Interpreters as co-diagnosticians: Overlapping roles and services between providers and interpreters

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Abstract

This study examined medical interpreters' practice of the co-diagnostician role and further explored its practical, institutional, and ethical implications. Twenty-six professional interpreters (of 17 languages), 4 patients, and 12 health-care providers were recruited for this study, which involves participant observation and interviews undertaken in the Midwestern US. Constant comparative analysis was used to develop themes of interpreters' communicative practices. Interpreters justified their role performances by claiming the identity of a member of the health care team and their work as part of the team effort. Their communicative strategies as a co-diagnostician reflect their preconception of the social hierarchy of health-care settings and the emphasis on diagnostic efficacy. I have identified five strategies for the co-diagnostician role. These were assuming the provider's communicative goals; editorializing information for medical emphasis; initiating information-seeking behaviors; participating in diagnostic tasks; and volunteering medical information to the patients. Although many strategies can be attributed to interpreters' effort to conserve providers' time and to bridge the cultural differences, they also pose risks to patients' privacy, clinical consequences, and provider–patient relationships.
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Keywords: Bilingual health communication; Medical interpreting; Cross-cultural health care; Medical interpreters; Interpreter-mediated interactions; Health communication; USA

Introduction

The role expectations for medical interpreters are very different from that of other types of health-care providers. Generally speaking, providers are expected to take initiatives in developing an empathic relationship with and ensuring the quality of care for the patients (Cooper & Tauber, 2005). In contrast, interpreters are conceptualized as invisible machines or 'conduits'. The codes of ethics for interpreters and physicians both envision interpreters in the conduit role, relaying verbatim information and deferring the control of the communication to the provider and the patient (Dysart-Gale, 2005; Leanza, 2005). Medical interpreters are discouraged from developing relationships with patients or making active judgments to facilitate provider–patient communication (Hsieh, 2006). Although certain behaviors, such as developing

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rapport with patients, may seem natural for providers, interpreters are trained to avoid any verbal, physical, or emotional interactions with the patient without the presence of providers: they are only the voice of others (Hsieh, 2006). Hsieh (2006) found that interpreters reported distress because they had to refrain from non-conduit behaviors (e.g. comforting patients) that may improve the patients' quality of care. Interpreters' failure to follow a conduit model often is viewed as a transgression that may warrant termination of their jobs (Kaufert & Koolage, 1984).

Researchers, however, have noted that interpreters are hardly neutral participants in medical encounters. Interpreters' communicative strategies often are intentional and purposeful acts to manage provider–patient interactions (Hsieh, 2006). Interpreters actively conduct various types of appraisals in provider–patient interactions (Bolden, 2000; Hatton, 1992). Angelelli (2004) noted, "[We] witnessed interpreters orchestrating moves and coordinating information-based relations between speakers. [...] [We] saw interpreters attending simultaneously to structural, cultural, interactional, and linguistic difficulties [in interpreted communicative events]. They constantly balance how to talk and how not to talk about things" (p. 103). In short, despite the role expectations of physicians and interpreters' codes of ethics, interpreters consistently were found to assume specific roles that influence the process and content of the provider–patient interactions.

Based on my own research and the literature on bilingual health communication, it became clear to me that interpreters, at times, assume a specific role that enabled them to provide services typically associated with providers. I use *co-diagnostician* to describe this role, highlighting (a) interpreters' active involvement in the patients' diagnostic and treatment process and (b) the overlapping roles and services between providers and interpreters. Davidson (2000) first coined the term, *co-diagnostician,* and noted that interpreters actively evaluate information for its value and interpret accordingly without informing others about their information screening process (i.e., acting as *covert* co-diagnosticians). Davidson, however, did not elaborate on this role. In fact, there has been no systematic examination of, or theoretical framework, for the co-diagnostician role. Several researchers have noted that interpreters systematically and intentionally enact behaviors that overlap with providers' responsibilities and services (e.g., Angelelli, 2004; Bolden, 2000). However, these incidents were not perceived as specific role performances and were reported as anecdotes. For example, Angelelli (2004) noted instances in which interpreters gave advice that was not given by the physician and assumed the provider's role in obtaining medical history and giving medically related instructions. Angelelli argued that these behaviors were necessary to successful provider–patient interactions.

