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GENERAL RESEARCH ARTICLES

Understanding Medical Interpreters: Reconceptualizing Bilingual Health Communication

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This article provides a new approach in conceptualizing bilingual health communication, emphasizing the differences between types of medical interpreters as well as the interrelationships among all participants in bilingual health communication. Confronted by the conflicting results of interpreting services in medical settings, the author used past research to explain why medical interpreters should be categorized into different categories (i.e., chance interpreters, untrained interpreters, bilingual health care providers, on-site interpreters, and telephone interpreters) so that their characteristics and interpreting styles can be better observed and understood. In addition, by recognizing that interpreter-mediated communications in health settings are dynamic situations and that all participants can influence the outcomes of the communication, researchers can start to investigate the interrelationships among all the participants and, thus, develop different strategies that will improve the quality of bilingual health communication.

With the increasing numbers of immigrants and international travelers, governments, health care administrators, and researchers have recognized that the presence of interpreters is necessary for patients who do not speak the same language as their health care providers (Woloshin, Bickell, Schwartz, Gany, & Welch, 1995; see also Eytan, Bischoff, & Loutan, 1999). In the United States, starting in the late 1970s, there have been federal and state legislative efforts to require physicians to provide interpreters for patients with limited ability to speak English (Fortier, 1997). The most recent action at the federal level, an executive order on Improving Access to Services for Persons With Limited English Proficiency issued by the White House on August 11, 2000 (U.S. Department of Justice, n.d.), resulted in written guidelines being provided by the Department of Health and Human Services (2001) to health care providers to ensure language assistance for persons with limited English skills. The guideline has its roots in Title VI of the 1964 Civil Rights Act (U.S. Department of State, 1996), which prohibits discriminations on the basis of race, color, or national origin by any recipient of federal financial assistance (Otto, 2001a). In other words, health care providers who do not provide interpreter services will be cut off from Medicaid reimbursements.

However, these legislations were not without opposition, which mainly derived from the health care industry (Fortier, 1997). For example, the American Medical Association (AMA), the largest physicians group in the United States, with about 290,000 dues-paying members, engaged in a series of campaigns to overturn the federal rules that require physicians to hire interpreters for patients who do not understand English (Otto, 2001a; Romano, 2001). Its argument against mandatory interpreter services—that the cost of interpreter services is too high—is a complicated issue. In an example presented by AMA, a physician was required to pay $237 to hire an interpreter, yet the Medicaid payment for the office visit was only $38 (Romano, 2001). AMA worries that similar incidents would lead many physicians to turn away Medicaid patients entirely (Otto, 2001a). However, the cost of interpreter services may not be as expensive as suggested by AMA. In fact, the cost of interpreter services can be dramatically reduced (from $125 per hr to $20 per hr for Spanish interpreters) when the physician is more resourceful and more connected to the community in which the physician's office and medical practice is located (Otto, 2001b). One perspective of resourcefulness is physicians' ability to utilize different types of interpreters (e.g., bilingual employees,

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on-site interpreters, friends of patients) without compromising the quality of services provided. However, this is an area few researchers in bilingual health communication have touched on.

Traditionally, research in bilingual health communication tended to come from two camps: physicians who use interpreters (Baker, Hayes, & Fortier, 1998; Baker, Parker, Williams, Coates, & Pitkin, 1996; Buchwald et al., 1993; Woloshin et al., 1995) and interpreters themselves (Haffner, 1992). As Davidson (2000) stated

> The physicians generally lament the difficulties of diagnosing patients, establishing a clinical relationship, or providing adequate care to patients when using an interpreter; the interpreters tend to focus on their role as "linguistic ambassadors" for the patient, a stance in favor of overt "advocacy" interpretation. Neither group, however, rests their arguments on analyses that explore exactly how, in discourse, interpreters advocate or obfuscate the conversational process. (p. 384)

In addition, in these studies interpreters are viewed as a generic group, a common variable that can produce certain, presumably similar, impacts on the outcomes of bilingual health communication. However, as more and more studies were conducted, researchers were confronted with conflicting information of interpreting services and the arguments about what interpreters do came to a deadlock.

Rather than seeing medical interpreters as a generic category or developing communication strategies recommended for *all* situations, I propose that interpreter-mediated communication in health settings are dynamic situations and interlocutors, health care providers in particular, can adjust their communication strategies accordingly in order to achieve quality care. The purpose of this article is to provide a new direction for bilingual communication and to further the theoretical development of interpreter-mediated communication. From a practical perspective, this article also aims to facilitate health care providers in working with different types of medical interpreters to be versatile and, at the same time, achieve quality services. I will start with reviewing past research on medical interpreters in health care settings. Then I will discuss how these studies should be conceptualized and what research questions should be asked so that we can form a systematic understanding and a theory of bilingual health communication. By examining the types of interpreters that currently practice in health care settings, and their interpreting styles, I will discuss what the further directions of bilingual health communication should be.

