ABSTRACT

Working with Spanish-speaking Interpreters in a Family Health Setting: Assessing Language Needs and Implementing Training

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An estimated 53 million Hispanics currently live in the United States, comprising 17 percent of the total population. By 2060, this number is projected to rise to 128.8 million, comprising 30 percent of the population. Despite these numbers and numerous studies highlighting the low level of training and availability of Spanish-language interpreters in health care settings, current initiatives to prepare for the projected population increase are limited. This thesis examines the use of interpreters at the Family Health Center clinic system in Waco, TX, providing an analysis of current issues and recommendations for ongoing training. Research instruments used in this project included a language needs assessment based on previous research, interpreter and clinician training interventions, Spanish language proficiency exams, and patient satisfaction surveys. Results indicated that additional training was needed, and response to the initial interventions was positive, suggesting that future training programs might provide additional benefits.

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WORKING WITH SPANISH-SPEAKING INTERPRETERS IN A FAMILY HEALTH SETTING: ASSESSING LANGUAGE NEEDS AND IMPLEMENTING TRAINING

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CHAPTER ONE

Introduction

At its core, healthcare is founded on communication. The ability of patients to communicate with those who treat them fundamentally affects the perception of an illness, transforming it from a mere set of symptoms into a story. Without the context of this story, treating an illness becomes more of a guessing game than a puzzle. It is not easy to imagine trying to communicate the details of an illness to a physician while wearing a gag, but this is not unlike the problem that many Spanish-speaking patients face in the US health care system. Since interpreters are the most common solution to this problem, it is important to assess how well they facilitate communication in health care settings.

This thesis examines the effectiveness of communication between clinicians, interpreters, and Spanish-speaking patients at the Family Health Center (FHC) clinic system in Waco, TX. Through a review of literature, a language needs assessment survey, and a series of employee training interventions, the project analyzes language-related needs and seeks to improve communication in a way that will provide tangible benefits to FHC's Spanish-speaking patients. The results of the project suggest that, although there are many imperfections in the way that interpreters are being used, training programs hold significant promise for improving their efficacy and thereby improving the quality of health care provided to Spanish-speaking patients.

Chapter two, the literature review, discusses the findings of other authors concerning how interpreters have been used in the past, the implications that these

findings have for future training and policy, and challenges faced when providing health care to patients from Hispanic backgrounds. The scope of this chapter includes the nature of interpretation, the different types of interpreters that can be used, the different ways in which they influence the health care process, and the Hispanic cultural attitudes and beliefs that health care providers must understand and allow for in order to be effective in their treatment of patients that adhere to them.

Chapter three details methods used to elicit research data. The chapter includes descriptions of a language needs assessment, employee training workshops, Spanish language proficiency exams, and patient satisfaction questionnaires that were used to gather data for analysis in this project. Chapter four presents the results of these research instruments, providing an analysis of the data.

Chapter five discusses implications from the data, reviewing the significance of the results and considering how these results should guide future training and investigation. That the quality of interpreting services in United States health facilities is less than ideal is no great revelation: this is one of the main themes explicated and reiterated in much of the literature discussed in this thesis. The intention in writing this thesis is not to point out the flaws in the system, but to provide additional perspective on the problem based on the unique situation of a particular group of health clinics, and to use this perspective to contribute to the larger discussion of how to improve the quality of health care for Spanish-speaking patients throughout the United States.

CHAPTER TWO

Literature Review

Communication Issues for Spanish-Speaking Patients in the US Health Care System

Language

One of the most conspicuous barriers to effective communication between Hispanic patients and non-Hispanic physicians is language. Glenn Flores reports that 18.7 percent of U.S. residents speak a language other than English at home, and this percentage has been steadily rising since 1980 ("Language Barriers" 229). In addition, many U.S. Hispanics do not speak English well, as shown by a Pew Hispanic Center report estimating English fluency of first-generation Hispanic immigrants (those born outside the U.S.) to be as low as 23%, although this level rises to 88% in the second generation (those born in the U.S. with at least one first-generation parent) (Hakimzadeh 4). This statistic is especially notable in light of the fact that in 2011, 46.7% of the foreign-born population (i.e. first-generation) was Hispanic. Also of note is the fact that the foreign-born population comprises 12.9% of the total population, which currently consists of about 309 million people. This means that within the category of first-generation Hispanics alone there are at least 14 million individuals—nearly 5% of the entire U.S. population—who are not fluent in English ("Selected Characteristics of the Native and Foreign-Born Populations").

Although the effects of this language barrier are not the same for those from different Hispanic cultures, the generalized complications for health care that result

from this language barrier are well documented. Pedro Poma highlights one result of the barrier in his essay "Hispanic Cultural Influences on Medical Practice:

> The language people use as children continues to be the language they use with family and friends, the language they use under stress or when exhausted, and the language they identify with happy situations. In emotional situations such as those involving their health, then, they can communicate much more easily with someone who understands their first language. (Poma 942-943)

Even when Spanish speakers expend time and energy to learn English as a second language, they are still at a disadvantage compared to native English speakers in their ability to effectively communicate with health care providers. Diamond et al. describe the potential consequences of this disadvantage, saying, "patients with LEP (limited English proficiency) may have decreased access to acute care and preventive services, decreased satisfaction with care, poor understanding of instructions or medications, longer hospital stays, and an increased risk of medical errors and misdiagnoses" ("Getting By" 256). Flores et al. posit additional consequences, saying that "LEP patients often defer needed medical care, have a higher risk of leaving the hospital against medical advice, are less likely to have a regular health care provider, and are more likely to miss follow-up appointments, to be nonadherent with medications, and to be in fair/poor health" ("Errors in Medical Interpretation" 6).

Communication problems do not arise only from limited technical knowledge of a language; some are caused by differences in conversational style. For example, Tate explains in a recent article that "In the United States, we are accustomed to direct, pointed conversation … For the Hispanic culture, being too direct and rapidly getting to the point is considered to be brash, uneducated, or even downright rude"

(Tate 215). Chong discusses finding a balance in volume, noting that, to Latinos, "a provider who speaks in a loud voice may be perceived as ill-tempered, impolite, or upset … on the other hand, a provider with a very soft voice may be perceived as lacking in personality" (Chong 98).

Davidhizar and Shearer illustrate the importance of respect in conversation with Hispanics. They write, "especially when initially addressing strangers or persons of authority … rather than disagree, some Hispanic individuals prefer to say nothing" (Davidhizar 507). In this case, a Hispanic may see the silence itself as indicative of disagreement, while a non-Hispanic may mistake it for passive agreement. Even more confusing for those who are unfamiliar with Hispanic cultures is the tendency of a Hispanic patient embarrassed by disagreement or lack of understanding to simply "nod so that the interaction is terminated quickly, not because of agreement or understanding" (Davidhizar 507). Further observation of this type of behavior is found in a study by Bender et al., who note that "a 'yea-saying' bias in Spanish-heritage respondents was significantly higher than in other respondents" (Bender 790).

Effectiveness of interpreters in overcoming the language barrier. Many see the use of interpreters as an ideal solution to the communication problem between Hispanic patients and their physicians, as illustrated by the fact that interpretive services are required by law for those who need them. However, the availability of professionally trained interpreters is not universal, and even when available, the use of an intermediary of any kind is less than ideal from a communicative standpoint, as shown by Davidson, who says that "even same-language medical

discourse may itself be viewed as a form of cross-cultural discourse" adding that "patients who do not share a common language with their provider have an added 'language barrier' that further impedes communication" (Davidson 171-172). When information is relayed through a third party, the content of the message is inevitably filtered through that person's worldview and experiences, which invites the potential for distortion, no matter how faithful the attempt at accuracy. Poma observes:

> No two observers of the same phenomenon will report it identically … thus, the individual translator's beliefs (moral, ethical, or otherwise) influence what he hears and subsequently tells the patient. Occasionally, the information provided to the patient is distorted, even though there was no deliberate attempt to change the facts. (Poma 944)

Nevertheless, problems created by the use of interpreters are not merely communicative. The use of interpreters can also result in subtle and systemic barriers between Spanish-speaking patients and institutions of health care. In a recent study of hospital interpreters, Davidson describes the *de facto* function of interpreters beyond their communicative roles, saying:

> In addition to reformulating the words and phrases uttered by conversational participants, professional hospital interpreters are engaged in the mediation of the social, personal, and institutional expectations and goals of participants in the medical interview. They also participate in the construction of an acceptable outcome for that interview based in their understanding of the requirements of institutional medical practice. (Davidson 170)

Not only do institutional interpreters inevitably color the information that they are relaying, their role in the health care system actually invites them to be selective in what information they choose to relay at all. In fact, the author observed in the study that "for over half of the questions asked [by the patient], they were answered

by the interpreter herself, and the physician was never even notified that a question had been asked and subsequently answered" (Davidson 175).

Davidson concludes that, rather than acting as neutral agents or advocates for the patient, the interpreters act "in tacit coordination with the physician as an additional gatekeeper within the medical interview;" as one extra judge that the patient must convince "that their concerns are important enough to be addressed and resolved by the means at the institution's disposal" (Davidson 177). He discusses the outcome of this cooperatively restrictive partnership between the interpreter and the physician on Spanish-speaking patients, saying:

> The interpreter often protects the physician from challenge and denies the patient the opportunity to interpret for herself the physician's understanding of her complaints. An added layer of institutional judgment is thus created, and this in turn creates additional problems for an already underserved patient population; because interpreted patients are unable to speak for themselves, for example, they are often seen as 'passive' and 'non-compliant' by physicians (a self-fulfilling prophecy), with significant consequences for how care is delivered, and for how their role within the institutionally-based state is defined. (Davidson 173)

The result of this closed system is that Spanish-speaking patients are being robbed of input and control over their own health care, which is already limited because they, "by definition, cannot on their own work to change the medical record in English" (Davidson 171).

At this point, it becomes necessary to ask how this state of affairs has been precipitated. Davidson points to the systemic cause of time constraints rather than interpreters themselves as the root of the problem. He writes, "physicians are under enormous economic pressure to see as many patients as possible in as short a time as possible. Consequently, physicians expected interpreters to edit heavily what

immigrant patients were saying" (Davidson 171). According to Davidson, physicians are not unaware that interpreters function as institutional gatekeepers; rather, they willingly reinforce and are complicit in this behavior. He more specifically pinpoints the systemic nature of this problem when he says of professional interpreters that they "work in tandem with physicians to 'keep interviews moving' and, consequently, to move non-English speaking patients quickly out the door" (Davidson 170).

Davidson views the interpreters in his study as essential cogs in a machine that intrinsically shuts out Spanish-speaking patients, as evidenced by his claims that "the actions of the interpreters … are not those of untrained incompetents, but rather [of] agents of a state that has very little time for, and very few resources allocated to the care of, its most recent additions" (Davidson 177). He clarifies, however, that he does not fault the interpreters for the system since "The problem is not that the interpreters … are acting unethically, but rather that they are working within the system of ethics as defined by the institution of the hospital clinic, not by the ethical system of the patients who are seeking services from that institution" (Davidson 177).

Despite the inherent issues with filtering information through an interpreter, quality interpretation service is still valuable in a health care setting; McDowell et al. claim that "The use of professional interpreters within the health care context is associated with better understanding, improved health care outcomes, decreased medical costs, and increased levels of patient knowledge and satisfaction" (McDowell 144). Using any kind of interpreter may never be as ideal as using a

physician who can fluently speak the native language of the patient, but having a qualified interpreter available is nevertheless a superior option to having no interpreter.

One option that that is often employed as a compromise between these two alternatives is the use of *ad hoc* interpreters. *Ad hoc* generally refers to a solution that is makeshift, applicable only to the narrow parameters of the problem in response to which it is devised, and not extendable to any broader category of issues. Diamond et al. offer a concise description of what *ad hoc* interpreters are and how they differ from professionally trained interpreters in a recent study on the use of Spanish language skills by physicians and nurses:

> A professional interpreter can be defined as someone 'with appropriate training and experience who is able to interpret with consistency and accuracy and who adheres to a code of professional ethics' and an ad-hoc interpreter as 'an untrained person who is called upon to interpret,' which for the purposes of this study included bilingual family or friends of patients, nurses, or clerks. ("The Use of Spanish Language Skills" 118)

The authors report that physicians and nurses with low Spanish proficiency—who comprised 81% of the study sample—were "at least as likely to work with ad-hoc interpreters as [with] professional interpreters" ("The Use of Spanish Language Skills" 120).

Although *ad hoc* interpreters are a common fallback in the absence of professionally trained interpreters, their use is associated with adverse consequences. In one recent evaluation of interpreting errors, Flores et al. report that "errors committed by *ad hoc* interpreters were significantly more likely to be errors of potential clinical consequence than those committed by hospital interpreters (77% vs. 53%)" ("Errors in Medical Interpretation" 6). Examples of

errors of potential clinical consequence observed in this study included omitting questions about drug allergies, omitting instructions on the administration of antibiotics and rehydration fluids, adding that hydrocortisone cream must be applied to the entire body instead of only to a facial rash, instructing a mother not to answer personal questions, omitting that a child was already swabbed for a stool culture, and instructing a mother to put amoxicillin in both ears for treatment of otitis media ("Errors in Medical Interpretation" 6). In addition to being associated with more errors of potential clinical consequence, the use of *ad hoc* interpreters detracts from the employees' ability to focus on their other tasks, according to Jacobs et al., who claim that "the use of *ad hoc* interpreting by employees has an opportunity cost for institutions in the form of staff time lost to interpreting" (Jacobs 306).