My objective for this study is to problematize the co-diagnostician role by critically examining the practices and the consequences of this role. By juxtaposing interpreters' practice and narratives, I will examine interpreters' practice of and rationale for this role and the underlying factors that influence the co-diagnostician behaviors. The typology of co-diagnostician behaviors presented here serves two major functions. First, it provides a framework to examine the roles and services of interpreters. Second, it allows researchers to explore the ethical and practical guidelines for interpreters' roles and functions in health-care settings.

The co-diagnostician role is defined by interpreters adopting strategies that extend beyond interpreters' functions in bridging the linguistic and cultural differences and overlap with providers' responsibilities and functions. I used three criteria to identify the co-diagnostician role: an interpreter actively (a) deviates from the conduit role, (b) aligns with the providers (as apposed to the patients or the health-care institution), and (c) assumes responsibilities typically associated with providers (e.g. diagnosing the illness, educating patients, or providing support). A co-diagnostician role allows interpreters to take initiatives to ensure a patient's quality of care, whereas a conduit role argues that the quality of care is the responsibilities of the providers (not the interpreters). In this role, an interpreter assumes "the same (symbolic) position as the health care provider" (Leanza, 2005, p. 171).

Many co-diagnostician strategies would be considered as interpreting errors in a recent study, in which 63% of the interpreting errors were found to have potential clinical consequences (Flores et al., 2003). It is important to recognize that as interpreters actively manage the provider–patient interactions, they inevitably infringe on others' control over the medical encounters. Interpreters generally have minimum training in soliciting, screening, and evaluating medical information. As researchers highlight the active roles of interpreters (Angelelli, 2004; Bolden, 2000; Davidson, 2000), it is important not to downplay the danger of the interpreter's problematic behaviors. To effectively conceptualize interpreters' active roles, a careful examination of the ethical and practical implications of these roles is urgently needed (see Hsieh, 2006).

Method

This study is a part of a larger study that examines the roles of medical interpreters. The same data were used in an earlier paper to examine interpreters' experience of role conflicts in health care settings (Hsieh, 2006). This study focuses on the particular role of co-diagnostician, investigating its theoretical and practical implications. The data include participant observation from a 1-year ethnographic study and in-depth interviews. I recruited interpreters from two interpreting agencies in the Midwestern United States. Both agencies view medical interpreting as their primary task and have contractual relationships with local hospitals. Interpreters included in this study are all considered *professional* interpreters (as opposed to informal or untrained interpreters, such as family members and friends). The majority of interpreters (17 out of 26) have participated in a 40-h course developed by the Cross Cultural Health Care Program, which has been viewed as an industry-recognized training for professional interpreters. Those who had not attended the course either had passed certification programs of individual hospitals or had acted as trainers in education programs for medical interpreters.

For the ethnographic study, I recruited two Mandarin Chinese interpreters, 4 patients, and 12 providers. I shadowed the interpreters in their daily routines and audio-recorded their interactions with the patients and the providers. In total, 12 medical encounters (each lasting 1–1.5 h) were observed, audiotaped, and transcribed. I also took fieldnotes (e.g., nonverbal behaviors and contextual features) to supplement the audio data. Three months after the beginning of the ethnographic study, I recruited 26 interpreters (from 17 languages) and conducted 14 individual and 6 dyadic interviews (each lasting 1–1.5 h). I relied on my experience as a medical interpreter and my prior data collected during the participant observation to navigate through the design, preparation, and interview process. The research questions focused on exploring interpreters' understanding and practice of their roles. Two research assistants and I used the three criteria discussed earlier to define the co-diagnostician role. We used constant comparative analysis for the data analysis (Strauss & Corbin, 1998), coding the data for dominant themes and categories.