CONFLICTING OUTCOMES OF INTERPRETER SERVICES

Because bilingual health communication is a rather new field and because the backgrounds and the qualities of medical interpreters can be considerably different from one another, the research on bilingual health communication has tended to be scattershot and has often observed conflicting outcomes. Complementing studies that demonstrated a demand for medical interpreters in our society (e.g., Baker et al., 1996; Carrasquillo, Orav, Brennan, & Burstin, 1999), several studies provide concrete evidence of the benefits of providing interpreter services. For example, in Tocher and Larson's (1996) study, the treatment process and outcomes of diabetes care for interpreted patients were as good, if not better, than for English-speaking patients. In another study, compared to patients who said an interpreter should have been called, interpreted patients were more satisfied with their provider's friendliness, concern for the patient as a person, efforts to make the patient comfortable, and amount of time spent (Baker et al., 1998). Also, compared to patients who did not receive interpreter services, interpreted patients had a significantly greater increase in office visits, prescription writing, and prescription filling (Jacobs et al., 2001).

However, in other studies, the results of providing interpreter services were not all positive. For example, compared to English-speaking patients, Spanish-speaking patients who have received interpreter services had less communication with their physicians, were less likely to receive facilitation from the physicians, and were more likely to have their comments ignored (Rivadeneyra, Elderkin-Thompson, Silver, & Waitzkin, 2000). Compared to patients who thought an interpreter was necessary but were not provided with one, interpreted patients did not show significant differences in their objective understanding of diagnosis and treatment (Baker et al., 1996). In another study, Spanish-speaking patients who communicated through an interpreter were significantly less likely to be given a referral for a follow-up appointment after an emergency department visit (Sarver & Baker, 2000). Finally, patients who communicated with their health care provider through an interpreter were less satisfied with physician–patient relationships even in areas unrelated to languages (Baker & Hayes, 1997).

At first, these conflicting outcomes may seem confusing. As a variable in bilingual health communication, the effects of medical interpreters seem to provide little predictability. Nevertheless, a closer look at the interpreters in the research of bilingual health communication suggests that these outcomes may be attributed to the different types of interpreters in the studies. The first clue is that many researchers are hesitant to argue for generalizability outside the scope of their studies, citing that the types of interpreters in their studies may be distinct from other circumstances (e.g., Baker et al., 1998; Jacobs et al., 2001). A subtler clue is that many studies that investigate bilingual health communication often see medical interpreters as a generic group without mentioning or examining how the type of interpreter recruited may have biased their studies (e.g., Carrasquillo et al., 1999; Rivadeneyra et al., 2000; Sarver & Baker, 2000). Even in cases in which the characteristics of the interpreters are identified, researchers often attribute the outcomes of their studies to the professionalism (or nonprofessionalism) of their interpreters without having compari-

son or control groups to examine how different types of interpreters would have influenced the outcome variables. Thus, when researchers are confronted with conflicting outcomes, they are not able to examine whether or not the results were affected by the professionalism of medical interpreters.

Although in current health care settings, on-site interpreters and telephone interpreters are considered professional interpreters, most interpreters are not from these two sources. In Baker et al.'s (1998) study at Harbor–UCLA Medical Center in California, 88% of the interpreters used were without formal training in interpreting. In another study of interpreter use in an emergency department of a public hospital, Baker et al. (1996) found that when an interpreter was used, physicians interpreted 28% of the time, followed by nurse (22%), family member or friends (12%), professional interpreters (12%), and hospital employees (11%). In Eytan et al.'s (1999) survey of psychiatric services in Switzerland, 85% of the psychiatric services reported using health care staff and patients' family members or friends as interpreters, 72% used nonmedical staff, 49% used outside volunteers, and only 59% used trained and paid interpreters. These data suggest that currently, medical interpreting is done by interpreters from various backgrounds. Because the backgrounds of interpreters lead to significant differences in their knowledge of medical terminology, attitude toward interpreting, and styles of interpreting, it can be expected that the quality and the effectiveness of medical interpretation may differ considerably. Therefore, if researchers simply treat medical interpreters as a generic group without a clear understanding about the type of interpreter being studied, it is not surprised that eventually they will be confronted with conflicting data. In other words, it is essential to see medical interpreters not as a generic group but as different groups of interpreters that require health care providers to adopt different communicative strategies.

However, how can medical interpreters be categorized? In past research, medical interpreters were often dichotomized as professional versus untrained interpreters (e.g., Tang, 1999) or professional versus ad hoc interpreters (e.g., Pérez-Stable & Nápoles-Springer, 2000). As I have noted earlier, medical interpreters in health care settings are more diversified than the simple dichotomies have suggested. Therefore, based on related literature and personal observations, I proposed five categories of medical interpreters: (a) chance interpreters, (b) untrained interpreters, (c) bilingual health care providers, (d) on-site interpreters, and (e) telephone interpreters.

