

These questions will be addressed in more detail below with specific reference to translation. But first one must decide which option will best suit the purpose and the target audience: to translate materials that already exist in English or to prepare appropriate new materials in the language of the target audience. There are in fact three possibilities:

Original text creation – tailored to the purposes of the communication and demographic and cultural characteristics of the intended audience, drafted in the audience's preferred language(s)

Translation – creating a target-language text that closely matches an existing text designed for English-speakers

Transadaptation – a middle path, in which the content of the existing text is modified to accommodate the special communicative purposes and recipient characteristics of this project.

As noted earlier, if adaptation is desired, it can either be done by modifying the source text prior to translation or by instructing the translator (through the specification sheet that accompanies the text to be translated) as to what modifications are desired in the output. According to *skopos* theory, as described above, what we have called "transadaptation" is just a variety of translation guided by *the purposes of the initiator* (not the author of the source text) and adapted to *the needs and understanding of the audience* (generally distinct from the audience for whom the source text was written).

Often the decision to translate or create a new text will rest on whether one is working from a known English source text (a text that one wishes to make accessible to a new non-English-speaking readership) or whether one is working back from some specific informational needs of a culturally and linguistically distinct community. The existence of an appropriate English-language source text is of course crucial in making this decision.

If one begins with a standard admissions form, a questionnaire, or an information sheet for wound care, etc., a close translation may be appropriate (and the product will likely be bilingual, with texts in both languages side by side). If one begins with a community issue, such as the non-reporting of domestic abuse or disparities in the incidence of untreated diabetes, communications unique to that community, drafted in the language of the community and using preferred genres and media, may prove to be the best choice.

Advice on how to create non-translated patient/client materials, whether in English or another language, is available elsewhere and is beyond the scope of this paper. Original writing for speakers of other languages living in the United States, however, raises many of the same issues that must be addressed in translation. For example, there is the diversity of dialects spoken by Spanish-speakers who have immigrated from any of the many countries where Spanish is the predominant language. Problems of translation arise also from the fact that Spanish as spoken regionally in United States may be different from any of the dialects spoken in other countries, influenced by contact with English and by vocabulary borrowing and innovation that may differ by region. It should also be noted here that texts created in another language generally must be translated into English, both as a check on the accuracy of their content and as a way for English-speaking providers to know what a text written in another language says.

At this point we will assume that the decision to translate has been made and focus on the process of translating an English source text, with or without some appropriate degree of cultural adaptation.

One important initial task is **prioritization**. Engler (2002, 34), describing how translation is handled at Mayo Clinic in Rochester, Minnesota, addresses this issue.

> All medical centers must manage their limited translation resources wisely to ensure the best use for the greatest good of the patients. The sheer volume of requests received by the Clinic necessitates prioritizing all translation requests. Requests . . . are prioritized based on a number of criteria. The criteria include: urgency for the patient; status of the source publication (has it been approved by a Mayo physician, is it due for revision?); number of patients served, and priority as part of a patient education plan. Each request is given a numerical ranking, and translation usually proceeds on high- and medium-priority pieces. Translation of low-priority pieces may be dropped or moved to a later date.

Once the decision is made to translate a particular English-language text, these further questions require answers:

> Is the source text in fact appropriate for the intended purpose and audience, if translated?
> Are the reading level and the content, genre, and style appropriate?
> Can it or must it be adapted and, if so, in what ways?

When these questions have been answered, specifications for the translation can be drafted and passed along, with the source text, to those selected to do the translation.

In a large organization, competent translation can probably be done in-house, by language specialists who also serve as interpreters or by a staff selected specifically for their translation skills. In many cases, however, especially for less commonly encountered languages, it may be best to contract with a translation agency that will assign the work to a translation and editing team experienced in the kind of translation required.

It is important to keep in mind a point addressed above, that quality translation requires skills not found among typical bilinguals and different in many ways from the skills needed for oral interpreting. And, unlike interpreters whose presence is required for face-to-face encounters between providers and patients, there are no geographic constraints on the choice of translator. Translators can work from anywhere and communicate with the translation initiator and others quickly and efficiently via e-mail, fax, and interactive Web sites. Major translation agencies mediate between their clients and a world-wide network of specialist translators.