The limited number of interpreters does not allow me to make generalizations about culturally specific patterns or cultural differences. I included cultural information when the interpreter explicitly referenced it to explain his or her behaviors. The data presented here were first observed in interpreters' practice and further explored in the interviews. I juxtaposed interpreters' practices and narratives to illustrate the co-diagnostician behaviors and the corresponding rationale. However, the interpreters' practices and narratives do not always match perfectly because (a) the interview contains better examples than the participant observation, (b) interpreters may be reluctant to discuss certain practices, and (c) interpreters were unable to explain their rationale for certain behaviors (Atkinson, 1997). Also, the interview data reflect the interpreters' perception (as opposed to the exact reality) of the events (Atkinson, 1997). In the transcript, health-care providers are denoted as H, interpreters as I, and patients as P. I also have assigned pseudonyms for all participants. I *italicized* some texts to highlight my emphases.

Results

Five strategies were identified as co-diagnostician behaviors: (a) assuming the provider's communicative goals, (b) editorializing information for medical emphases, (c) initiating information-seeking behaviors, (d) participating in diagnostic tasks, and (e) volunteering medical information to the patients. The identification of these behaviors should not be perceived as my support for these strategies. However, it is important to identify these behaviors and understand interpreters' rationale so that researchers can develop practical and effective solutions to the possible consequences.

Assuming the provider's communicative goals

Speakers utilize a variety of linguistic resources (i.e., *communicative strategies*) to fulfill their *communicative goals* (e.g., task, identity, and relationship goals). The distinction between communicative goals (i.e., the speaker's intended objectives) and communicative strategies (i.e., the speaker's linguistic practice) is

particularly important for interpreters. An interpreter's nonconduit behaviors may be motivated by their focus on the primary speaker's communicative goals.

With this strategy, the interpreter identifies and assumes the provider's communicative goals. The interpreter may evaluate whether the provider's communicative goals have been met and decide to independently accomplish the provider's goals. For example, an interpreter may determine that the patient's answer was not complete and initiate information re-seeking on behalf of the provider. In Extract 001, the interpreter (Christie) helped the provider (Heather) seek information from the patient (Paula) about the newborn's feeding pattern.

Extract 001

```
101        H: And she's giving how long and how frequent?

102        I: 那你每一次大概給她餵多久，一天多少次？

103           (How long do you feed her each time and how many times a day?)

104        P: 他因為我不知道是不是她不夠力，虛。她都要 40 分鐘

105           (I am not sure if she does not have enough strength or [if she is]
106           weak, but she takes about 40 minutes.)

107    →   I: 你說每次要 40 分鐘。然後一天大概要幾次？

108           (You said 40 minutes each time, and how many times a day?)

109        P: 我兩個小時就餵一次

110           (I feed her every two hours.)
111        I: Okay. Every two hour, every time, probably around 40 minutes. And mom
112           was concerned, maybe because the baby's- I mean it's very difficult
113           to suck the milk or what, it takes 40 minutes every time.
```

Paula only partially answered Heather's question (i.e., how long; line 104). Rather than interpreting the partial answer, Christie re-initiated the provider's question in line 107 ("How many times a day?") so that the provider would obtain a complete answer for her question ("How long and how frequent?"; line 101). A conduit role expects the interpreter to provide the partial answer and defer to the provider to evaluate whether the information was sufficient, arguing that it is the provider's responsibility to manage the quality of information exchanged. However, Christie adopted the providers' objectives, decided that the patient's answer was incomplete, and pursued the additional information by herself: in other words, Christie overtook the provider's responsibility in evaluating the quality of information.

Interpreters' persistence in obtaining information sought by the provider reflects their concern for the providers' communicative goals. Extract 001 is a good example because the interpreter's linguistic strategy deviated from the conduit role but maintains the provider's communicative goal. Several interpreters also commented that they would find a way to obtain the information needed by the provider independently. Silvia explained, "I try to get an answer, unless the doctor says, 'What's going on?' Then, I said, 'The patient is not answering,' and I continue to ask the same question." Interpreters in this study talked about the pressure to conserve the providers' time and used this strategy to manage the flow and the length of the interaction more efficiently.