CHARACTERISTICS OF THE FIVE TYPES OF MEDICAL INTERPRETATION

Chance Interpreters and Untrained Interpreters

Chance interpreters and untrained interpreters are interpreters who do not have formal training in interpreting and do interpreting on ad hoc basis. Often, these two categories of interpreters are termed *ad hoc interpreters.* However, in this article, I decided to divide them into two groups for a more detailed analysis. *Chance interpreters* are usually a patient's family members or friends, but they can also be bilingual persons who are just in the waiting room by chance. On the other hand, *untrained interpreters* as defined here are bilingual support staff (e.g., nurse, technician, or receptionist) and bilingual persons who are hired as medical interpreters but who do not have formal training in interpretation. Although chance interpreters and untrained interpreters have much in common, they have different characteristics.

For many patients, family members and friends are the most convenient and comfortable sources of interpreters. It is important to note that often these patients not only need interpreters to help them communicate with physicians, they also need interpreters to help them to communicate with nurses and staff, and to help them get around in the hospital. As chance interpreters, family members and friends have good background knowledge about the patient, are able to meet the patient's interpreting needs in most places in health care settings, and have usually earned the patient's trust already (Buchwald et al., 1993). In Kuo and Fagan's (1999) study, 85.1% of patients reported satisfaction with chance interpreters. Chance interpreters had the second highest percentage of satisfied patients, only second to that of professional hospital interpreters, and were higher than that of untrained interpreters, telephone interpreters, and even bilingual health care providers (Kuo & Fagan, 1999).

However, although a few researchers (e.g., Bruccoliere, 2000) have suggested using family members or friends as interpreters, the majority of studies have suggested that family members or friends may not be a good source of medical interpreters for several reasons. First, children, other family members, or friends as interpreters may encounter problems with disrupting social roles, dealing with sensitive issues, understanding medical terms, being accurate, and preserving confidentiality (Flores, 2000; Haffner, 1992; Phelan & Parkman, 1995). Second, family members make frequent behavioral mistakes, such as responding to questions without allowing the patient to answer, volunteering their own information and opinions, and failing to interpret patients' comments (Buchwald et al., 1993; Haffner, 1992). Third, incompetent chance interpreters may lead to inaccurate interpretation and put health care providers and hospitals at risk for lawsuits (London, 2000).

Untrained interpreters are less likely than chance interpreters to encounter problems with disruptions of social roles or sensitive issues because they may be viewed by the patients as professional roles similar to that of physicians. In addition, as untrained interpreters, bilingual support staff may have more knowledge about medical terminology, be more familiar with health care settings, and be a more reliable and stable source of interpreters for health care administrators.

However, untrained interpreters also have some disadvantages. First, untrained interpreters often interpret only in phy-

sician–patient communication. Patients are often left alone in between physician visits (e.g., visiting pharmacy, scheduling next appointment with receptionist, etc.), which may be a fairly uncomfortable experience for patients who do not speak the language at all. Second, without proper training, untrained interpreters may still make frequent interpreting errors (Pöchhacker & Kadric, 1999) and behavioral mistakes (Baker et al., 1998; Cambridge, 1999; Vasquez & Javier, 1991). In fact, in Kuo and Fagan's (1999) study, untrained interpreters (hospital employees who are not professional interpreters) had the lowest satisfactory ratings by both medical residents and patients.

In summary, chance interpreters and untrained interpreters have their advantages as convenient sources of interpreters. These interpreters "performed well in the translation of simple, non-complex contents. However, they often failed to convey critical contents, whenever more sophisticated communication skills and medical knowledge would have been needed" (Stuker, Gross, & Sabbioni, 1998, p.123). Without proper interpreting training (Woloshin et al., 1995) or physicians' effective communication strategies (Elderkin-Thompson, Silver, & Waitzkin, 2001), it is inevitable that these two types of interpreters will make mistakes, which may lead to inferior health care services.

Bilingual Health Care Providers

In this article, *bilingual health care providers* are defined as health care providers who learn the patients' native languages as their second languages. Although bilingual health care providers, physicians in particular, do not have formal training in interpreting either, many researchers (Baker et al., 1996; Baker et al., 1998) still consider a bilingual health care provider as the best solution. Bilingual health care providers have great advantages in their training in physician–patient communication and medical knowledge (Edlow, 1996). In addition, by reducing the need for interpreters, the patient can enjoy better rapport with the physician (Baker et al., 1998). In other studies, patients who had bilingual health care providers asked more questions in clinical encounters, recalled more information afterward (Seijo, Gómez, & Freidenberg, 1991), and reported better quality of life (Pérez-Stable, Nápoles-Springer, & Miramontes, 1997).