B. Preparing and Organizing a Translation Project

We assume that quality, value, and efficiency are among the goals of any translation project, and that planning and management are keys to success, just as with the production of any other sort of product. Juan C. Sager, in an article on translation quality assessment (Sager 1983, 121) puts it this way:

> In order to discuss meaningfully the quality of a translator's work we have to consider the process of translation as an industrial process, subject to considerations of time and effort by which any work is measured. Similarly, the result of this process, the translation itself, is a commercial product of the information market, to which a certain price can be attached. It follows that the price and hence the quality of translations should be commensurate with the value attached to an original which is used for the same purpose and with the importance attributed to it in the process of communication.

Quality is the result of concerted teamwork between the original content provider (i.e., the initiator of the translation project, who may or may not be the author) and the translation vendor.[2] This section focuses on what the client organization can do to ensure quality in cross-linguistic written communication. In Appendix A we add a discussion of the translation vendor's role in the process, starting from the point at which the client has decided to undertake a translation (based on the considerations discussed above) and has determined the following parameters, known in the translation industry as the "4 T's":

Text. The source language document(s) to be translated. The desirability of translating a particular text must be determined. Texts are chosen to be translated for reasons of relevance, importance, legality, and other considerations. The client must clearly communicate to the translation vendor the purposes, uses, and overall context of the document(s). Furthermore, as Mary O'Neill (2002, 151-2) points out, it may be useful for the client's technical writing staff to compose (or re-compose) the original text to make it as "translatable" as possible—by following an international style guide, restricting the

[2] In this section, consistent with the idea of translation as a product, we will refer to the translation team as the "translation vendor" and the organization requesting or sponsoring the translation as the "client," recognizing of course that the translation may be done in-house.

use of jargon, and avoiding linguistic complexities of English such as compacted noun phrases.

Target. The audience(s) for whom the translation is intended. The form of the translation will be affected by questions of dialect, literacy level[3], bilingualism, preferred means of communication, and people's attitudes towards their language (Communications Office, MDH Office of Public Affairs, no date).

Determining the nature of the target audience so as to communicate in language that is understood and accepted may be more complex than it at first appears. Take the matter of dialect, for example. The intended audience is often comprised of individuals native to different countries or regions. A "language" usually encompasses a number of "sub-languages" or dialects, spoken in different regions or among different social groups. Some dialects of the same language may not even be mutually intelligible. For example, a native English speaker from the Midwest region of the U.S. may well have trouble understanding a native English speaker from New Hebrides, or even from the Southeastern United States.

The same phenomenon of dialect diversity applies to native Spanish speakers of diverse origins, even those from countries located quite close to one another. For example, some words for common objects used by native Spanish speakers in Venezuela and Uruguay are quite different. "Beans" are called *caraotas* in Venezuela, but *porotos* in Uruguay; many Venezuelans call "popcorn" *cotufas*, a word not understood in Uruguay, where the same item is known as *pororó.* Even an object imported from the Western industrialized world, the toilet, has taken on different names in different Spanish-speaking countries: *poceta* in Venezuela, and the borrowed term *(el) water* in Uruguay.

How can a translator solve this problem of mutual intelligibility? One must make a crucial distinction between an audience's *active* vocabulary and *passive* vocabulary. A competent language speaker's *passive* vocabulary—or the range of words, terms, and expressions in the native language that s/he can understand—is typically much larger than the same speaker's *active* vocabulary, i.e. the range of words, terms, and expressions that s/he uses on a daily basis due to habit or preference. Furthermore, while two individuals who share the same native language but speak different dialects may share little *active* vocabulary, the *passive* vocabulary of the same two individuals typically overlaps a great deal. Since the translation is usually intended as one-way communication from a single author to a diverse audience, it makes both theoretical and practical sense to draw on the passive vocabulary common to a wide sector of that audience, as opposed to relying on the active vocabulary of one sub-section or other. Thus, the problems of

[3] Literary considerations in translation are discussed in Albin 1998, PATH 1989, and especially Doak, Doak, and Root 1985. Studies investigating the relevance of literacy in health care communications include Richwald, Schneider-Munoz, and Valdez 1989 and Williams et al. 1998a and 1998b. Some publications address literacy in minority and especially Spanish-speaking groups; key references are Richwald, Schneider-Munoz, and Valdez 1989, and Vari-Carter 1981.