Regardless of whether or not interpreters are professionally trained, patients are not the only group affected by their use. Interpreters often find themselves subject to high levels of stress, particularly if they have other jobs within an organization. McDowell et al. say of dual-role interpreters that they experience "the additional burden of multiple responsibilities within the health care system, which contributed to their feeling of 'being stretched' to beyond their personal capacity" (McDowell 142). According to McDowell, the role of the interpreter can be conceptualized as a continuum falling between two endpoints: the passive, neutral language conduit and the active cross-cultural diplomat. The function of the passive "conduit" model of the interpreter is simply to relay information as literally as possible without any interference, while the function of the active "diplomat" model

of the interpreter is to evaluate information for meaning, then relay that meaning to the recipient in culturally appropriate terms. In reality, the role of the interpreter incorporates aspects of both of these models (McDowell 137). Typically, the health care provider expects the interpreter to conform more to the conduit model, while the patient expects the interpreter to conform more to the diplomat model, resulting in many interpreters reporting that they feel mentally and emotionally strained between competing demands, whether they were dual-role or not (McDowell 143-145).

Culture

Although the language barrier is arguably the most apparent obstacle to communication between Spanish-speaking patients and English-speaking physicians, culture plays a subtler but significant role in their communicative divide. Davidson summarizes this aspect of the divide when he says, "recently immigrated patients for and with whom interpreters communicate in modern medical settings are required to negotiate, not only words, but worlds" (Davidson 172). Language may be the primary avenue for perceived failures in communication, but differences in background and heritage are also difficult to overcome.

One example of a cultural value that is viewed very differently by Hispanics and non-Hispanics is *respeto*, or respect. Chong illustrates this difference when she says of mainstream United States culture that it "derives respect from success … for Latinos, respect is a consequence of age, gender, and/or hierarchy" (Chong 22). Whereas non-Hispanics in many cases treat respect as a reward to be earned, for Hispanics, "respect is a sense of admiration granted because of an intrinsic quality of

the individual regardless of social, political, or financial standing" (Chong 26). Since Hispanics take such an intrinsic view of respect, it is only natural that it should become more integral to healthy interpersonal relationships in Hispanic cultures. This essentiality of respect can pose difficulties for someone who doesn't understand how fundamental it is to Hispanics, which is why Chong warns, "Latinos need to perceive respect in their relationships, and a lack of this perception may be interpreted as an *absence* of respect" (Chong 26).

Another way that Hispanics and non-Hispanics differ culturally is in their views on the nature of identity. Hofstede et al. discuss the development of identity in different cultures, defining the concept in any given culture according to a spectrum ranging from individualist to collectivist. The authors claim that "collectivism can be seen as an adaptation to poverty and limited resources, and individualism, to wealth and ample resources" (Hofstede 35). Since most Latino countries in the Western Hemisphere have historically been poorer than the United States, it is to be expected that their cultures would be more collectivist than that of the United States, according to the reasoning of the authors. This is unequivocally true according to Chong, who writes that Hispanic cultures are "permeated by collectivism" (Chong 23). The clearest manifestation of this identity formation in Hispanic cultures is a specific form of collectivism known as *familismo,* in which the collectivist unit is the family (Antshel 439).

The views of many Hispanic cultures on family tend to be very different from those of non-Hispanics. In the United States, a household typically consists of one nuclear family, whereas in many Hispanic cultures, it is more common for the entire

extended family to live together under one roof, or at least for related nuclear families to live close to each other so that they can interact with each other frequently. This type of behavior stems from a fundamental difference between the two cultures as described by Chong, who writes, "mainstream [United States] culture focuses on personal, social, and financial achievement; Latino culture seeks harmonious relationships and cooperation at almost any cost" (Chong 22). This difference leads to a much less individualistic type of culture in Latino countries than in those in which the importance of the extended family is de-emphasized relative to that of the nuclear family, as is typically the case in the United States. Antshel even goes so far as to say of Hispanic culture that "the family as a group has precedence over individual interests." Because of this more collectivist perspective on identity, Hispanics usually place more importance on the role of family in everyday life than do non-Hispanics, and often involve family members in healthcare decisions (Antshel 439).

The emphasis on *familismo* in Hispanic cultures can have far-reaching effects when it intersects with the health care system. As discussed above, availability is often limited to *ad hoc* interpreters, which in many cases means that one of the patient's family members is suddenly thrust into the role of informational and cultural filter. Davidson points out that when this happens, "family dynamics (of shame, respect, and taboo) are inserted into the structure of the medical interview" (Davidson 172). These aspects of the familial relationship, while not necessarily wrong or unhealthy, are not variables that facilitate full and completely candid exposition of the facts that a physician might need to know in order to make an

effective diagnosis.

In the case of family members who serve as interpreters, the slight shift in balance of power away from the institution and towards the patient (relative to situations in which professional interpreters employed by the institution are used) has interesting ramifications for the roles of patient, physician, and interpreter. As previously shown, interpreters who are employed by an institution naturally find themselves in the role of institutional gatekeeper, acting as an additional checkpoint to which Spanish-speaking patients must be attuned in order to have any chance at influencing their health care experience. Conversely then, interpreters that have an established relationship with the patient act as gatekeepers too, controlling how much of the patient's history and current medical state are transmitted to the physician. Davidson confirms this reciprocal aspect of his previously examined argument, saying:

> Family members who interpret are often assumed, in practice, to know what their familiar is thinking or feeling without even asking the patient in question; likewise … hospital-based interpreters often step in and answer questions before they ever reach the physician. (Davidson 172)

In other words, both types of interpreters find themselves in the role of pre-diagnostician without appropriate training: the latter by virtue of their supposed knowledge of what the physician is thinking, and the former by virtue of their supposed knowledge of what the patient is thinking.

Linked to *familismo* is the Hispanic concept of *machismo,* or male dominance. Antshel describes this concept by saying that "Latino families are often patriarchal, with males fulfilling a strong authoritarian role" (Antshel 439). However, the patriarchal familial structure does not necessarily translate into authoritarian

behavior by an older male relative of a patient. Hispanic fathers and other male authority figures within the family may actually be averse to playing a direct role in the medical treatment of a younger relative because health care—especially that of a child—is traditionally seen as the province of the women in the family (Antshel 440). Therefore, a Hispanic father may be reluctant to actively participate or even be present during a clinic visit concerning the health of his child, not because he is uncaring, but because he fears such behavior doesn't exhibit *machismo* and detracts from his role as a good father.

Further complicating the issue, when an important decision needs to be made, the mother of the child may feel that she is expected to defer to her husband, father, or even her son if he is old enough to be considered an adult. If the man is not present, treatment may be undesirably delayed. Some physicians may attempt to resolve this problem by pressing the woman for a decision on the spot, but Davidhizar warns, "when instructions are given to the female, agreement may not be synonymous with compliance" (Davidhizar 508). It is therefore in the best interest of clear communication and a healthy patient-physician relationship for the health care provider to assess the family dynamic of each patient and proceed accordingly with an appropriate level of sensitivity to the issue of *machismo*.

Although it may seem sexist to enable this type of patriarchal behavior, Hispanics are unlikely to change deeply ingrained cultural patterns based on the urging of an authority figure whose culture is foreign. A likely response to culturally disparate advice might be to simply ignore it and possibly even abandon contact with the provider in favor of a more traditional treatment solution. Antshel and

Davidhizar both suggest that in some cases it is in the best interest of the patient to acquiesce to the established familial power structure for the sake of improved adherence to the treatment plan.

Conclusion

The concerns that are addressed in the literature that has been examined above do not have easy answers. The investigation described in the following chapters is not an attempt to resolve every single one of these problems. Rather, it seeks to contribute perspective on the first steps that must be taken in order improve the complex and systemic issues surrounding the field of Spanish language interpretation.

CHAPTER THREE

Methods

This project uses four different instruments to measure the knowledge and opinions of patients and employees at the Family Health Center (FHC): (1) a language needs assessment, (2) employee evaluations of workshops for interpreters and clinicians, (3) two Spanish language proficiency exams, and (4) patient satisfaction questionnaires. The data collected from these instruments were encoded into standardized formats and graphically analyzed using Microsoft Excel and Microsoft Word.

The origin of these instruments and the reasons for their implementation are part of a larger research project currently being conducted by Karol Hardin, an Assistant Professor of Spanish at Baylor University. Dr. Hardin is a linguist with 19 years of experience in medical interpreting in Latin America, including four years volunteering with her physician husband for Hospital Vozandes del Oriente in Shell, Ecuador. Currently, Dr. Hardin coordinates six sections per year of a class entitled "Intermediate Spanish for Health Care Professionals." She has published a number of articles pertaining to linguistics and Spanish for health care.

Hardin's research began in January 2013 with IRB approval, a research leave, and a grant from Baylor University's Modern Languages and Cultures Small Grant program. The project was entitled "Assessing and Improving Communication in Spanish-speaking Patient Interactions with Medical Personnel at the Family Health

Center-Waco, Texas." During this semester of research, Dr. Hardin and her research assistants made video recordings of 95 Spanish-speaking patient interactions at the Family Health Center (FHC) clinic system in Waco, TX. The recordings were subsequently transcribed and are currently being entered in a large database for linguistic analysis. Data from these recordings and answers to a summary questionnaire by the three research assistants suggested that additional training was needed for both interpreters and physicians.

This thesis is an extension of Hardin's prior research. The Undergraduate Research and Scholarly Achievement Small Grant program (URSA) provided funding for the training and associated research described in this study. This second project describes an analysis of education pertaining to language and culture for health care personnel both at the local and national level. The project builds on existing research to ensure quality health care for Spanish-speaking residents of McLennan County by further equipping the Family Health Center (FHC) clinicians and interpreters with more effective cross-cultural communication skills.

Language Needs Assessment

The Language Needs Assessment was offered to all employees of the FHC clinic system in order to obtain their feedback regarding perceived needs in cross-cultural communication issues that they encountered with Spanish-speaking patients. It consisted of a twelve-question survey designed to address employees' perception of their competency when interacting with Hispanic patients; linguistic and cultural skills they desired; the clinic's effectiveness in dealing with this population; and suggested changes in the clinic's operation. The assessment was

informed by a survey published by Lepetit and Cichocki in *The Modern Language Journal* and tailored according to informal interviews conducted with FHC patients and staff. Hardin used the results of this assessment to prepare training workshops that she conducted in February and March 2014.

The questionnaire was posted on the AdobeForms website for two months in March and April 2013. The survey was optional, data were kept confidential, and respondents were required to sign a consent form before completion. A total of 143 employees of the FHC clinic system completed the questionnaire, which contained Likert scale, ranking, multiple-choice, and free-response questions. The respondents included attending physicians, mid-level clinicians, residents, nursing, and office staff.

Interpreter Workshop Evaluations

Based on results from the needs assessment and video research, in January 2014, Hardin conducted an intervention for interpreters employed by the FHC clinic system. This workshop was specifically designed to address repeated instances of miscommunication and misunderstanding that had been observed in the video recordings from the previous year, as well as issues indicated by the needs assessment. The clinic director requested employees serving as interpreters (whose schedules permitted) to attend the workshops. Interpreters who currently serve the FHC system are lay interpreters; that is, they are self-identified bilingual Spanish-English speakers who offer to interpret for Spanish-speaking patients. The clinic directors stated that they are unaware of any interpreters in the system who are licensed or certified, and few, if any, had training in interpreting. Instead,

interpreters had on-the-job experience, learning through trial and error or in previous jobs elsewhere. Furthermore, the interpreters' proficiency levels in Spanish and English had not been tested.

The interpreter training included two groups that attended two 90-minute sessions. The first group consisted of 25 interpreters who attended one session on January 21st and another on January 23rd, 2014. The first group was primarily comprised of both registered nurses and licensed vocational nurses. The second group consisted of 40 interpreters who attended a session on January 28th and another on January 30th. This group was mostly comprised of non-nursing staff such as receptionists, clerks, and other office employees, who were bilingual and often interpreted in some way in the clinic. A few bilingual nurses also attended the second session since they were unable to attend the first. Joining Hardin in conducting the workshop was a certified medical interpreter-trainer who was a former employee of both the Area Health Education Center (AHEC) and the FHC clinic system, where she formerly worked as an interpreter. The training addressed professionalism and ethics as well as several aspects of the interpreting process, including appropriate vocabulary, etiquette, procedure, and register. It also addressed issues that were observed in the video research at FHC.

First Session

The first session began with a skit demonstrating how a physician might feel with an inadequate interpreter as well as what not to do in an interpreted setting. Next, the instructors explained the difference between translators (who render written information from the source language into the target language in a written

format) and interpreters (who render spoken information from the source language into the target language in a spoken format), a distinction that is commonly misunderstood. They also explained the most basic role of the interpreter: to facilitate good communication, which occurs when the message that is sent by one party is the same as the message that is received by the other party.

The instructors then discussed the different modes of interpretation. The first mode is simultaneous, in which the interpreter renders information from the source language into the target language instantaneously, both speaking and listening at the same time. This mode is efficient, but risks confusing the patient via the interference created by two different people speaking two different languages concurrently in the same room. The second mode is consecutive, in which the interpreter listens to the information in the source language, then renders it into the target language after the speaker has finished speaking. This mode takes more time, but holds much less risk of information being lost or misunderstood. The third mode is summary, in which the interpreter listens to the information in the source language and then presents a summary of the information in the target language. This mode takes the least amount of time, but holds high potential for information being omitted. The instructors therefore stressed use of the consecutive mode so that information is understood clearly and completely.

Next, the workshop facilitators explained four specific roles of interpreters: conduit, clarifier, cultural broker, and advocate. In the conduit role, the interpreter renders exactly what has been said in the source language without any editing whatsoever. In the clarifier role, the interpreter explains the meanings of terms

whose linguistic equivalent either does not exist or will not be understood by the listener. In the cultural broker role, the interpreter provides the cultural framework required to understand the information being interpreted. In the advocate role, the interpreter takes action on behalf of the patient outside of the bounds of the interpreted interview. This role is usually filled when patients' needs are not being met due to systemic barriers. The interpreter-trainer advocated use of the conduit role in the FHC setting.