However, simply assuming that bilingual health care providers are better than professional interpreters may lead to problematic consequences. First, it is important to note that *bilingual* does not equate to *bicultural* (Haffner, 1992). Taking a few years of language courses in college does not guarantee that the physician has a good understanding of the patient's cultural beliefs or worldviews, which are crucial in treating illness. Second, health care providers may overestimate their language skills or may have limited language abilities that just meet their own perceived information needs but that are inadequate for understanding and delivering information needed by the patient (Baker et al., 1996). Without the presence of a professional interpreter, these may lead to discrepancies between the physician's and the patient's perceptions and evaluations of the health care services. In addition, bilingual health care providers are few and may not always be available (Phelan & Parkman, 1995). The low availability of bilingual health care providers makes this an unlikely universal solution.

On-Site Medical Interpreters

Of the five different types of medical interpreters, only on-site medical interpreters and telephone interpreters can be considered professional medical interpreters.

In some communities and states in the United States, there are specific programs to recruit, train, and certify medical interpreters (Woloshin et al., 1995). It is often required that on-site hospital interpreters fulfill a certain number of shadowing hours (shadowing professional interpreters) before working independently (Downing & Tillery, 1992). Many major hospitals in the United States provide on-site hospital interpreters for specific languages. Although the training of on-site medical interpreters may differ, from 40-hr, 5-day training courses (Cross Cultural Health Care Program, 1999) to three semesters of college courses (Avery, 1995), it is expected that the specialized training in medical interpreting helps them to learn the abilities, ethics, and responsibilities that are expected from medical interpreters. The strengths of hospital interpreters are (a) they are specifically trained for medical interpretation; (b) they are experienced in health care settings, in terms of related cultural issues and medical terminology; and (c) they are more likely to play an active role in health communication.

However, the most serious disadvantage of on-site interpreters appears to be the cost. It is estimated that a full-time on-site interpreter may cost $31,888 to $76,733 per year (Woloshin et al., 1995). As a result, without stable sources of immigrant and minority patients, it may be a great burden for hospitals to provide on-site interpreters. For example, in a study of emergency departments in the United Kingdom (Leman & Williams, 1999), 88.4% of the departments using face-to-face interpreters had experienced difficulty obtaining an interpreter outside of normal working hours. The availability of on-site interpreters depends on the language and the location of the patient, and the timing for interpreting services.

Telephone Interpreters

Since 1989, AT&T (American Telephone and Telegraph) Language Line Services, one of the pioneers in telephone interpreting, has provided 24-hr telephone interpreting service in 140 languages (Language Line Services, 2000; Rivero-Kempf, 1999). Many private corporations also have provided similar services. In general, the interpreters participating in this service, who are often native speakers, are prescreened by linguistic experts, undergo special training to

ensure their skill and accuracy in language translation and understanding the nuances of culture, and are often required to pass the same language proficiency examination required by many government agencies. Interpreters for health communication receive training in this specialty, but telephone interpreters generally handle all kinds of interpretation and are not as specialized and experienced as hospital interpreters.

The advantages of telephone interpreting are its accessibility and confidentiality (Wadensjö, 1999). Telephone interpreters are valuable because they are able to meet unusual needs, which include areas with small limited English speaking populations, interpretation for rare languages, and demands for interpretation outside of normal working hours (Woloshin et al., 1995). In addition, for some patients, telephone interpreting provides certain confidentiality. However, confidentiality can be a double-edged sword, as some patients may feel that the invisible interpreter might be able to identify them, whereas they cannot identify the interpreter (Wadensjö, 1999). This may also help to explain why more medical residents (74.5%) are satisfied with telephone interpreters than patients (53.3%, $p < .01$; Kuo & Fangan, 1999). After all, in physician–patient communication, a patient is the more vulnerable party and is more concerned with privacy. Finally, telephone interpreters face a major obstacle: loss of nonverbal cues, which I will discuss later.

In review, Table 1 provides comparisons between different types of medical interpretation.

INTERPRETING STYLES OF DIFFERENT TYPES OF MEDICAL INTERPRETERS

As I have mentioned earlier, medical interpreters were often dichotomized as professional and nonprofessional interpreters. Rather than examining the differences in interpreting styles between professional and nonprofessional interpreters, research on bilingual health communication simply focused on the mistakes or errors that are made by interpreters (e.g., Cambridge, 1999; Elderkin-Thompson et al., 2001), untrained interpreters in particular. In addition, researchers' conclusions often implicitly suggest that professional interpreters would not have made similar mistakes or that the mistakes were made due to the interpreters' nonprofessional status. However, research on court interpreters has demonstrated that despite strict guidelines of faithfulness and accuracy or the professional training court interpreters have endured, trained interpreters still systematically alter the original text (Berk-Seligson, 1987, 1988, 1989, 1999). It is unrealistic to expect that interpreters always convey the interpreted message without any alteration (Davidson, 2000; Hsieh, 2001). Rather, when interacting with interpreters, interlocutors should see interpreters as mediators (Wadensjö, 1998) and try to develop effective communication strategies that best suit the goals of conversational task (Hsieh, 2001).