dialect variation mentioned in the previous paragraph can frequently be avoided in translation by choosing a "neutral" term understood equally well by Spanish speakers representing different dialects. For example, the object "beans" can be recognized by both Venezuelans and Uruguayans under the term *frijoles*; "popcorn" can be called *palomitas de maís*; and a "toilet" can be referred to either as *excusado* or *inodoro*. Even though none of these terms would necessarily be the one *chosen* by a given Spanish speaker, all of them can be *understood* by the vast majority of Spanish speakers, regardless of national origin.

Of course, other factors besides dialect and the national origin of the audience can strongly affect the translator's choices of style and vocabulary. The audience's social and economic role in the communicative context also needs to be taken into account. Are they applicants for financial assistance? Patients being asked to consent to a medical procedure? Members of the public seeking information on healthy life choices or specific diseases and treatments?

Team. The people who will collaborate on the project during all of its stages. Of foremost concern in this paper is the translation component of the team. The best translators will usually be native speakers of the target language rather than of the source language (English). These translators are more likely to be familiar with the target-language culture and the stylistic norms of the target language itself. Because it is so important for translations to be accurate and stylistically and culturally appropriate, translation should preferably be done by the best available professional translators, not by bilingual staff members who lack training and the specific skills needed for translation. Beyond these basic concerns, useful criteria for selecting translation vendors include qualifications, languages of specialization, markets served, range of services, turnaround time, and price (O'Neill, 2002, 153).

In addition to the translator, or group of translators, there need to be others available for evaluation and consultation. For a large project, the client should also designate other key individuals as project managers, content consultants, and/or technical troubleshooters. O'Neill (2002, 152) outlines an ideal process by which a client enlists the cooperation of all its relevant divisions and vendors—advertising, sales and marketing, packaging, technical documentation, software, pre-press, printing—to work with the translation vendor on producing usable, accurate, consistent, and cost-effective documents.

The working relationship among all the people on the team, and the required duties of each one, need to be established before the project gets underway. Guidelines for contracting with translation vendors in particular will be given in the ASTM "Consumer-oriented Guide to Quality Assurance in Translation and Localization" (working title), under preparation by ASTM Subcommittee F15.48 (see Wells 2002, 159-160).

Tools. The written and electronic source materials, including online resources, which will be used as helps by the translators. As outlined in the MDH protocol cited above, such tools include dictionaries, grammars, and cultural descriptions of both the source language and receptor language. Tools also include any previous translations, documentation, and glossaries that the client may provide. An additional tool that has become more prominent in the last decade is computer-aided translation (CAT) software, which can store and code large bodies of text in the source and target languages, enabling the translator to find target-language "matches" for key terminology and even automatically "regenerate" sentences and paragraphs that had appeared identically in a previous translation.

Once the matters of the text, the target audience, and the team relationships are established, and the tools needed made available, the project is ready to begin.

Since the purpose of this paper is mainly to provide an orientation to theories, methods, and issues that arise in undertaking translation in a health-care setting, the details of carrying out a translation project are not addressed here. See, however, Downing and Bogoslaw (in preparation), intended as a step-by-step guide to translation, including the sequence of tasks that must be carried out by the translation/ editing team in close cooperation with the project manager. These include, at a minimum, studying and determining the meaning of the source text; making terminological decisions about rendering technical or idiomatic expressions, consistent with other texts addressed to the same readership; producing a draft translation; review and editing by a second translator; and pre-final review by a bilingual content specialist (sometimes an attorney) and by a community review panel that can give feedback on the comprehensibility and naturalness of the translation product. Only after these steps have been taken can a translation be considered ready for printing and distribution.

We have not included **back-translation** in our description of the usual translation process, but it needs to be mentioned. The term refers to the retranslation of a translated text into the original source language (by a different translator). The use of back-translation is considered by some to be a desirable or even an essential element of translation. It has often been cited as a method of checking the quality of the original translation (see, for example, Larson 1984, 54-55, 534-537). Some grants and contracts even stipulate that all translated documents be back-translated into the original language.