The instructors then detailed proper procedures for any interpreted interview. Interpreters should introduce themselves to the patient, assess the linguistic register, and address patients' comfort needs (whether they are physical or cultural). Interpreters should also assure patients that all information communicated throughout the interview will be accurate, complete, and confidential. Furthermore, interpreters should speak in first or second person throughout the interview, only switching to third person for clarification (e.g. if a miscommunication becomes apparent to the interpreter). Interpreters were encouraged to position themselves appropriately, standing beside or as close as possible to the physician so that the patient can focus on the doctor and yet observe the interpreter simultaneously. The instructors gave this directive in order to abrogate a repeated problem observed in the video recordings; when interpreters didn't position themselves near the physician, the patient was physically forced to choose which person to look at, and this distraction inhibited the flow of the interview. Interpreters were also trained to be aware of their nonverbal communication, such as posture, eye contact, and gestures. Before ending the

interview, interpreters were taught to thank both the patient and the physician and explicitly ask whether patients understood everything fully or if they had any concerns.

The trainers then discussed the importance of using appropriate register, which is concerned with the degree of status and familiarity that the physician (and therefore interpreter) have with the patient. Register also reflects the level of formality that is appropriate for the setting of the conversation. For example, three different levels of formality that would collectively cover most conversational situations are: formal, in which the conversants might address each other by their formal titles (Mr., Mrs., Dr., *Don/Doña*, etc.); informal, in which the conversants might address each other by their given names or the informal pronoun *tú*; and intimate, in which the conversants might address each other using nicknames, *vos* (very informal "you") or other titles of endearment. Although the majority of patient interviews call for a formal tone, informality may occasionally be appropriate, for example, with children. The instructors stressed carefully gauging the appropriate level of formality when speaking to a patient, since using the wrong level may cause offense.

Another aspect of register, degree of familiarity, is primarily concerned with the level of vocabulary. For instance, one could use the term “myocardial infarction” when speaking to a physician, “cardiac arrest” when speaking to a highly educated patient, and “heart attack” when speaking to a patient with a lower level of education, even though all these terms essentially mean the same thing. Adapting to

the patient's register is vital if the interpreter is to be successful in communicating effectively, establishing rapport, and helping the patient to feel at ease.

Near the end of the first session, participants were separated into groups of four and engaged in interactive scenarios designed to help them put into practice the skills and strategies discussed in the presentation. Each group scenario was in the form of a simulated exchange using the assumed roles of patient, physician, interpreter, and observer. To conclude the first session and reinforce concepts, the instructors brought three volunteers onstage to role-play two sample scenarios, one set in a pharmacy and the other in an outpatient clinic.

During the presentation and activities for the first session, assistants handed out three medical vocabulary worksheets to each participant. The worksheets contained a list of terms and phrases in English, with space for their Spanish equivalents. The vocabulary emphasized basic anatomy, male and female reproductive systems, and descriptive adjectives for pain and other sensations. Participants were asked to complete the worksheets as "homework" to prepare for the second session.

Second Session

The second interpreter session began with a brief review of appropriate register, followed by an examination of common mistakes and how to avoid them. The instructors emphasized correct pronunciation and precision when translating numbers; for example, specifying that a patient is at 22 weeks gestation rather than saying "about 20 weeks" or "a little over 20 weeks." The instructors also stressed accurate terminology rather than slang and common false cognates. For example,

when interpreting the English word "examine," interpreters were taught to say *examinar* rather than the slang term *checar* (adapted from the English word "to check"). As another example, when interpreting the English word "constipation," interpreters learned to use the Spanish equivalent *estreñimiento* rather than the false cognate *constipación.*

Next, an instructor read several realistic conversations between a patient, physician, and interpreter. These exchanges were presented in both English and Spanish, and then the instructors and participants discussed mistakes that had been made and how to avoid such mistakes in their own work. The exchanges depicted errors of omission, addition, embellishing, and misinformation, the last of which can occur either unintentionally or to accelerate communication by summarizing. The instructors concluded this portion of the workshop with an interpreting exercise where they read statements in English and participants interpreted into Spanish, trying to avoid common errors that had just been addressed.

Finally, the instructors lead participants through a list of tips and strategies for being more efficient and accurate as an interpreter. These strategies included being aware of personal limitations, counting separate ideas on one's fingers, writing down numbers as memory aids, being willing to ask the speaker to pause when necessary, and echoing key phrases. The instructors also recommended strategies for skill building outside of the exam room. Some ideas included practicing memory and concentration, note-taking, keeping a file of new vocabulary, taping oneself for later critique, reading aloud in both languages, and becoming

more familiar with names, places, and phrases that are likely to arise in patient interviews.

The second session concluded with an open-ended question and answer period. Participants in both groups took advantage of this period, asking questions for the full duration of the time available. They asked specific questions, clarifying finer points of the topics discussed, and demonstrating enthusiasm and interest in the material that had been presented. Participants also received a list of useful resources and the opportunity to take a Spanish language proficiency exam, which is discussed in the next session. Before participants left, they completed a short, anonymous evaluation of the workshop, and the evaluations were subsequently collected for analysis.

Physician Training Workshop

A separate workshop, the Physician Training Workshop, was offered as an optional opportunity for attending physicians, residents, and mid-levels at the main FHC clinic site to obtain training on how to effectively work with interpreters. The announcement for the workshop read as follows:

> **Provider Workshop: Working Efficiently with Interpreted Patient Interactions.**
>
> Do you want to work more effectively with Spanish interpreters?
> Do you ever feel as though your message is "lost in translation?"
> Do you have enough Spanish to "get by" when communicating with patients?
>
> Results from the online Language Needs Assessment and 95 video-recorded interviews with Spanish-speaking patients at FHC suggest that communication with Spanish-speaking patients can be improved.

> This brief training workshop for physicians and NPs/PAs will focus on improving interactions with Spanish-speaking patients and working effectively with interpreters. The workshop will be led by Dr. Karol Hardin.
>
> One hour of training could make a difference in the way you provide care for almost 40% of your patients!

During the prior semester of research, many clinicians noted that they had never been trained to appropriately work with interpreters. These informal comments as well as summary data from the video research and language needs assessment led to the development of this intervention. Hardin conducted the intervention on March 25, 2014. The one-hour session included a self-test on elements of Latino culture, a skit demonstrating common mistakes made in interpreting situations, a presentation on the appropriate use of interpreters, small group role play activities, a question-and-answer period, and several handouts.

The self-test was distributed before the workshop opened; participants were allowed a short period of unstructured time to complete it before the presentation portion of the workshop began. It addressed beliefs and behaviors commonly exhibited in Hispanic cultures, such as gender roles and traditions associated with pregnancy and birth. It was intended to provide participants with an objective benchmark against which they could gauge their knowledge of Hispanic cultural attitudes concerning health care. The test included ten open-ended association questions, ten true/false statements, and fifteen traditional "health conditions" that participants were instructed to describe. The answers were distributed once participants had been allowed sufficient time to complete all of the questions.

The presentation portion of the workshop began with a skit that depicted an encounter where the interpreter incompletely and inaccurately rendered information between English and Tok Pisin (a creole language spoken in Papua New Guinea), and in which both the physician and interpreter were rude and dismissive towards the patient. The purpose of the skit was to provide participants with visual examples of how easily mistakes can be made in an interpreted situation and how such mistakes can affect the patient-physician relationship. Following the skit, the instructor elicited mistakes that had occurred. The participants were observant and perceptive, pointing out nearly all of the errors that occurred in the skit.

Next, the instructor presented a PowerPoint presentation on working with interpreters. She first described appropriate positioning, greeting, and leave-taking. For positioning, interpreters should position themselves as close to the physician as is reasonably possible. She then discussed greetings and the cultural value of *personalismo* in order to build rapport. Greetings should consist of appropriate introductions, shaking hands, and small talk. Similarly, leave-takings should consist of a verbal valediction, shaking hands, and sending greetings to the patient's family members, if the physician knows them.

Next, the instructor discussed eye contact and active listening skills; the physician should look at the patient throughout the interview, not at the interpreter. Participants were also told to avoid excessive eye contact with their computers, because the video data showed that physicians made more eye contact with their computers than with either the interpreter or the patient. When they do need to look at their computers, physicians should keep the distraction brief and explain

what they are doing on the computer. Physicians should also actively listen to the patient even if they do not understand the language in which the patient is speaking. This should be demonstrated through nodding, affirming vocalizations, and other gestures that will convey to patients that the physician is paying attention to them. This type of active listening in an interpreting situation is known as back channeling.

Next, the instructor discussed the importance of avoiding reported speech ("tell him that…," "is she having…," "he said that…," etc.). Instead, physicians were instructed to use first and second person address rather than referring to the patient in the third person. When all three parties in an interpreted situation use first and second person address, communication is both clearer and more efficient than with reported speech. This pronoun use demonstrates advantages of the interpreter's "conduit" role.

The workshop facilitator then discussed the need to break information into small "chunks" of one or two sentences, giving interpreters time to fully understand and accurately render everything that is said. Longer intervals without pauses increase the potential for errors of omission and paraphrasing. One participant raised the question of how to know if his intervals were too long without breaking the flow of the interview to discuss this with the interpreter. At this point, Hardin noted that the interpreters had been instructed on how to appropriately interrupt when they needed to interpret. This reciprocal training illustrates the complementary nature of the interpreter and clinician workshops.

Finally, the instructor discussed the importance of meta-discourse and checking for understanding. Meta-discourse refers to communication beyond the interview itself, for example, discussing communicative preferences with the interpreter or encouraging feedback after the interview is over. Such discourse makes interpreting a collaborative effort between the physician and the interpreter. Physicians should also check to make sure the patient has understood everything that has been discussed in the interview. For example, the physician might ask the patient to summarize in his or her own words the instructions that have just been given. Participants were warned that a simple nod or "sí" does not constitute a satisfactory confirmation of understanding, often due to cultural issues.

After the presentation, participants separated into groups of three for role-play activities. The seven role-play scenarios, each with physician, patient, and interpreter, depicted some common interpreting issues mentioned in the presentation.

To conclude the workshop, Hardin conducted a brief question-and-answer session. Participants took full advantage of this time, asking questions for the duration of the available time and demonstrating interest in and engagement with the information presented. During the question-and-answer session, assistants distributed two handouts: an information packet and an evaluation form. Participants were given the information packet to take home. It contained eight pages of resources and information for working with Hispanic patients. Participants were asked to fill out evaluation forms, which were subsequently collected for

analysis. Finally, participants were informed that they could take a Spanish language proficiency exam, which is discussed in the next section.

Spanish Language Proficiency Exams

It was apparent from the video recordings and Language Needs Assessment that attending physicians, residents, and mid-level clinicians wanted to know more Spanish. It was also apparent that some clinicians were "getting by" with their current Spanish proficiency level, which was inadequate for communication in this context. In order to address these concerns, Hardin determined that it might be beneficial to offer exams to assess Spanish language proficiency. Unfortunately, the cost of these exams (typically at least $100 per person) was prohibitive for the FHC clinic system. Accordingly, the grant for this project included funds to cover 15 Spanish language proficiency exams.

The exams were administered and graded by ALTA Language Services, and were provided in two different versions: the Qualified Bilingual Staff (QBS) Assessment and the Clinician Cultural and Linguistic Assessment (CCLA). Kaiser Permanente, a respected healthcare consortium based in Oakland, CA, developed both exams. Children's Mercy Hospitals and Clinics in Kansas City, Missouri currently uses the CCLA exam in its CHICOS training program for pediatric residents. Reuland et al. also used ALTA's services in their longitudinal study of a medical Spanish program at the University of North Carolina. The exams are each administered via telephone, with all prompts pre-recorded to ensure that all test-takers have an identical testing experience.

In order to determine which exams should be offered to employees of the FHC system, three sample exams were administered and their effectiveness evaluated. A bilingual physician employed by the FHC, took the sample CCLA exam, which was determined to be an appropriate tool for clinicians. An interpreter employed by the FHC took a sample Medical Spanish-English Consecutive Interpretation Test, which took the interpreter only ten minutes to complete, and was determined to be too simple to provide useful feedback to interpreters. Consequently, a certified interpreter-trainer not employed by the FHC, took a sample QBS exam, which was determined to be more appropriate for the research goals of assessing interpretation skill in a medical setting.

According to ALTA's website, the QBS exam is designed to assess staff members' ability to directly communicate with target language-speaking patients in a medical setting, and, secondarily, to measure interpreting skills for a range of medical terminology and tasks. It is divided into five sections: conversational/social, customer service, nursing diagnosis and instructions, medical terminology, and sight translation. The conversational/social section is an introduction and warm-up exercise intended to help put the candidates at ease with the recording system and to allow them to practice their target language briefly prior to the formal portion of the exam. The customer service section contains 11 dialogues that the candidate must interpret from English into the target language or from the target language into English. The nursing diagnosis and instructions section contains a dialogue between a nurse and a patient that the candidate must interpret in both English and the target language. The medical terminology section

assesses a candidate's knowledge of medical terminology in both English and the target language. The sight translation section assesses the candidate's ability to perform a simple sight translation.