Therefore, although in this section it may appear that I am discussing the mistakes often made by particular types of interpreters, I prefer to see them as *interpreting styles*, which can be influenced by other interlocutors' communication strategies. As Bakhtin (1981/1975) has suggested, the final product of communication is always a coconstruction of all parties involved. By understanding the interpreting styles of different types of interpreters, health care providers can develop more effective communication strategies with different types of interpreters and still achieve successful bilingual health communication.

Chance Interpreters and Untrained Interpreters

By definition, chance interpreters and untrained interpreters do not have formal training in interpreting. However, this does not mean that we cannot improve the interpreting quality and, thus, achieve better interpreter-mediated communication. When reporting the communicative problems resulting from the use of untrained interpreters, Pöchhacker and Kadric (1999) concluded that the fundamental problem is not the interpreters' lack of competence but "the failure of the health care institution and its staff to appreciate the complexities of mediated communication across culture" (p. 177).

Because there has not been research examining the differences in the interpreting styles between chance interpreters and untrained interpreters and because these two types of interpreters do not have formal training in interpreting, I presume that they share similar interpreting styles. However, further studies may suggest otherwise, because chance interpreters and untrained interpreters do differ in many other perspectives, such as their understanding of medical terminology or a patient's medical history. Researchers need to investigate whether their differences in characteristics would lead to different interpreting styles. Research on interpreting errors often focuses on untrained interpreters' interpreting styles (Briskina, 1996; Cambridge, 1999; Elderkin-Thomp-

TABLE 1
Comparisons Between Different Types of Interpretation

Type	*Availability*	*Professionalism*	*Comfort to Patient*	*Interpreting Quality*
Chance interpreter	Moderate–high	Low	Moderate–high	Low
Untrained interpreter	Moderate	Low	Low–moderate	Low
Bilingual health care provider	Low	Moderate–high	Moderate–high	Varied
On-site interpreter	Varied	High	Moderate–high	Moderate–high
Telephone interpreter	High	Moderate–high	Moderate	Moderate–high

son et al., 2001; Pöchhacker & Kadric, 1999) rather than comparing the differences of mistakes made by professional interpreters and nonprofessional interpreters. As a result, we are unable to examine how professional interpreters differ from nonprofessional interpreters. Nevertheless, we still have some good data on the interpreting styles of chance interpreters and untrained interpreters.

Studies have shown that untrained interpreters tend to provide the clinical information expected by the physician when doctors and patients have different perceptions of the problem (i.e., siding with the physician rather than the patient; Bolden, 2000; Davidson, 2000; Elderkin-Thompson et al., 2001; Pöchhacker & Kadric, 1999). As a result, it is more likely that the doctor's utterances are translated to the patient than the other way around. In fact, the sample of Briskina's (1996) study showed that on average, 74% of doctors' utterances are translated (*SD* = 3.56) and only 54% of patients' utterances are translated (*SD* = 25.68).

Also, untrained interpreters often shift between first-person style interpretation (e.g., "I have been coughing for the past 2 weeks," "Have you been taking the prescription I gave you the last time?") and third-person style interpretation (e.g., "She said that she has been coughing for the past 2 weeks," "The doctor asked you if you have been taking the prescription he gave you the last time" Elderkin-Thompson et al., 2001; Pöchhacker & Kadric, 1999). It is important to note that although these interpretations can all be understood, carrying the same information in the communication, the constructions of the communicative contexts invoked by the two interpreting styles could be very different (Hsieh, 2001). Although it appeared that third-person style is used more often, Cambridge (1999) suggested that untrained interpreters' choice of first-person or third-person style may be influenced by physicians' use of the third person (e.g., "Ask him if he coughs").

One particularly surprising finding in the interpreting quality of untrained interpreters is that their quality of interpretation can vary dramatically from one setting to another (Elderkin-Thompson et al., 2001). "A nurse [interpreter] could do an excellent job with one physician only to have difficulties with the next one. … Every physician … had an individual style for relating to the patient, and the nurse [interpreter] had to accommodate that style" (Elderkin-Thompson et al., 2001, p. 1355). This finding also implicitly underlines the importance of the physician's role in achieving a successful bilingual health communication.

Because the final product of communication is always a coconstruction of all parties involved (Bakhtin, 1981/1975), at a time when little can be controlled on the part of chance interpreters or untrained interpreters, we can turn our attention to the other party, health care providers. In addition to learning effective communication strategies, some physicians would even try to replace interpreters themselves. Jonathan A. Edlow, a physician in emergency medicine, indicated that his early motivations for learning Spanish were the time wasted in waiting for interpreters and his lack of trust in untrained interpreters' interpretations (Edlow, 1996).