Interpreters' effort to assume the providers' communicative goals and bridge cultural differences may lead to problematic practices. For example, Ulysses talked about his strategies when American physicians' comments may be considered problematic in his Muslim culture. He explained,

> [The doctors] ask about sexual contacts outside of the marriage, which is a really really very bad question. It is very offensive. For Muslim ladies in particular. […] I said, "Does *your husband* go to other women?" […] Even though they might be practicing [adultery], they do not talk. But there is a way to make it soft, just ask another way.

Ulysses intervened into the diagnostic process by changing the providers' actual question (e.g., "Do *you* have other sexual partners?") to what he considered a more culturally appropriate one. However, these are essentially two different questions. Although Ulysses assumed the provider's communicative goal (i.e., assessing the risk level of the patient's sexual history), his strategy clearly impinged upon the provider's control over the medical encounter.

Editorializing information for medical emphases

Editorializing information for medical emphases is categorized as a co-diagnostician behavior because the interpreter, rather than the provider, decides whether certain information has medical value or not. Interpreters who adopt this strategy may ignore or downplay the providers' actual communicative goals and focus solely on medically related information.

Bolden (2000) found that interpreters consistently and covertly editorialize *patients'* utterances for medical emphases, which also is observed in the current study. Interpreters in this study also talked about how they explicitly inform the patients about what information is appropriate in a medical encounter. For example, Vicky mentioned that patients from her culture (i.e., Vietnam) often are not knowledgeable about the appropriate content and sequence of a medical encounter. Vicky explained,

> If [the patients] feel comfortable with you, they will tell you, "Please tell the doctor this, this, this." [I would tell them,] "Okay. Slow down. Let's talk about today's symptoms. Not the symptoms we have a week ago, a month ago. […] *Don't bother him with too much information.*"

Vicky managed the patient's narrative by informing the patient about what information should be given to the provider. This suggests that interpreters may not only editorialize the speakers' narratives during a medical encounter but also exert control over the speakers' communicative behaviors (i.e., informing the patient about what to say and what *not* to say). Vicky acted as a co-diagnostician by controlling the communicative process of the medical encounter.

I also want to highlight some findings that have not been noted in earlier studies. First, interpreters in this study were observed to editorialize the *provider's* utterances for medical emphases as well. In Extract 002, the provider (Hannah) tried to educate the patient (Pam) about diabetes. The provider's identity has been changed significantly by the interpreter's (Claire) editorialized message:

Extract 002

```
201      H: [in an animated and caring tone] When you have diabetes, it's very
202         important for you- because you are not just this baby's mother, you
203         are this baby's nurse, doctor. Because when you do the right thing,
204         your sugar is controlled. It's very important for you to eat right
205         diet, take care of, you know, your sugar. If you don't, you know, you
206         can affect your baby. It's very important; you are not just a mother.
207         You are the nurse of this baby. And you are the doctor for the- The
208         doctor cannot do anything. The nurse cannot do anything.

209      I: 你現在懷孕，你就是胎兒的醫生和護士，所以你要遵從醫生告訴你怎麼做，飲食要注意。

210         要好好控制飲食。

211         (You are now pregnant and you are the baby's doctor and nurse. You need
212         to follow doctor's instructions. Pay attention to your diet. Control
213         your diet.)
```

Although the literal meaning—the content—of the providers' message (line 201–208) and the interpreters' message (lines 209–210) appear to be similar, the interactional meaning—the meaning in context—of the messages are quite different (Tracy, 2002). The provider's tone was animated and caring. The repetition of the

message "It's very important …" three times is *not* redundant as it serves a prosodic function. Essentially, this is a role performance that highlights the provider's warm personality and relationship with the patient. In contrast, the interpreter's message was much more concise. The provider's prosodic performance was changed into a directive: "It's very important for you to eat right diet, take care of, you know, your sugar. If you don't, you know, you can affect your baby" was changed to "Pay attention to your diet. Control your diet". The interpreter focused on the medical (as opposed to interpersonal) aspects of the provider's narratives, creating a more professional, authoritative identity for the provider.