The CCLA exam is designed to assess physicians' ability to communicate directly with target language-speaking patients in a primary care medical setting in a linguistically and culturally sensitive manner without the use of an interpreter. It is divided into three sections: introduction and general instructions, sociocultural competence, and symptoms, diagnoses, and treatment. The introduction and general instructions section consists of a warm-up exercise intended to help put the candidates at ease with the system and to allow them to practice their target language briefly prior to the formal portion of the exam. The sociocultural competence section assesses general medical discourse, terminology, and concepts. In addition, this section is particularly designed to elicit language samples that reflect a candidate's sociocultural competence. This tests the physician's ability to change registers to suit the age, gender, and educational background of the patient. It also tests the physician's ability to understand the culturally appropriate language required in certain medical settings. It is comprised of four pre-recorded scenarios, each of which represents a different medical domain and various sociocultural tasks. The symptoms, diagnoses, and treatment section is designed to elicit language samples that represent the range of doctor/patient interaction from initial presentation of symptoms through diagnosis and treatment. It is divided into two pre-recorded scenarios, each addressing a different medical domain.

Both exams are scored using objective scoring units and a subjective assessment protocol. The objective units represent significant words, phrases, and clauses that are found in and critical to staff/patient or doctor/patient communication. These include specialized medical terminology, register variation, rhetorical features, general vocabulary, grammatical structures, and appropriate sociocultural discourse. Those taking the QBS exam are also assessed in the subjective scoring categories of "pronunciation," "grammar," "conduit role," "conveying the meaning," and "fluidity in language transition." Those taking the CCLA exam are assessed in the subjective scoring categories of "fluency," "pronunciation," "customer service," and "cultural proficiency." The subjective scoring categories are assigned one of four grades: "novice proficiency," "approaching proficiency," "proficient," or "superior proficiency." A prescribed percentage of objective scoring units must be rendered correctly in each section of the exam. While those taking the QBS exam must also achieve an acceptable performance level on the subjective scoring scale in order to obtain a passing score, the subjective assessment on the CCLA exam serves only to give candidates recommendations for improvement.

At the completion of the interpreter workshops and physician workshop, participants were made aware of the opportunity to sign up for the QBS exam and the CCLA exam, respectively, and were given instructions on how to do so. Part of the reason for offering these exams was to encourage interpreters to consider taking an official certification exam and to inform them on what areas they needed to improve their skills in order to become officially certified. Also, if the exams were

seen to be helpful, the clinic might benefit by developing its own exam to help interpreters evaluate themselves. Eleven interpreters and four physicians sent written requests to take the exams. The exams were administered during March and April of 2014, and all results were kept anonymous.

Patient Satisfaction Questionnaire

An optional patient satisfaction questionnaire was made available to patients of the Family Health Center as they checked out at the end of each clinic visit. The survey was an existing form already in use three to four times each year at the clinic; however, this survey included two additional questions regarding interpreters, and was first made available during September and October, 2013. Due to the low literacy level of some patients, the survey uses a five-point Likert scale with emoticons and simple language in both English and Spanish. The two interpreter-related questions asked (1) whether the interpreter translated everything the patient said and (2) whether the interpreter appropriately translated what the doctor said.

The same survey administered before the interventions is to be administered again in April 2014 after the interventions (and after the date of writing of this thesis). The results of the pre- and post-intervention surveys will be compared to determine if the interventions had any measurable effect on patient satisfaction. It is true that factors other than the interventions also affect the results of these surveys, but the results nevertheless will provide additional data that can be analyzed and used to guide the course of future training. If the results are positive, they will provide additional support for the efficacy of interpreter and physician

training at the FHC. In addition, summary results will be incorporated into Hardin's ongoing research.

The language needs assessment, workshop evaluations, language proficiency exams, and patient satisfaction questionnaires discussed in this chapter are all part of a larger research initiative on cross-cultural communication at the FHC clinic system. Their purpose is to provide summary data to the FHC so that they can locally address communication issues with Spanish speakers and to inform the researchers regarding the most appropriate steps to improve the quality of healthcare provided. Results from the data are presented in the next chapter.

CHAPTER FOUR

Results

Language Needs Assessment

The Language Needs Assessment was an optional questionnaire offered to all employees of the Family Health Center clinic system in March 2013. It was created to further examine the issues related to interpreting in Hardin's previous research project. Hardin additionally hoped to apply some of the results in designing medical Spanish curricula at Baylor University. The survey was designed to address employees' perceptions of their own competency when interacting with Hispanic patients, the clinic's effectiveness in dealing with this population, and any suggested changes to more appropriately serve Spanish-speaking patients.

Closed-Response Questions

Identifying information. Questions 1, 2, and 3 asked respondents to indicate their gender, job title, and whether or not they worked as an interpreter, respectively. The results of these questions are graphically represented below.

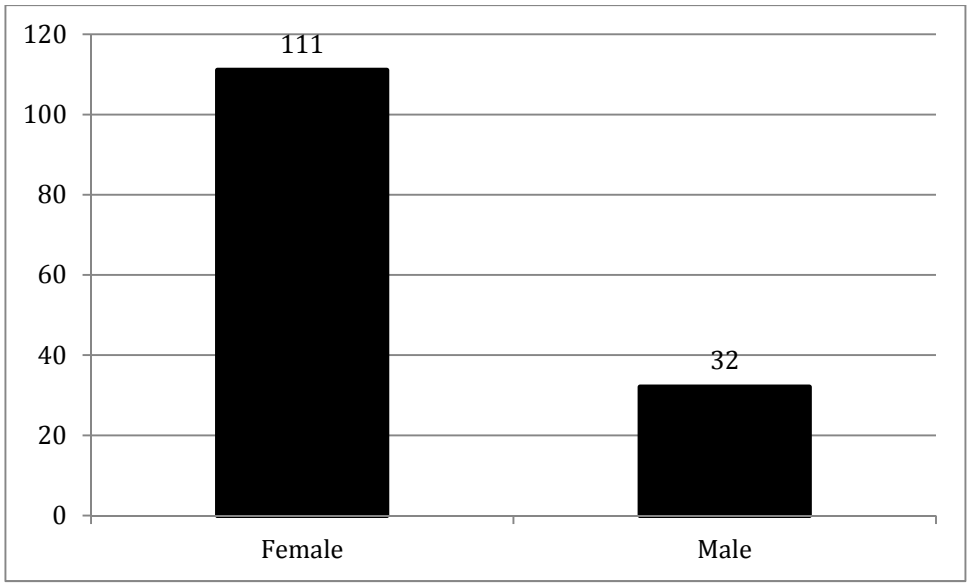

Figure 1: Gender

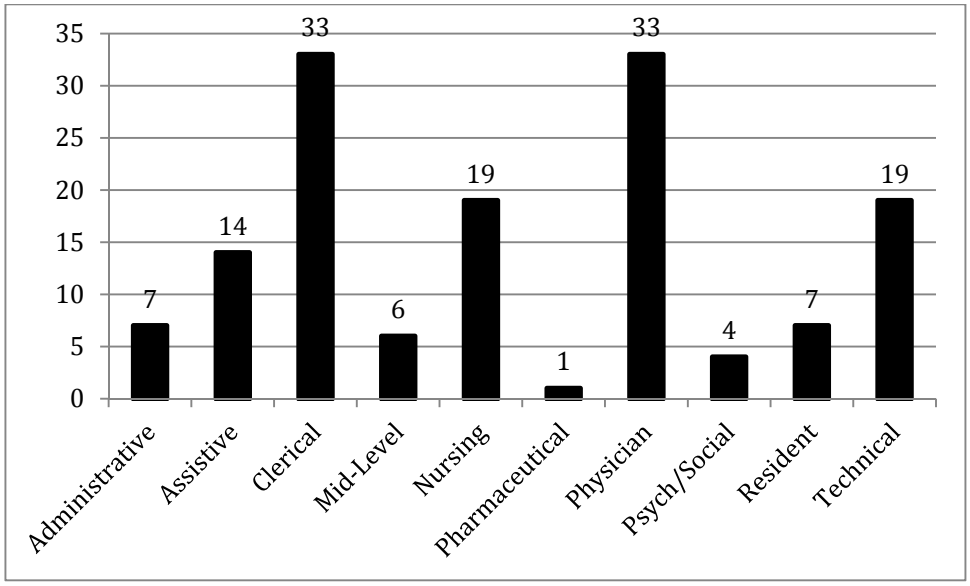

Figure 2: Job Category

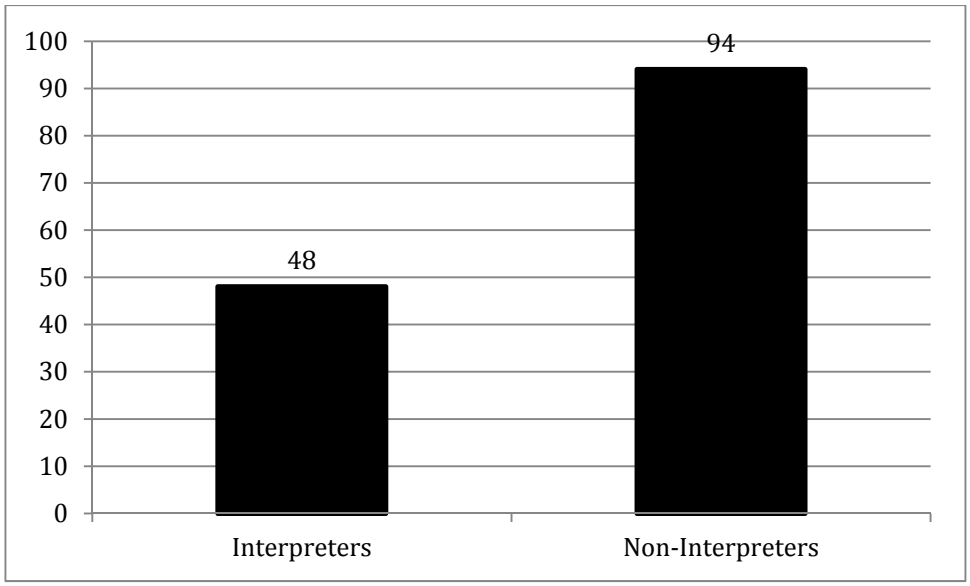

Figure 3: Interpreter Status

Spanish language usage at home. Question 4 asked respondents to indicate how often they spoke Spanish at home: never, only with parents or other relatives, sometimes, or always. Interpreters and non-interpreters are contrasted below.

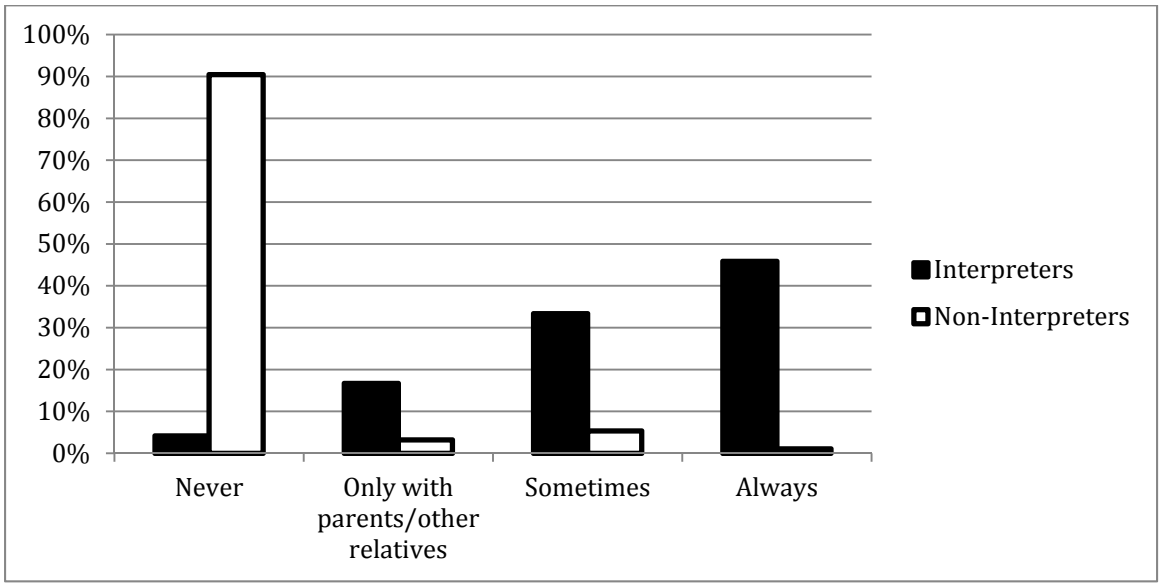

Figure 4: Spanish usage at home

Non-interpreters nearly all indicated that they never spoke Spanish at home, while interpreter responses displayed a rising trend towards higher usage at home, with nearly half indicating that they always spoke Spanish at home.

Spanish language proficiency self-assessment. Question 5 asked respondents to evaluate their skill level in five different aspects of communication with respect to the Spanish language. Interpreters and non-interpreters are contrasted below.