Bilingual Health Care Providers

Although many studies have suggested that bilingual health care providers are invaluable in physician–patient communication (Baker et al., 1996; Baker et al., 1998; Pérez-Stable et al., 1997; Seijo et al., 1991), the interpreting styles of bilingual health care providers are not without problem. One major problem for bilingual health care providers whose second language is the patient's native language is their overconfidence in their language ability and cultural competency. These problems generally would not be noticed without the presence of professional interpreters. In addition, a patient may be less willing to ask for an interpreter in the middle of physician–patient communication, to avoid the possibility of causing the physician to lose face. As a result, the patient and the physician may have very different perceptions of their clinical encounter. In fact, the percentage of satisfied patients who had bilingual physicians (75%) was lower than that of chance interpreter (85.1%) or on-site interpreters (92.4%; Kuo & Fagan, 1999).

However, due to the great advantages bilingual health care providers can offer, bilingual health care providers are still invaluable assets in health care settings. Because there is no source text for bilingual health care providers' communication, it is difficult to pinpoint the interpreting style of bilingual health care providers. The most important issue I would like to mention here is that bilingual health care providers need to be aware of their language ability and cultural competency in the communicative process. If at any point of the process, the health care provider senses possible miscommunication or the information to be discussed is beyond the health care providers' abilities, health care providers should actively encourage patients to voice their concerns and request interpreters immediately. Although this may pose a threat to face for health care providers, any reasonable patient will appreciate their health care provider's sincere concern about providing the best health care services they can offer.

On-Site Medical Interpreters

To the best of my knowledge, I have not seen research that examines whether professional interpreters and untrained interpreters have different impacts on the results (e.g., quality of care, patient compliance, etc.) of health care services, nor have I seen research that investigates how professional interpreters behave in medical settings. Medical interpretation is very different from other interpretation not only because of its professional terminology but also because of the issues it deals with. Because hospital interpreters are specifically trained for medical settings, they are more familiar with medical terminology and possible scenarios. Although the professionalism of on-site medical interpreters may still vary, as their training differs greatly, the following guidelines are common in training of on-site medical interpreters.

On-site hospital interpreters often need to take a more active role than to simply interpret literally. An on-site hospital interpreter is encouraged to pick up any nonverbal messages as well as to handle intercultural issues in an active manner (Haffner, 1992). For example, if any party looks confused, the interpreter can immediately decide to make further clarification. An example occurred in a rehabilitation session of one of my scoliosis patients. After explaining the case, the physician ended with "To tell you the truth, this is the worst case I have ever seen in my entire career." At that moment, I decided that this might sound offensive to the Chinese patient. I asked the physician if I should interpret his last sentence and he quickly answered, "No, please don't," and thanked me for checking with him before interpreting.

One thing worth mentioning is that, due to the active nature of hospital interpreters, one specific rule is set for on-site interpreters: to use the first-person singular when interpreting (i.e., speaking as if the interpreter were the original speaker). For example, when a patient says, "I have a headache," instead of saying "the patient says she has a headache," an interpreter says, "I have a headache." Roat, Putsch, and Lucero (1997) have suggested that the advantages of first person interpretation include shortening the communication, avoiding confusion as to who is speaking, and reinforcing the primary relationship between the provider and the patient. In addition, by using first person singular, the interpreter simplifies the interpreting context by presenting himself or herself as a nonperson. Goffman (1959) defined *nonperson* as "those who play this role are present during the interaction but in some respects do not take the role either of performer or of audience, nor do they pretend to be what they are not" (p.151). By situating oneself as a nonperson, the interpreter creates the illusions of a dyadic physician–patient communication.

In short, this rule helps the physicians and patients pay more attention to each other, directing information to the other person. In addition, it also reduces the possibilities of either party initiating a conversation with the interpreter. Occasionally, in an effort to be friendly, a provider or patient may start to chat with the interpreter. First-person interpretation reminds the provider and the patient that the interpreter is there to represent both parties and wishes to keep the communication as if would have been if both parties spoke the same language.

Telephone Interpreters

Telephone interpreters face more difficulties in accessing nonverbal messages as well as confirming their interpretation of nonverbal messages. Consequently, telephone interpreting forces the medical interpreter to be more cautious. The interpreters can base their interpretations only on the words they hear. Interpreters cannot make judgments other than those based on the language used. For instance, a telephone interpreter cannot answer whether the patient's shaky voice is a result of drinking or just because the patient is unfamiliar with medical settings. There may be many other reasons (e.g., mental condition) for a shaky voice. Instead, an interpreter could inform the physician that the patient has a shaky voice and let the physician judge what to do with such information (i.e., instead of asking "Do you think the patient is drunk?", the physician should ask "Does the patient have a shaky voice?"). Interpreters should not offer judgments even upon request because of the limited resources they can obtain through the telephone. Nevertheless, if there are cultural issues involved, telephone interpreters are still trained to actively inform physicians on such issues.