Interpreters' focus on medical information may cause them to ignore the provider's other communicative goals (e.g., interpersonal goals). In Extract 003, a nutritionist (Hilda) educated Pam about diabetes and Claire was the interpreter.

Extract 003

```
301        H: oh, oh. Has she ever heard of carbohydrate?
302        I：你有沒有聽過碳水化合物？
303           (Have you heard of carbohydrate?)
304        P：(laugh)喔，我知道 （笑氣音）
305           [laugh] (Oh.hhh. I know. hhh.)
306        I: yes.
307     → H: Okay. Good, cause sometimes people don't know what it is. That's why
308           I asked. (laugh)
309        (.5)
310        H: Okay. These are the groups- Carbohydrate is what raises blood sugar.
311        I：這一類，就是全都是碳水化合物，提高糖分的
312           (This group. It's all carbohydrates and raises blood sugar.)
```

The patient's laughter and tone of voice (line 304) indicates that the patient considers the provider's question awkward, funny, different, or face-threatening (Haakana, 2002; Jefferson, 1984). The providers' response (lines 307–308) was a strategy to reduce the face threat by explaining to the reason for her question (Jefferson, 1984). The silence after the provider's comment (line 309) suggests that the provider may be waiting for the interpretation, which was not provided. The interpreter ignored the provider's effort to reduce the face threat, which was meaningful to the provider–patient relationship but not to the diagnostic purpose.

An interpreter's active evaluation of other speakers' communicative goals also may be reflected in their emphases in the communicative process. For example, an interpreter may assume a provider's diagnostic goals and evaluate the types of information to be interpreted in the medical encounter. In Extract 004, the medical encounter involves a newborn baby's first follow up (the mother is Paula). The provider (Heather) was seeking information about the baby's sleeping patterns. The interpreter's (Christie) strategies suggested that she focused on medically related information.

Extract 004

```
401        H: Okay, where's baby's sleeping?
402        I：小孩子在哪裡睡？
403           (Where does the baby sleep?)
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404        P: 在 baby 床。

405           (The baby bed)
406        I: The baby bed.

407   →    H: Bes- okay, Bassinet. All right. How's baby sleeping?

408   →    I: 小孩子睡得情形怎麼樣？

409           (How's baby sleeping?)
410        H: Overnight?

411        I: 晚上的時候？

412           (At night?)
413        H: When the baby awakes for feeding, how many hours she's (awake)?

414        I: 如果說他半夜起來要喝奶的時候，起來大概多久？

415           (If she wakes up at night for feeding, how long is she awake?)

416        P: 一個小時

417           (One hour.)

418        I: 那一次-半夜裡面會起來幾次？

419          (Once every- How many times is she awake?)

420        P: 一次

421          (Once.)
422        I: One time in one night.
423        H: One time awakes.
424        I: Yeah.
425        H: That's good.
426        I: And then, probably one hour once she wakes up.
427        H: For one hour.
428        I: Hmm.
```

The interpreter disregarded the providers' information verification comment in line 407 (i.e. editorializing information for medical emphases). When the provider verified that the baby sleeps in a bassinet and continued the next question "How's baby sleeping?", the interpreter's next turn focused on the diagnostic-related information seeking (see line 408; "How's baby sleeping?"). An interpreter who focused on diagnostic-related goals may disregard information that is not diagnostically related; for example, comments that do not require the patients' response (see lines 423, 425, and 427) or comments that serve other goals, such as building rapport.

In all these examples, the interpreters editorialized the providers' utterances for medical emphases. Consistent with past studies, the interpreters in this study focused on information that is relevant to the patient's understanding of medical information but ignored information that does not appear to have clinical consequences. Interpreters' editorialization of providers' utterances also influenced the provider–patient relationship and the primary speakers' identity management.