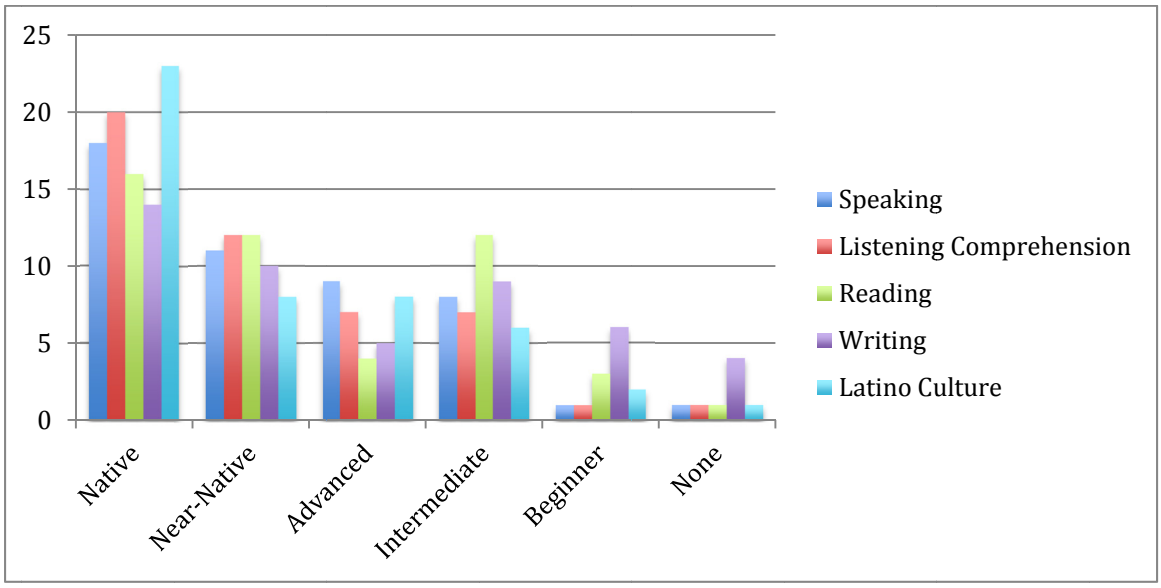

Figure 5a: Interpreter skill self-assessment

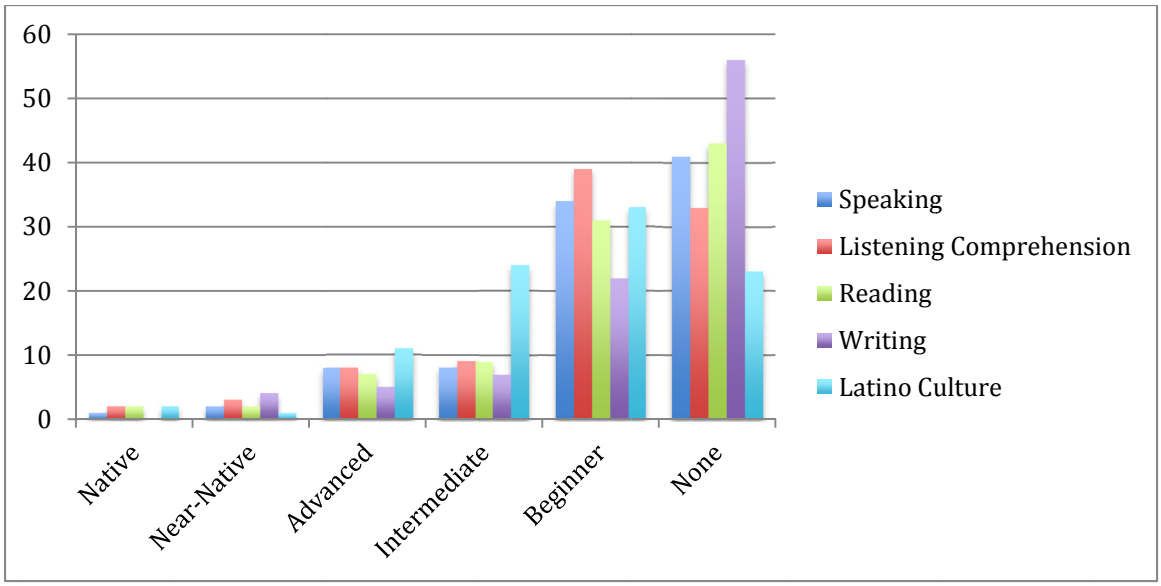

Figure 5b: Non-interpreter skill self-assessment

Interpreters were much more likely to identify themselves as having high skill level in all aspects of communication, and non-interpreters were much more likely to identify themselves as having little to no skill in all aspects. Analysis of overall skill in each aspect was performed by assigning a numerical value to each skill level (native=5, near-native=4, advanced=3, intermediate=2, beginner=1, none=0) and recording the average score. Interpreters and non-interpreters are contrasted below.

Table 1: Interpreter overall skill self-rating

Latino Culture	Listening Comprehension	Speaking	Reading	Writing	Average
3.85	3.83	3.71	3.48	3.10	3.60

Table 2: Non-interpreter overall skill self-rating

Latino Culture	Listening Comprehension	Reading	Speaking	Writing	Average
1.36	1.10	0.94	0.93	0.71	1.01

Formal education. Question 6 asked respondents to indicate the highest level at which they had formally studied Spanish. Interpreters and non-interpreters are contrasted below.

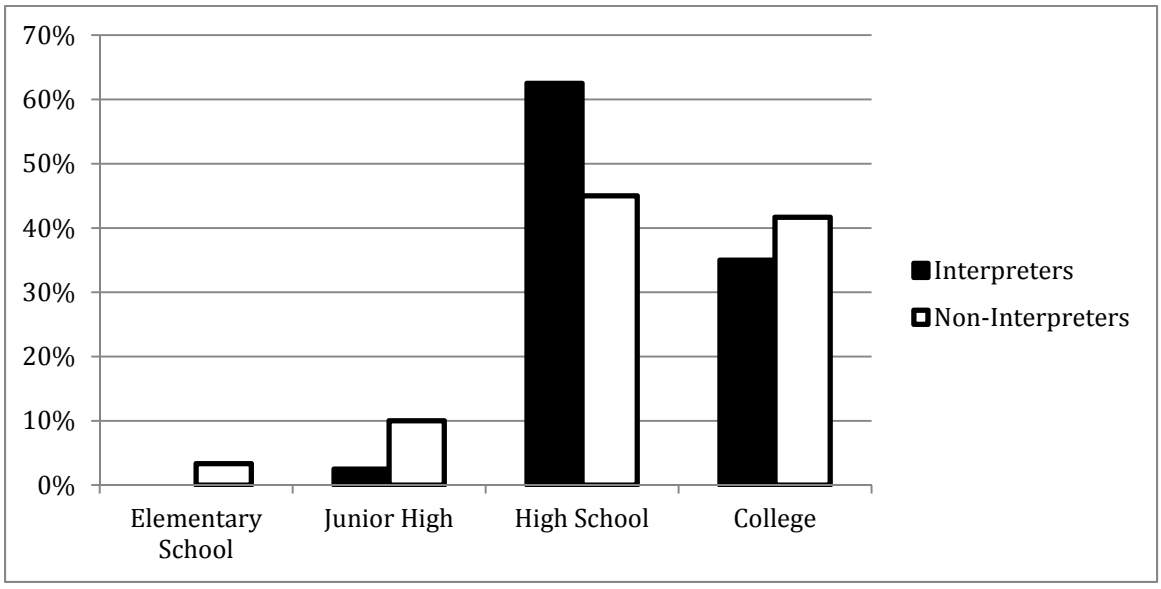

Figure 6: Highest level of formal Spanish education

This graph shows that both interpreters and non-interpreters were most likely to have studied Spanish through high school only, although non-interpreters were nearly as likely to have studied it through college.

Relative importance of different aspects of communication. Question 7 asked respondents to rank the relative importance of speaking, listening, writing, reading, and culture in the education of healthcare professionals. Analysis of overall ranking of each aspect was performed by assigning a numerical value to each rank (#1=5, #2=4, #3=3, #4=2, #5=1) and recording the average score. 45 responses to this question were unable to be incorporated into the analysis because they assigned equal ranking to multiple items rather than ranking each item in order. This left 98 responses available for analysis. Interpreters and non-interpreters are contrasted below.

Table 3: Interpreter overall educational category ranking

Speaking	Listening	Culture	Writing	Reading	Average
4.14	4.07	2.89	1.96	1.93	3.00

Table 4: Non-interpreter overall educational category ranking

Listening	Speaking	Culture	Writing	Reading	Average
4.27	4.00	2.81	1.96	1.96	3.00

Speaking and listening were the most favored categories for both interpreters and non-interpreters, with non-interpreters placing a slightly higher emphasis on listening. Interpreters and non-interpreters both exhibited similar overall rankings for culture, writing, and reading.

Most desired skills related to interpreting. Question 8 asked respondents to rank which skill they would most like to learn in a Spanish class for healthcare

professionals: Spanish grammar, Spanish conversation, Latin American cultural issues that affect healthcare, and how to appropriately use interpreters. Analysis of overall ranking of each skill was performed by assigning a numerical value to each rank (#1=4, #2=3, #3=2, #4=1) and recording the average score. Again, 43 responses could not be incorporated into the analysis because respondents assigned the same ranking to multiple items rather than using each ranking only once. This left 100 responses available for analysis. Interpreters and non-interpreters are contrasted below.

Table 5: Interpreter overall desired skill ranking

Spanish conversation	Latin American cultural issues that affect healthcare	Spanish grammar	How to appropriately use interpreters	Average
3.07	2.41	2.37	2.15	2.50

Table 6: Non-interpreter overall desired skill ranking

Spanish conversation	Latin American cultural issues that affect healthcare	Spanish grammar	How to appropriately use interpreters	Average
3.47	2.36	2.15	2.03	2.50

Interpreters and non-interpreters both indicated that they would most like to learn more about Spanish conversation, followed in descending order by Latin American cultural issues, Spanish grammar, and the appropriate use of interpreters. Although both interpreter rankings and non-interpreter rankings had the same

average rating for all skills combined (a mathematical necessity), the range for each skill rating is greater for non-interpreters than interpreters. In other words, non-interpreters' preference for learning Spanish conversation and their lack of preference for learning how to appropriately use interpreters was more pronounced than the same trend as expressed by the interpreters. This observation may be visualized in the graph shown below. Note that although both groups exhibit a downward trend from left to right, the difference is greater for non-interpreters than for interpreters.

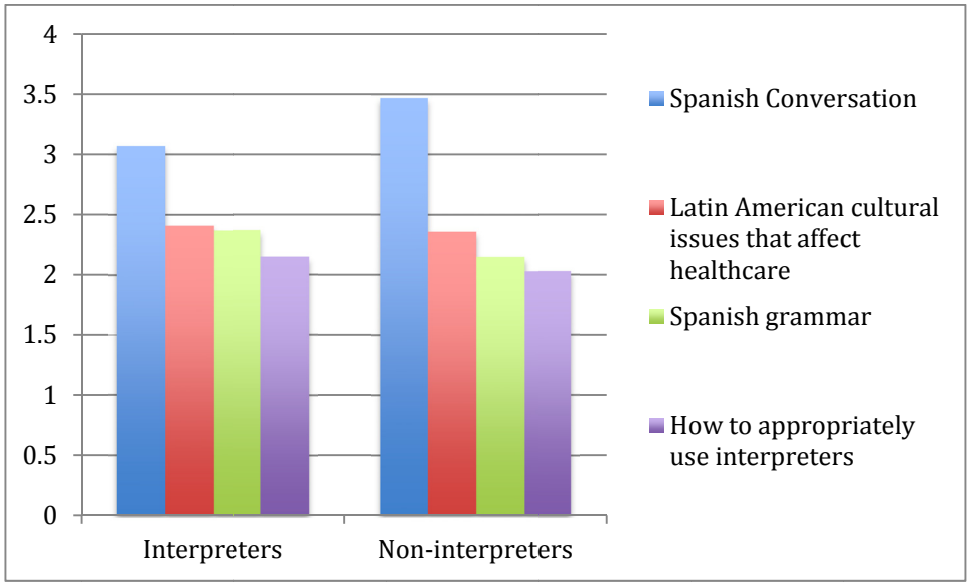

Figure 7: Most desired skills related to interpreting

Relative importance of various communicative skills. Question 9 asked respondents to evaluate how necessary several different skills might be when communicating with Spanish-speaking patients. Again, a numerical value was assigned to each rating (very necessary=3, necessary=2, somewhat necessary=1, unnecessary=0) to obtain an average score. Interpreters and non-interpreters are

contrasted below (items are ordered by rating from lowest to highest according to interpreter responses).