In addition, telephone interpreters are required to use third-person interpretation (Roat et al., 1997): the interpreter always refers to the patient or physician as he or she. This is because of the nature of telecommunication. To avoid confusion, the interpreters use third-person interpretation, so all parties are aware of each other's existence. Although telephone interpreters need to take a conservative role in interpreting, it is important that they take an active role in gatekeeping the flow of communication. On-site hospital interpreters can use nonverbal signals to guide the flow of communication. In face-to-face communication, people depend heavily on nonverbal cues to know whose turn it is to speak, who is the intended audience, and whether the hearer is listening to the speaker (Goodwin, 1981). At the end of a face-to-face interpretation, an interpreter can simply look back to the speaker to indicate that the interpretation has been completed (Dimitrova, 1997). In addition, if a hospital interpreter thinks the message gets too long, a simple hand signal or eye contact is sufficient to inform the speaker to pause and let the interpreter speak. However, in a telephone conversation, these nonverbal cues are not possible. Consequently, telephone interpreters tend to give verbal cues to guide the flow of the communication. In one study, Wadensjö (1999) found that compared to other interlocutors, telephone interpreters are more active in interrupting others' utterances, causing overlapping talk. A telephone interpreter often actively guides the flow of communication so that each party understands whose turn it is to speak, and when to pause for interpretation. Telephone interpreters must give clear verbal cues to set up the beginning of the call, the close of the call and the turn taking during the call.

In review, Table 2 provides the role comparisons between on-site interpreters and telephone interpreters.

RECONCEPTUALIZING BILINGUAL HEALTH COMMUNICATION

There is no doubt that bilingual health communication has come a long way. Complemented by the development of health communication, the importance of culture, ethnicity, and language to the physician–patient relationship, patient compliance, and health outcomes is no longer an issue that need to be proven. However, as researchers learn more about the importance of these issues in health-related areas, it is important that we can move forward in our research as well as

TABLE 2
Role Comparisons Between On-Site Interpreters and Telephone Interpreters

Characteristic	*On-Site Interpreters*	*Telephone Interpreters*
Style of interpretation	First person	Third person
Informing providers of cultural elements	High	Moderate
Interpretation of nonverbal messages	Active	Avoid
Guiding the flow of communication	Moderate (Do not interfere unless necessary)	Active (Use verbal cues)

theoretical development. Instead of asking whether these variables make any differences in the quality or the outcomes of health care services, researchers should now ask how these differences are created and how the disparities in services between patients who are of different cultures, ethnicity, and languages can be resolved.

In this article, I have focused on a particularly important party, a medical interpreter, in bilingual health communication. The nature of bilingual health communication implicitly guarantees that an interpreter will be the most powerful person in a medical conversation because the interpreter is the only person who understands the two languages, determines what should be said or heard, and is vested with rights to interrupt others' utterances (Davidson, 2000; Dimitrova, 1997). As a result, past research on bilingual health communication has focused on the roles and influences of medical interpreters. Nonetheless, a medical interpreter, as a participant in the medical conversation, is viewed as a generic character that produces, presumably similar, effects during medical interpreting. The trends of seeing a medical interpreter as the person who takes the sole responsibility for the success of bilingual health communication and seeing medical interpreters as a generic group have caused research on bilingual health communication to reach a deadlock. With all the data and studies, researchers were not able to generalize their results nor were they able to provide a systematic understanding of how interpreters influence physician–patient communication, why interpreters take on certain roles or exert certain influences, and how the problems associated with interpreter-mediated communication can be solved.

To break the deadlock in the current research on bilingual health communication, I have provided a systematic categorization of medical interpreters and discussed how different types of medical interpreters differ in characteristics and interpreting styles. By attending to this, researchers can overcome the seemingly irresolvable arguments and start to investigate and answer new research questions. It is time for researchers to ask (a) how different types of medical interpreters influence physician–patient communication, (b) what elements influence certain types of interpreters' performance, (c) is there any commonality or differences in bilingual health communication mediated by different types of interpreters, and (d) is it possible for health care providers to adopt different communicative strategies so that quality health communication can be achieved regardless of the type of interpreter involved?

These questions are important in the sense that these are the first steps we need to take in the process of building a coherent and systematic theory of bilingual health communication. These questions require researchers to take on new assumptions. First, by recognizing different types of medical interpreters, researchers can avoid the simplistic view of seeing medical interpreters as a generic group or dichotomizing medical interpreters as professional versus nonprofessional interpreters. As I have mentioned earlier, seeing medical interpreters as a generic group has made researchers unable to explain the conflicting outcomes of providing interpreter services. As researchers are able to identify the characteristics of different types of interpreters and to understand the different elements that would influence the performance of different types of interpreters, it will become more feasible to discuss the actual impact of interpreting services in medical settings.