Since back-translation is so often asked about and discussed, we include here a brief analysis of its effectiveness in three crucial areas that affect translation quality: completeness, accuracy, and naturalness (or stylistic appropriateness for the target audience).

Back-translation is a reliable indicator of completeness. In other words, by comparing the back-translation to the original text, one can readily see whether any sentences, bullet points, or paragraphs have been added or deleted. We should point out that the same type of comparison can be (and customarily is) performed in the process of editing, in which a "second pair of eyes" compares the translation side by side with the original document. However, it may be easier to do this type of comparison with two texts in the same language, rather than reading "across languages."

Back-translation can also gauge the accuracy of a translator's work. Inaccurate terminology can be readily identified if, for example, the word for *bolt* in a technical manual is erroneously translated as *screw*. Moreover, back-translation (combined with a follow-up analysis by a trained consultant) can be useful for revealing cases in which the translator misunderstood the content of the original text (Larson 1984, 534).

However, this analysis needs to be performed with extreme care. Because some terms do not "match up" exactly with their counterparts in other languages, the correct translation may seem invalid or incorrect when back-translated into the source language. For example, the Spanish term approved by the U.S. Federal Government to denote *food stamps* is *cupones para alimentos*, or (literally) *coupons for food*. (To complicate the situation still further, neither term accurately describes the actual item, which is generally found in the form of an electronic card.) A consultant who does not know Spanish could easily draw the conclusion that the Spanish translator committed a major error by translating "stamps" as "coupons," when in fact the translation was correct. In addition to flagging such potential "false alarms," back-translation can also fail to reveal some of the literalisms or "false cognates" that often appear in translated drafts. One such example, again from Spanish, is the word *aplicación*, which is commonly used for the English *application* (for benefits, grants, insurance, and other purposes). The Spanish word indicates a cream or lotion that is applied to the skin, but an entirely different word (*solicitud*) would be used in the sense described above.

In the area of naturalness, back-translation is of little help. The main reason is that this quality is strongly affected by the stylistic capabilities of both the translator and the back-translator. Even an accurate and well-phrased translation is likely to sound either wordy or wooden when re-translated. In fact, back-translators are often instructed to make their translations as "literal" as possible, without editing them to make them flow smoothly.

Conversely, stylistic awkwardness that stands out to the reader of a translated text can be totally lost in back-translation. For example, the only Spanish word that can denote *parent* in a gender-neutral way is *progenidor*, but community reviews have shown that this word sounds stilted or archaic to some native Spanish speakers, who suggested that instead the two gender-specific options be juxtaposed (*madre/padre*). A back-translation, especially by a non-native speaker of Spanish, would be likely to gloss over such a stylistically important issue.

To summarize this discussion, back-translation is perhaps most useful for assessing whether there are any glaring omissions or additions in a translated text. It can also identify some mistranslations or misunderstandings of the original text, but can let some overly literal translations slip by; errors in accuracy can more reliably be flagged by an editor or consultant who is a native speaker of the target language. Finally, back-translation is quite ineffective in assessing how naturally the translation reads in the target language; stylistic naturalness is best judged by not just one but several native speakers of the target language.[4]

[4] These weaknesses, however, are obviated when back-translation is used as just one component of a multifaceted process of instrument translation, verification, and validation such as the "modified serial approach" advocated by Carroll et al. (2001).

V. Conclusion

Health care providers who serve linguistically and culturally diverse communities need to communicate with their patients, clients, and the public both orally (usually in private conferences) and more publicly in writing. To reach those whose ability to read English is limited, materials are prepared in other languages or translated from existing English-language forms, questionnaires, instructions, and informational brochures. But translation requires specialized skills that not all bilinguals may have. A quality product requires careful planning and teamwork involving cooperation among the initiators and managers of the translation project along with language professionals who can produce and edit the translation. Every translation involves many choices and decisions, which can be made easier by a clear vision of the purposes of the translation and the expectations and understandings of the intended reader.

Careful planning and management also paves the way for future revisions and additions to the body of written materials available "in language the patient can understand." It is a complex task, but it can be done. And better individual and community health can be expected from the effort to reach out to all clients, regardless of their origins or the language they speak.

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