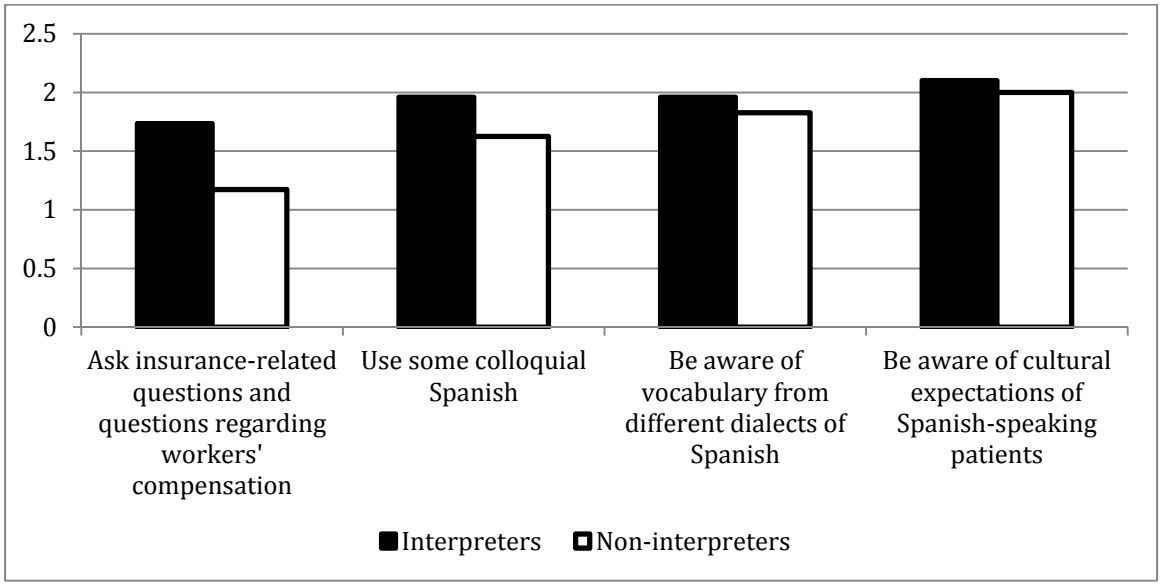

Figure 8a: Relative importance of communicative skills

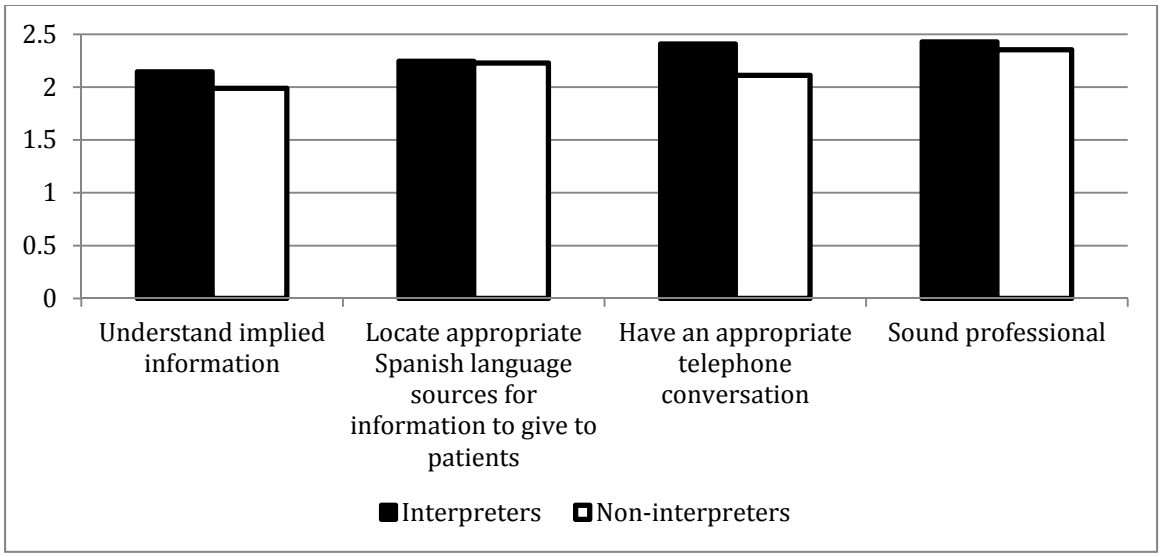

Figure 8b: Relative importance of communicative skills

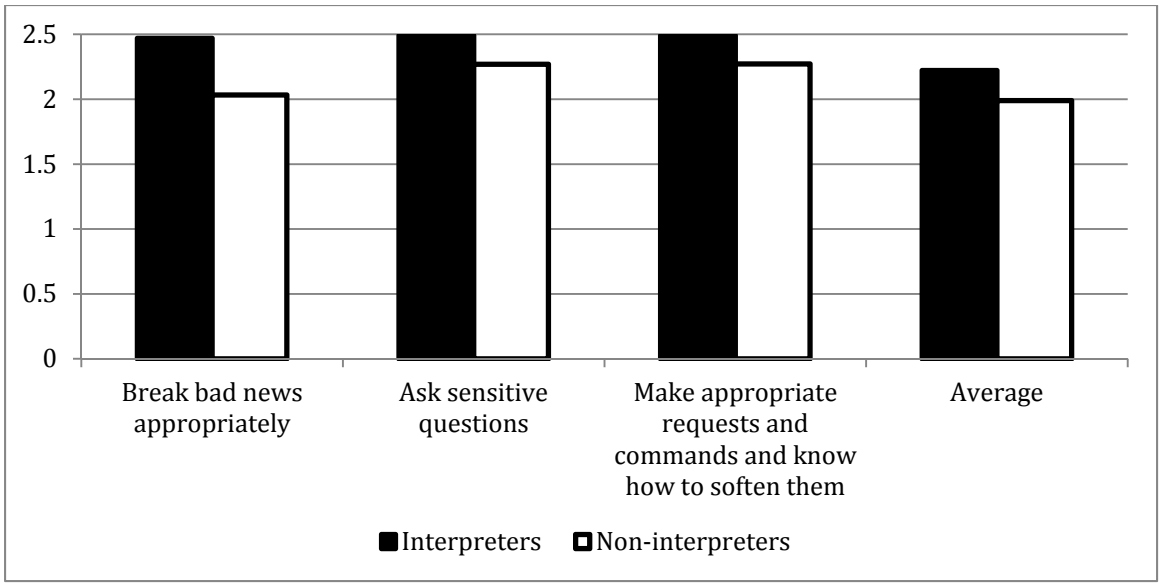

Figure 8c: Relative importance of communicative skills

Interpreters exhibited a slightly higher average rating than non-interpreters across all categories. More specifically, they rated each individual item more highly than non-interpreters. In other words, interpreters were more likely than non-interpreters to view these skills both collectively and individually as more important. Although there are two exceptions, both groups tended to rate action-oriented skills more highly than state-oriented items. The top six items are action-oriented, beginning with words such as “make,” “ask,” “break,” “sound,” “have ... conversation,” and “locate.” The three items below these are state-oriented, beginning with words such as “understand” and “be aware.” The two exceptions are the two lowest-rated items, which are action-oriented ("ask," "use"). Also notable is the fact that the item concerning the ability to ask questions related to insurance and worker’s compensation was rated much more highly by interpreters than by non-interpreters. Although this item was the lowest rated by both groups, the

discrepancy between those groups' ratings is greater than for any other item. In fact, the item's low rating makes the discrepancy even more significant because it is greater in proportion to the total rating than it would be for a more highly rated item.

Open-Response Questions

Questions 10, 11, and 12 asked respondents to express opinions about what they find most frustrating when dealing with Spanish-speaking patients, what they would like to see improved with regard to communicating with these patients, and what they would like to see improved with regard to effectively using interpreters.

Responses to these questions included a wide range of concerns, with some themes common to nearly all participants, and some that clearly illustrated the various perspectives from different positions within the clinic. Most of the latter were logical reflections of the varying goals and tasks that employees in different areas of work must accomplish. While the responses span nearly the entire spectrum of emotion from negative to positive, nearly all suggested potential benefits that could be gained from linguistic and cultural training.

By far the most common frustration expressed by employees in every single position was their own lack of proficiency in the Spanish language. This frustration was often expressed vaguely; some respondents indicated that their greatest frustrations were "my limited skills," "inability to comprehend," "language barrier," "I can't communicate with [Spanish-speaking patients]," and simply "I don't know any Spanish." However, there were several responses that specifically pinpointed trouble with grammatical structures, limited vocabulary, disjointed speech or slow

synthesis, and discomfort with using a language other than their own. To a lesser extent, many employees also expressed frustration with Hispanic patients' lack of proficiency in English. Occasionally, these sentiments were expressed together by the same respondent, indicating a more holistic understanding of the problem as systemic rather than individual. This understanding is exemplified by one respondent who said that her greatest frustration with Spanish-speaking patients was that they were "difficult to understand sometimes" but also admitted that they "seem to get frustrated … with my lack of understanding." More often, however, respondents faulted Hispanic patients for not learning English or for expecting providers to learn Spanish, sometimes in very strong terms. For example, one participant said that his greatest frustration with Spanish-speaking patients was when they "become frustrated that I do not know their language." Another respondent said she thought these patients "stay lazy because they don't really have to learn English," and claimed that they would learn English better if they were forced to use it during healthcare visits. Another respondent echoed this sentiment by suggesting that interpreters shouldn't even be provided for Spanish-speaking patients, saying, "we don't do this for any other culture."

The impression of Spanish-speaking patients as not trying to understand was also shared by many respondents, both as a lack of effort to understand English and as a lack of effort to understand the employee's Spanish. One respondent said that these patients were "set in their ways" and said that no matter how much she tried to explain things to them, they did "not want to comprehend." Another claimed that some Spanish-speaking patients "look to their families for translation, even when

I'm speaking to them in Spanish." Some respondents even suggested that patients could understand their Spanish perfectly well, but pretended not to understand. Two respondents opined that Spanish-speaking patients sometimes refuse to speak Spanish with them because they are Anglo-American. Some participants also remarked that patients often pretend to understand their English even when they, as one respondent put it, "obviously don't."

Many respondents expressed frustration with their own lack of knowledge of medical terminology in the Spanish language. However, this type of response was mostly restricted to employees in clerical type positions. In addition, this frustration was more common among employees who spoke fluent Spanish. These fluent employees were more likely to indicate that their shortcoming was only in the specific area of medical terminology, whereas employees who did not speak fluent Spanish were more likely to mention such a deficiency as merely one aspect of their general limitation in using the language.

One very common frustration that was almost exclusively limited to physicians and residents was the lack of adequate interpreters. These responses were roughly equally distributed between annoyance at having to search out an interpreter and concern that the available interpreters were not performing sufficiently well to ensure clear communication. In other words, the emphasis varied between a simple "lack of interpreters" and a "lack of *adequate* interpreters." Many physicians expressed concern that their message was being distorted or reduced by interpreters—some simply because they couldn't be certain, and some because they knew enough Spanish to catch some errors being made. One

physician, for example, expressed concern that "salient elements of the history are not being properly covered," while another said, "Because I know some Spanish, I am aware that interpreters do not always say what I say." One resident was quite adamant in his criticism of interpreters for not interpreting his sentences word-for-word, for adding additional sentences to explain or clarify, or for leaving some sentences out, even though he admitted that most of the omitted material consisted of jokes or colloquialisms.

Another frustration that was limited to physicians, mid-levels, and residents was the logistical issue of time; treating Spanish-speaking patients simply takes more time, even when using a good interpreter. Three clinicians claimed that patient visits with interpreters took twice as long as those without. In some cases, this type of response included comments that Spanish-speaking patients as a group were too long-winded and detailed in their communication. For example, one physician referenced an alleged "cultural need to share every little problem with your doctor." Another even went so far as to claim that patients "intentionally manipulate the interpretation situation in order to extend the visit." One physician also expressed annoyance with Spanish-speaking patients' tendency to leave the primary complaint for the end of the visit, even when prompted multiple times beforehand to begin with the most pressing concerns.

Another concern expressed by several respondents was that even when adequate interpretation was provided, information could often be lost in the cultural divide. Respondents referred to the idea that all information could be interpreted literally and accurately, but still fail to be understood appropriately

because one or both parties lacked the correct cultural context to fully understand it. Specific examples included disruption of the normal "flow" of the visit and uncertainty or discomfort with sensitive topics such as intimate issues or the breaking of bad news. Some physicians also expressed their frustration at feeling like they were unable to truly connect with their patients on a personal level when using interpreters or speaking a second language.

Workshop Evaluations

Interpreter Workshops

The evaluations discussed in this section were completed after the interpreter workshops at the Family Health Center in January 2014. These workshops were initiated in response to repeated instances of miscommunication observed at the FHC by Hardin during her previous research there, and were designed to address concerns that had been raised by the language needs assessment administered in 2013. Attendees at the workshops were given several minutes at the end of the session to fill out the 5-point Likert scale evaluations.

The first section asked respondents to evaluate the workshop. In response to whether the workshop met their needs, participants indicated high satisfaction with an average ration of 4.56 out of 5.00. Respondents were less satisfied with the length of the workshop, giving an average rating of 4.14 as to whether length of the workshop was adequate. In response to a question asking for suggestions on how the workshop might be improved, various respondents mentioned that the

workshop should have been longer than the two 90-minute sessions allowed. Most interpreters did not comment or said that they would not change anything.

One question asked respondents to indicate what they liked most about the workshop. Responses to this question mostly referenced improvement in a specific skill, particularly in the area of new vocabulary and synonyms. Some participants appreciated role-play activities and the opportunity to compare vocabulary and learn from their colleagues. Respondents also expressed appreciation for the presenters, describing them as patient and professional. A subsequent question asked interpreters to indicate what they least liked about the workshop, but nearly 75 percent of them instead emphasized that they enjoyed the experience and didn't dislike any aspect. Those who did indicate a least favorite aspect expressed that the group activities made them uncomfortable because they didn't like being put under pressure in front of others or reiterated that the workshop should have been longer.

The next question asked respondents what they learned during the workshop that they did not know before. Most referenced one of the main themes discussed in the previous chapter, such as the difference between interpreting and translating or the importance of positioning. Over a third of respondents indicated that they had expanded their vocabulary by learning new synonyms or colloquialisms. A few simply stated that they learned they needed to improve their overall skill or fluency level.

The next question asked respondents what additional training they would like in order to make them more effective as interpreters. The majority said nothing, but about a quarter indicated a realization that they needed more practice,

especially in the area of medical terminology. Several respondents also mentioned that some type of certification course might be helpful.

The second section of the evaluation asked respondents to rate three different learning objectives using a 5-point Likert scale. The objectives were "understanding communication problems related to medical interpreting," "developing skills in the area of interpreting," and "learning expected standards and ethics for professional interpreting." Respondents gave these objectives average ratings of 4.37, 4.42, and 4.47, respectively.

The third section of the evaluation asked respondents to indicate their agreement with a series of evaluative statements about the workshop using a 5-point Likert scale. The average ratings are represented graphically below.