For example, rather than simply discouraging or prohibiting the use of chance interpreters or untrained interpreters, researchers should investigate the conditions that influence nonprofessional interpreters' ability to produce quality interpretation. Not all bilingual speakers are willing to be interpreters, for this may translate into increased workload, increased responsibilities, or uncomfortable social roles (Haffner, 1992; Johnson, Noble, Matthews, & Aguilar, 1999; Zimmermann, 1996). Even when chance interpreters and untrained interpreters are willing to help out, or to make the patient feel less isolated, they may not be comfortable performing particular types of communication (e.g., legal consent) and are hesitant to take on responsibilities in such communication processes (Johnson et al., 1999). By pinpointing the reasons that hinder nonprofessional interpreters' ability or willingness to produce quality interpretation, researchers can then develop policy recommendations (e.g., extra pay for interpreting work; limited subjects of interpreting tasks; task confirmation before interpreting) to enhance nonprofessional interpreters' performance.

Second, by recognizing that interpreter-mediated communications in health settings are dynamic situations and that all participants (i.e., health care providers, patients, and interpreters) can influence the outcomes (e.g., information exchanged, satisfaction of participants, etc.) of the communication, researchers can start to investigate the interrelationships among all of the participants and, thus, develop different strategies that will improve the quality of bilingual health communication. For example, studies have shown that chance interpreters and untrained interpreters are vulnerable to interpreting errors; therefore, researchers recommended that physicians should use "back-interpretation" (i.e., asking the patient to repeat the interpreted instruction) so that any

miscommunication can be detected and corrected (Elderkin-Thompson et al., 2001; Haffner, 1992). In another example, Cambridge (1999) found that by using third-person speech style, physicians made all participants change roles in some encounters, making interpreters the principle addressee (i.e., the interpreter would speak in place of the patient, as opposed to interpreting for the patient, during the patient's turn of talk) while, at the same time, making the non-English speaking patient feel more isolated. In these situations, researchers (Roat et al., 1997) suggested that interpreters adopt a first-person interpreting style so that the primary relationship between the provider and the patient can be reinforced.

These two examples showed that (a) chance interpreters and untrained interpreters' problems can be solved by physicians' communication styles, and (b) the negative impacts of physicians' communication styles can be mitigated by interpreters' interpreting methods. In other words, there are multiple ways to solve the problems in doctor–patient–interpreter communication. As communication researchers, it is our responsibility to investigate how the participants of bilingual health communication exert influences on other parties of the communication and to develop strategies for each participant to achieve a satisfactory outcome of communication.

CONCLUSION

In this article, I have presented the current problems in bilingual health communication, namely, the difficulties in reaching coherent explanations of the impacts of interpreting services in medical settings. I have proposed two assumptions for the future development of bilingual health communication. First, I believe that it is necessary to differentiate medical interpreters into different categories. I have provided a tentative categorization of medical interpreters (i.e., chance interpreters, untrained interpreters, bilingual health care providers, on-site interpreters, and telephone interpreters) because I believe that these different categories of interpreters have distinct characteristics that may lead to differences in their ideology and practice of medical interpreting. I believe that further research is necessary to understand whether such categorization is effective in distinguishing the different characteristics of medical interpreters; it may be that some categories can be collapsed into one (e.g., chance interpreter and untrained interpreter) or that some categories needed to be defined differently. However, this tentative categorization is at least the first step in recognizing the complexities of medical interpreters and the intricacies of bilingual health communication.

The second assumption I have proposed concerns the interrelationships between participants of bilingual health communication: Each participant in bilingual health communication is only a link in the triadic communication and is capable of influencing other participants' communicative performances as well as perceptions of the communication. This approach allows researchers to use a broader view in examining problems and developing solutions related to interpreter-mediated communication. In essence, this assumption allows researchers to develop communication strategies for physicians to solve problems related to interpreters and patients, and vice versa.

A medical interpreter, as one of the three participants in bilingual health communication, has received the most, if not all, of the attention in interpreter-mediated medical conversations. Based on the power structure of the triadic communication that is inherent in bilingual health communication, the attention is well deserved. However, the attention on medical interpreters has failed to recognize the diversity of medical interpreters—as well as other participants' influences on bilingual health communication. As a result, researchers are confronted with conflicting data without good explanations or are unable to develop solutions to improve bilingual health communication. This article provides a new approach in conceptualizing bilingual health communication, emphasizing the differences of medical interpreters as well as the interrelationships among all participants in bilingual health communication. By doing so, perhaps researchers will finally be able to provide theoretical explanations for the phenomena in bilingual health communication and to develop practical and effective strategies to improve the quality of bilingual health communication.

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