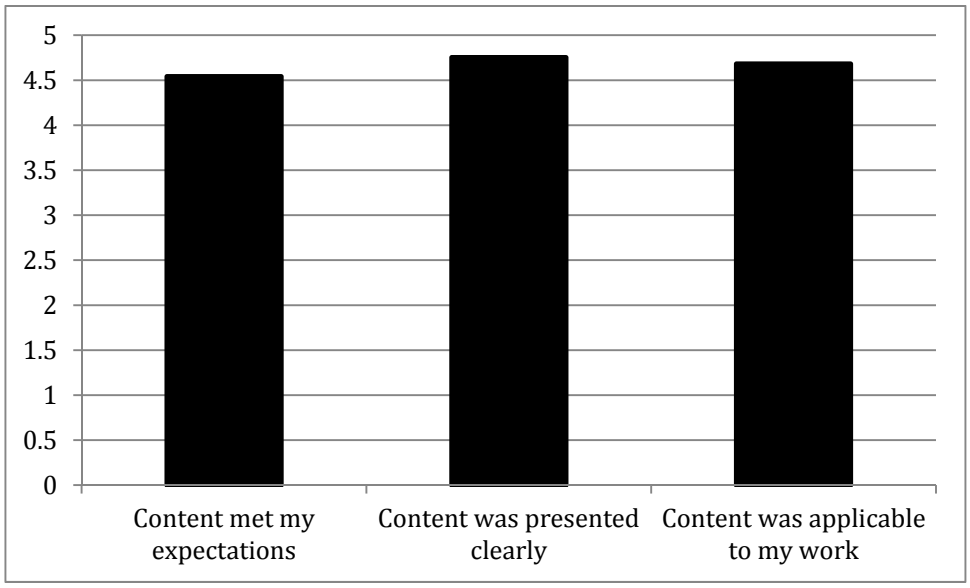

Figure 9a: Likert scale workshop satisfaction ratings

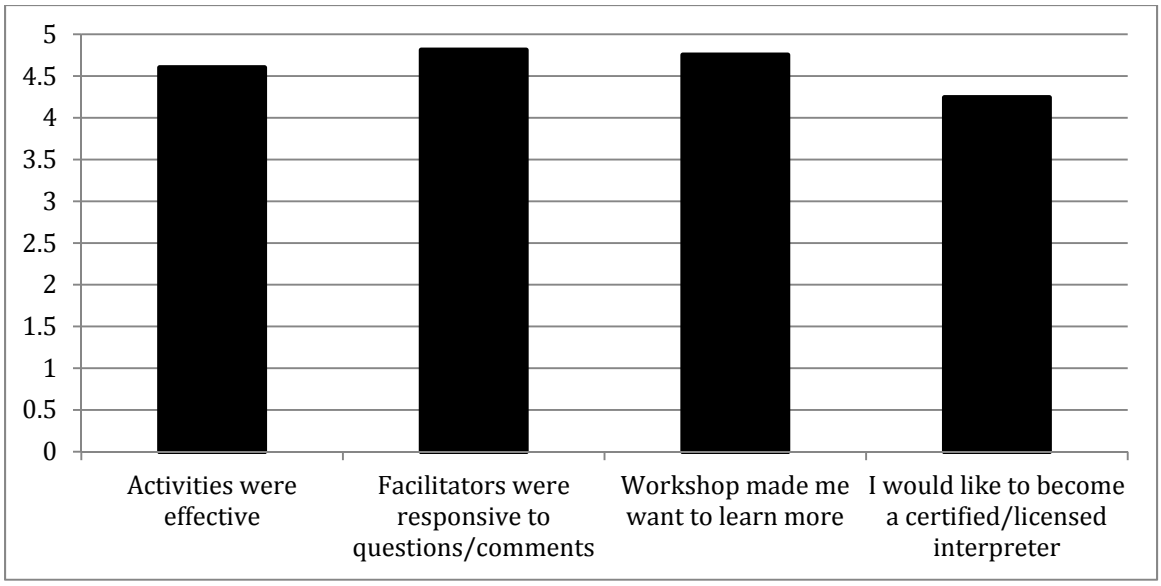

Figure 9b: Likert scale workshop satisfaction ratings

Agreement with these statements was high; all but one received an average rating of at least 4.5. Respondents approved of the content, its presentation, and the responsiveness of the facilitators. They indicated a desire to learn more, but were less enthusiastic about pursuing official certification as an interpreter.

Physician Workshop

The evaluations discussed in this section were completed at the end of the physician workshop conducted at the Family Health Center in March 2014. A five-point Likert scale indicated a range labeled from "strongly disagree" to "strongly agree."

The evaluation form consisted of three Likert scale items and an open-ended comment/suggestion question. The Likert scale items asked participants to indicate their agreement with the statements "I learned something new," "Content was presented clearly," and "Content was useful to me." Evaluation of these items was

very high, with average ratings of 4.80, 5.00, and 4.95, respectively. Open-ended comments were also very positive; of the 20 participants, 5 left the comment section blank, 4 gave neutral suggestions, and 11 offered positive comments. There were no negative comments.

Positive comments centered around the workshop's "usefulness," a word that was used by several respondents, who also complimented the workshop's organization. Suggestions included education on medical vocabulary, evening classes to improve Spanish proficiency, and implementation of the workshop as a regular feature of clinic training. One respondent suggested that the opportunity to observe video interactions might be helpful, although he suggested using video from an outside facility so as not to embarrass anyone. Another respondent wrote that this workshop was the first training he had ever received on how to work with interpreters in his entire medical career.

Spanish Language Proficiency Exams

The Spanish language proficiency exams were administered in February, March, and April 2014. The exams consisted of eleven Qualified Bilingual Staff Assessment (QBS) and four Clinician Cultural and Linguistic Assessments (CCLA), both administered by ALTA Language Services. The exams were conducted via phone and measured skills such as speaking, listening comprehension, sight and consecutive oral interpretation, and medical vocabulary. One of the QBS exams was left incomplete because the examinee misunderstood the instructions and was unable to answer some of the questions. This exam was to be re-administered at the time of this thesis. Two QBS exams were left incomplete because the call was

dropped during the exam. These two exams were not re-administered, but the portions that were completed were still available for analysis.

Spanish Language Proficiency Exam Results

At the time of writing of this thesis, the results of only seven of the QBS exams are available for analysis. None of the results of the CCLA exams are yet available for analysis. Preliminary results of the QBS exams are positive, with all participants achieving a passing score except for those who were unable to complete the exam because of technical issues. Once completed, the full exam results will be incorporated into ongoing research at the Family Health Center.

On the customer service section, participants averaged an objective score of 81.00% and a subjective score of 3.43 out of 4. On the medical terminology section, participants averaged an objective score of 84.85% and a subjective score of 3.57 out of 4. On the diagnosis and instructions section, participants averaged an objective score of 70.29% and a subjective score of 3.50 out of 4. On the sight translation section, participants averaged an objective score of 88.75% and a subjective score of 3.75 out of 4.

Patient Satisfaction Questionnaires

The post-intervention patient satisfaction questionnaires are currently being administered at the time of writing of this thesis, so the results are not available to be incorporated. However, it should be noted that results from previous years are very high, averaging at 4.86 on a 5-point scale. The average rating for the physician items was 4.98 in spring 2012, 4.97 in fall 2012, 4.94 in spring 2013, and 4.77 in fall

2013. The interpreter items were not administered until fall 2013, but their average rating for this period was 4.64.

Although the desired outcome of this project is to illustrate the success of the training interventions through increased patient satisfaction ratings, this result may not be observed simply because the ratings are already so high. The results for spring 2014 and subsequent periods will be incorporated into future research to compare pre-intervention and post-intervention outcomes.

Conclusion

The results of the four research instruments examined in this chapter provide insight on the direction that future training interventions should take. The language needs assessment provides baseline pre-intervention information that future training can continue to reference, and the workshop evaluations and language proficiency exams suggest specific areas on which that training can focus. Although the post-intervention patient satisfaction surveys are not yet available for analysis, their results will provide further information on the success of the interventions. The implications of these results are discussed in the following chapter.

CHAPTER FIVE

Discussion

This chapter will examine the implications of the results discussed in the previous chapter. After explaining the conclusions that can be drawn from these results, I will make recommendations on how future training interventions can build on the findings of this project.

Language Needs Assessment

Low Interpreter Self-evaluation

Based on results from the language needs assessment, it is apparent that some interpreters recognized that they did not have adequate skills for interpreting. Recall that Question 5 asked respondents to evaluate their own skill level in five different aspects of communication with respect to the Spanish language: speaking, listening comprehension, reading, writing, and Latino culture. Possible responses included "native," "near-native," "advanced," "intermediate," "beginner," and "none." It seems logical that the interpreters responding to this question would rate themselves as having at least intermediate skill, if not higher, but some chose "beginner" and at least one chose "none" for each category. The categories where multiple interpreters rated themselves at one of these lower levels warrant closer attention.

For the reading category, three interpreters rated themselves with beginning ability. For writing, six interpreters rated themselves as having beginning ability, and four rated themselves as having no ability. That is, 20% of the total number of interpreters claimed to have only beginning ability or less for writing in Spanish. Furthermore, the writing classification is by far the lowest rated category overall, with a 0.75-point deficit relative to Latino culture (the highest rated category) on the 5-point scale, compared with a 0.27-point deficit in the category of reading, which is the next-lowest rated.

These results are less concerning than they would be if the category being discussed was speaking or listening comprehension, because these areas are required for every patient interview, whereas reading and writing are not. Nevertheless, the skills of reading and writing may be called upon in some patient interviews. Even when they aren't, a beginner's level of skill in these basic areas of communication likely reflects an overall level of language proficiency that is less than ideal for someone whose job is intimately associated with processing information in that language. Furthermore, the low rating probably indicates functional illiteracy in Spanish, particularly in health care contexts. The low average score on the sight interpretation portion of the QBS exams also seems to support this conclusion. In light of these results, hospitals, clinics, and interpreters would greatly benefit from taking proficiency exams such as the QBS or certified interpreter exams to determine whether or not individuals have appropriate Spanish and English skills for interpreting in health care contexts. Unfortunately, the current high cost of interpreter exams makes it unlikely that clinics will

implement such exams. Lower exam costs and incentives for bilingual employees who obtain interpreter training and certification would likely enhance the current system.

Desire to Learn How to Appropriately Use Interpreters.

Another salient result from the needs assessment was the response to question 8, which asked respondents to rank which skills they would most like to learn in a Spanish class for healthcare professionals: Spanish conversation, Latin American cultural issues that affect healthcare, Spanish grammar, and how to appropriately use interpreters. As mentioned in the previous chapter, interpreters and non-interpreters both ranked these skills in the same order, but the range between the highest and lowest ranked skill was much greater in non-interpreter responses than in interpreter responses (0.92 points and 1.44 points, respectively, on a 4-point scale). This means that, although both interpreters and non-interpreters most desired conversational skills, interpreters were relatively less interested than non-interpreters, exhibiting an average rating for the item that was 0.40 points lower than the rating of non-interpreters. Similarly, both interpreters and non-interpreters least wanted to learn how to appropriately work with interpreters, but differed in their ratings of the item. Interpreters rated the item 0.12 points higher than did non-interpreters.

The reason behind the difference in rating for Spanish conversation can be logically inferred: non-interpreters were less likely than interpreters to have already learned and practiced Spanish conversation, and therefore were more interested in improving their skill in that area. An explanation is less intuitive,

however, for the difference in rating how to appropriately use interpreters. It seems unlikely that interpreters would be interested in learning how to use interpreters because they do not use interpreters; they *are* interpreters. Nevertheless, they expressed more interest in learning this skill than non-interpreters did.

The latter category of respondents was comprised of 6% mid-levels, 7% residents and 26% physicians. These three groups are entirely designated as non-interpreters, except for 8 physicians. The three groups are also most likely to work with interpreters since they conduct the interviews that create the demand for interpreters. Other interpretive scenarios (clerical, technical, etc.) are auxiliary to the medical interviews. It is possible that interpreters emphasized an interest in learning how to use interpreters because they had little or no training themselves and because their bilingual abilities helped them understood the complexities involved in medical interviews that that providers perhaps did not fully comprehend.

In all fairness to the providers, it was possible that the ratings of the non-interpreter category were skewed by respondents who, by virtue of the type of work that they do, seldom or never have direct contact with patients and therefore may never find themselves in an interpretive scenario, giving them no reason to want to learn how to work with interpreters. With this end in view, these potentially irrelevant respondents were omitted and a refined category consisting only of non-interpreting physicians. The results were surprising. The overall rating of this item by this group was a mere 1.74, or 0.41 points lower than the interpreters' rating. The data was not skewed by clerical and technical employee

responses. Instead, non-interpreting physicians demonstrated little interest or need for working with interpreters.

So why did these providers express even less interest in learning how to use one of their greatest assets than the interpreters themselves? The answer requires further study beyond the scope of this thesis; however, two considerations are relevant to this result. The first is that interpreters' expressed desire to learn how to use interpreters cannot be elucidated within the same context as for non-interpreters. It may be that interpreters want to learn how to best use interpreters in order to offer perspective to the providers who make use of their services, particularly at times when they perceive that they are being used ineffectively. Another possibility is that interpreters wanted to call attention to the value that such training would contribute to the clinic community even though they did not intend that training for themselves. Either motivation seems to indicate recognition on the part of the interpreters that the providers whom they serve could be using their services more effectively. Although physicians seemed less aware of this need based on responses to question 8, their positive reception to the physician workshop suggests that it helped them to recognize the need for further training. This was one of the most important functions of the physician workshop: to reverse the lack of perception that had been revealed by the needs assessment.

The second consideration is that non-interpreting physicians' low rating of this item by definition entails that their ratings of the other three items were relatively higher. Greater understanding of these items—Spanish conversation, Latin American cultural issues that affect healthcare, and Spanish grammar—are all

laudable objectives that would certainly facilitate a more closely-adapted relationship with Spanish-speaking patients and therefore improve the quality of care provided to them. In light of the observations presented in chapter two—that the use of a communicative intermediary can never be as ideal for accurate transmission of information as can the use of a physician who is fluent in the patient's native language—it could certainly be argued that physicians' emphasis of these items over the appropriate use of interpreters actually indicates an aspiration towards the higher goal of complete linguistic and cultural competency.

If this goal could be achieved across the board, provision of health care to Spanish-speaking patients would change dramatically, to the point that most of the concerns addressed by this research project would become largely irrelevant. Unfortunately, current resources—both monetary and human—are unlikely to achieve this level of training in the foreseeable future. Instead, interpreters at the Family Health Center are an existing resource that aids in communication, whereas complete physician fluency is unlikely in the near future. Diamond and Reuland discuss this issue, saying, "questions remain regarding how aware clinicians are of their own language proficiency and how fluency should be assessed," also adding that "the lack of a consistent way to report fluency currently impedes the development of strategies to eliminate health care disparities" ("Describing Physician Language Fluency" 427-428). Physicians should indeed be encouraged to seek higher levels of linguistic and cultural competency; however, in the meantime, they should focus on greater facility in appropriately working with interpreters. Furthermore, they should recognize that unless they have Distinguished, Superior,

or perhaps Advanced-high proficiency according to the guidelines of the American Council for the Teaching of Foreign Languages (ACTFL), their limited Spanish should serve only as an adjunct to, rather than a replacement for interpreters (Prince and Nelson, 32-37).

For this reason, Reuland and others suggest that physicians take proficiency exams to determine their exact level of proficiency. Hospitals, clinics, and physicians would benefit from taking exams such as the CCLA to specifically determine clinicians' Spanish abilities within a health care context. In order to help those clinicians who do not meet the appropriate guidelines raise their proficiency levels, it would be helpful for the Family Health Center to provide or at least facilitate access to Spanish language training that follows the parameters described by Diamond and Jacobs.

Asking Finance-Related Questions

Another salient result from the needs assessment was the response to question 9, which asked respondents to evaluate the need for different communicative skills with Spanish-speaking patients. The greatest disparity between interpreters and non-interpreters when evaluating the need for "ask insurance-related questions and questions regarding workers' compensation." Interpreters were 48% more likely than non-interpreters to consider this a necessary skill. Although this was the lowest rated item by both categories of respondents, the disparity suggests that that future training programs at the Family Health Center might include content related to insurance and workers'

compensation. Such content might potentially include vocabulary related to and the financial side of health care.

Results from Open-response Questions and Future Training

Responses to the open-response questions highlight needs for future training. Specifically, training for interpreters should focus on Spanish language proficiency, and training for clinicians should focus on how to effectively work with interpreters. Questions 10, 11, and 12 requested opinions on participants' frustrations when dealing with Spanish-speaking patients, improvements in communicating with these patients, and improvements in effectively using interpreters. A large number of responses to these questions expressed desires for training to increase their own Spanish language proficiency. This desire, in light of the large number of interpreter training workshop evaluations that expressed satisfaction with the Spanish language skills taught in those workshops, suggests that future training interventions should continue to focus on Spanish language proficiency skills. Specifically, many participants wished to learn more vocabulary related to health care. Since many workshop evaluations also expressed satisfaction with the vocabulary that was included, training in terminology (including jargon and colloquialisms) should remain a primary focus.

One common theme in providers' responses was frustration with the ineffectiveness of the interpretation process, particularly with information being omitted or changed. This issue was addressed both in the interpreter workshops and in the physician workshop. The instructors strongly emphasized to the interpreters the importance of relaying *all* information from the patient to the

physician and vice versa. The instructors also made the physicians aware that they had stressed this to the interpreters, telling them that they should expect this protocol to be followed by the interpreters and suggesting ways that they could communicate with the interpreters about their expectations if they observed that it was not.

Limitations

Ranking questions. The creators of the language needs assessment could have made it more informative by administering the ranking questions (questions 7 and 8) in a more restrictive format. Question 7 asked respondents to rank the relative importance of five different elements of communication pertaining to the education of healthcare professionals, and question 8 asked them to rank which of four skills they would most like to learn in a Spanish class for healthcare professionals. Unlike a rating question, in which each item is evaluated independently of the others, a ranking question's validity is dependent upon each rank being assigned to no more than one item. If one rank is assigned to multiple items, then the data for those items signify only how important the respondent considers that item to be in a general sense, rather than how important he or she considers it to be relative to the other items.

The ranking procedure could have been ensured by formatting the online questionnaire in such a way as to prevent any rank from being applied to more than one item. For example, the questions could have consisted of a list of the available ranks with a drop field below each rank, and a bank of items that could be dragged

and dropped into the fields by the respondent, allowing only enough room in each field for one item. Instead, the questions consisted of a list of the items with an open response field below each item, allowing respondents to type characters into the field to indicate the assigned rank. This allowed respondents to assign the same rank to multiple items if they wished, which some of them did, making their responses unusable for uniform analysis. One respondent, presumably confused about the instructions, typed words rather than numbers into the fields, describing her opinions of what should be taught in each category rather than which categories she thought most important. These errors resulted in 45 responses to question 7 and 43 responses to question 8 not being used in this analysis, which reduced its sample size and thereby decreased the significance of the results for those questions.

The responses to the ranking questions that did not follow the ranking format are still informative to anyone investigating these issues at the family health center, because they do indicate respondents' perceptions of the importance of each item. For the parameters of this analysis, however, their format makes them redundant. In order for the analysis to be uniform, all of the responses to a particular question must be in the same format, otherwise the results will be misleading. To present the results of a rating question (or a question that has been answered as a rating question) as if they were the results of a ranking question would misrepresent the data. It would lead the reader to believe that the items were being evaluated relative to each other when they were actually being evaluated independently.

In a situation such as this, where some of the responses to a ranking question have been answered as if it were a rating question, the investigator is faced with two possible approaches that might be taken in order to enable a uniform analysis. One is to use only the responses that have been entered in accordance with the ranking format. This is the approach that has been taken in this thesis. The alternate approach is to use all responses, evaluating them as if they were all intended to be rating responses. This is certainly a viable option, as it allows for analysis that is both uniform and meaningful. It also has the advantage of increasing the sample size. The reason that this approach was not taken is that the results must then be interpreted in a different light. By separating each response from its ranking order and evaluating it as an independent data point, the results would become subjective rather than objective. Instead of measuring how important the respondents considered each item *in terms of each other*, the results would then measure only how important the respondents considered each item *abstractly.*

There is certainly nothing wrong with subjective data. By the very nature of this project—because it deals with the perceptions and opinions of unique human individuals—a majority of the data that it examines is inherently subjective. These data still provide measurable and useful information about the process of language interpretation. However, objective data are useful as well, and questions 7 and 8 provide the only objective data in the language needs assessment other than the demographic questions (questions 1, 2, 3, and 6). To convert these two questions into subjective data would be to discard the entirety of the investigative objective data produced by this instrument. This action could still be justified if the subjective

data that it produced were important enough and informative enough to warrant the conversion. I made the judgment that it was not justified, because the data would not have been more informative than they are in the objective format, and because they would have contained a large amount of overlap with the data from question 9.

Conclusion

According to the evaluations from the interpreter and physician workshops, the interventions were well received and answered many of the concerns expressed in the language needs assessment. Therefore, I recommend continued implementation of these workshops on a regular basis at the Family Health Center, with two caveats.

The first caveat is that the workshops should have more effective collaboration between interpreters and physicians as their primary focus. In the interpreter workshops, proficiency training is appropriate and should be continued, but it should be done with a specific view towards creating an improved work dynamic between interpreters and physicians. Having more highly proficient interpreters will always be beneficial, but they will not fulfill their potential if there is tension or misunderstanding between them and the physicians they work with. In the physician workshop, proficiency training is less important than in the interpreter workshops, because the main goal of this workshop should be to improve physicians' ability to use interpreters effectively. Although the use of professional interpreters is more effective than the use of *ad hoc* interpreters, it is unrealistic to promote the use of professional interpreters in an organization that

employs none. Therefore, the focus should remain on using existing interpreters as effectively as possible, a goal that Diamond and Jacobs agree with, writing, "the focus should be on maximizing the quality of the interpretation using a non-professional interpreter" ("Let's Not Contribute to Disparities" 191). Improving physician fluency is an excellent goal that should be pursued if the resources to do so are present, but the goal of working effectively with interpreters should come first. With this end in view, future workshops might improve the complementary nature of the training by having interpreters and physicians role-play together, allowing them to implement the things they have learned in a setting that simulates their actual work environment.

The second caveat is that continued training interventions should be accompanied by continued assessment of their effectiveness. Analysis of the workshop evaluations indicate that the participants were satisfied and think that what they learned will help them to be more effective in their work, but only continued measurement of patient satisfaction and health outcomes will prove that the training provided tangible benefits. The main way in which this can be measured is by analyzing the results of patient satisfaction questionnaires, a process that is ongoing but that will not be completed until after this thesis is published.

It is clear from the current literature and from observations made at the Family Health Center that the quality of health care communication being provided to Spanish-speaking patients is less than ideal. Although the Family Health Center is an excellent clinic with hardworking employees that provide outstanding health care (as illustrated by their high patient satisfaction ratings), the communication

issues that arise when treating Spanish-speaking patients can sometimes inhibit them from taking full advantage of this care. The good news is that the employees are open and willing to work towards addressing these issues. Without their cooperation and enthusiasm for serving their patients as well as they can, this project would not have been possible.

This problem is vastly complex and will not be solved easily or quickly. Making a real difference will have to involve changes not just at the Family Health Center but throughout the United States health care system. Ultimately, a satisfactory solution will probably require extensive training of all types of health care employees, increased implementation of professional interpreters in lieu of *ad hoc* interpreters, and possibly even educational measures for Spanish-speaking patients. Until these goals can be reached, however, the type of training that this research project implemented will be helpful in improving the quality of health care for Spanish-speaking patients quickly and meaningfully.

BIBLIOGRAPHY

Antshel, Kevin M. "Integrating Culture as a Means of Improving Treatment Adherence in the Latino Population." *Psychology, Health & Medicine* 7.4 (2002): 435-49. Web. 10 May 2013.

Bender, Deborah E., Catherine Harbour, John Thorp, and Peter Morris. "Tell Me What You Mean by "Sí": Perceptions of Quality of Prenatal Care Among Immigrant Latina Women." Qualitative Health Research 11.6 (2001): 780-94. Web. 21 Jan. 2013.

Chong, Nilda. *The Latino Patient: A Cultural Guide for Health Care Providers.* Yarmouth: Intercultural Press, 2002. Print.

Davidhizar, Ruth, and Ruth Shearer. "Strategies for Providing Culturally Appropriate Pharmaceutical Care to the Hispanic Patient." *Hospital Pharmacy* 37.5 (2002): 505-10. Web. 10 May 2013.

Davidson, Brad. "Questions in Cross-Linguistic Medical Encounters: The Role of the Hospital Interpreter." *Anthropological Quarterly* 74.4 (2001): 170-78. Web. 15 Feb. 2013.

Diamond, Lisa C., and Elizabeth A. Jacobs. "Let's Not Contribute to Disparities: The Best Methods for Teaching Clinicians How to Overcome Language Barriers to Health Care." *Journal of General Internal Medicine* 25.2 (2009): 189-93. Web. 10 Jan. 2013.

Diamond, Lisa C., and Daniel S. Reuland. "Describing Physician Language Fluency." *Journal of the American Medical Association* 301.428 (2009): 426-28. Web. 20 Oct. 2012.

Diamond, Lisa C., Yael Schenker, Leslie Curry, Elizabeth H. Bradley, and Alicia Fernandez. "Getting By: Underuse of Interpreters by Resident Physicians." *Journal of General Internal Medicine* 24.2 (2008): 256-62. Web. 1 Nov. 2012

Diamond, Lisa C., Delphine S. Tuot, and Leah S. Karliner. "The Use of Spanish Language Skills by Physicians and Nurses: Policy Implications for Teaching and Testing." *Journal of General Internal Medicine* 27.1 (2011): 117-23. Web. 16 Jan. 2013.

Flores, Glenn. "Language Barriers to Health Care in the United States." *The New England Journal of Medicine* 355.320 July (2006): 229-31. Web. 12 Oct. 2012.

Flores, Glenn, M B. Laws, Sandra J. Mayo, Barry Zuckerman, Milagros Abreu, Leonardo Medina, and Eric J. Hardt. "Errors in Medical Interpretation and Their Potential Clinical Consequences in Pediatric Encounters." *Pediatrics* 111.1 (2003): 6-14. Web. 12 Feb. 2013.

Hakimzadeh, Shirin, and D'Vera Cohn. "English Usage Among Hispanics in the United States." *Pew Hispanic Center* (2007). Web. 18 Mar. 2014.

Hofstede, Gert Jan, Paul B. Pedersen, and Geert Hofstede. *Exploring Culture: Exercises, Stories and Synthetic Cultures*. Yarmouth: Intercultural Press, 2002. Print.

Jacobs, Elizabeth A., Laura S. Sadowski, and Paul J. Rathouz. "The Impact of an Enhanced Interpreter Service Intervention on Hospital Costs and Patient Satisfaction." *Journal of General Internal Medicine* 22.2 Nov. (2007): 306-11. Web. 27 Oct. 2012.

McDowell, Liz, DeAnne K. Hilfinger Messias, and Robin Dawson Estrada. "The Work of Language Interpretation in Health Care: Complex, Challenging, Exhausting, and Often Invisible." *Journal of Transcultural Nursing* 22.2 (2011): 137-47. Print.

Poma, Pedro A. "Hispanic Cultural Influences on Medical Practice." *Journal of the National Medical Association* 75.1024 June (1982): 941-46. Web. 29 Oct. 2012.

Prince, Diana, and Marc Nelson. "Teaching Spanish to Emergency Medicine Residents." *Academic Emergency Medicine* 2.1 (1995): 32-37. Web. 12 Jan. 2013.

"Selected Characteristics of the Native and Foreign-Born Populations." Chart. American FactFinder. United States Census Bureau, n.d. Web. 18 Mar. 2014.

Tate, Denise M. "Cultural Awareness: Bridging the Gap Between Caregivers and Hispanic Patients." *The Journal of Continuing Education in Nursing* 34.5 (2003): 213-17. Web. 10 May 2013.