Initiating information seeking for health information

Whereas (a) assuming providers' communicative goals requires interpreters to identify and adopt the providers' objectives and (b) editorializing information shows that interpreters actively evaluate and prioritize the primary speakers' narratives, initiating information seeking reflects interpreters' personal judgment about the necessary information in a medical encounter. Interpreters in this study initiated information seeking

about illness-related information when the providers were present. In Extract 004, the interpreter *initiated* a question to obtain more detailed information for diagnostic purposes. In line 413, the provider asked, "How many *hours* is she awake?" The patient answered, "one hour" (line 416). The sequence for the provider's question should have ended after the patient's comment; however, the interpreter then initiated further information seeking (line 418; "How many times is she awake?") without other speakers' prompting. Later, the interpreter provided information about the length of time *and* the frequency that the baby is awake (lines 422 and 426), which was more than the provider had originally requested (i.e., the length of time). This strategy is different from assuming the providers' communicative goals, which requires the interpreter to maintain the *providers'* conversational content and sequences. Initiating information seeking is about the interpreter pursuing information that he or she deems necessary. This is about the *interpreters'* evaluation of the communicative needs (e.g., the necessary content and sequence) for the medical encounter.

Interpreters also were observed to initiate information seeking without the presence of the provider. In Extract 005, a patient who is pregnant (Paula) asked the provider (Hilary) about stem cells, because it may be helpful to her first son's genetic illness. At this point, Paula only briefly mentioned her son's illness but did not provide any details. The provider left the room to find more information, leaving the interpreter (Christie) and Paula in the same room. Christie then initiated the conversation with Paula.

Extract 005

```
501    →    I：那他現在生活上面有什麼不方便嗎？
502            (Does he experience any incontinence in daily activities?)
503        P：他現在每年都去醫院照這個大腦
504            (He goes to the hospital to examine his brain every year now.)
505        I：照大腦
506            (Examining his brain.)
507        P：還有這個腎臟，還有這個眼
508            (And his kidney and his eyes.)
509    →    I：他會有什麼明顯的，比如說-
510            (Are there obvious- such as-)
511        P：他皮膚全部都一粒粒
512            (His skin is granular everywhere.)
513        I：硬硬的啊？
514            (Is it hard?)
515        P：很像這個小瘤
516            (Like the little wart.)
```

Later in the interaction, Christie asked for the official diagnosis and looked it up in a medical dictionary. The interaction between Christie and Paula is very similar to what would have happened in a medical history-taking session between a provider and a patient. One could argue that Christie asked for the information out of curiosity. However, Christie's later behavior of asking for an official diagnosis and looking it up in the dictionary suggested that these are purposeful behaviors to facilitate later interpretation.

Several interpreters talked about the difficulties of their tasks because, unlike providers and patients, who have access to the patients' medical history, an interpreter may interpret for cases without prior knowledge of the speakers. Many interpreters commented that working with a new patient is challenging. Sandra talked about her strategy to resolve the challenges,

[When I am alone with the patients,] I also ask them what are the reasons they are there? Do they have any problems? Because I know that all these are going to come up when I get into the office and it is going to be easier for me when I say, "Well, the patient is here for this reason." [...] *I think this is going to make it faster, the appointment.*

Actively seeking information from the patient allows Sandra to accomplish the communicative goals of (a) have more background knowledge about the medical encounter and (b) better control of the interpreting sessions. Other interpreters talked about how they request information about case history so that they can feel that they are included in the illness event, working as a team. Interpreters do not see these behaviors as overstepping the roles of providers; rather, they argued that the "chitchatting" allows them to prepare better for later interactions.

Participating in diagnostic tasks

When asked about their roles, many interpreters talked about their identity as a member of the health-care team. None of the interpreters, however, explicitly stated that they were involved in *diagnosing* the patient. In fact, I was not able to find any interpreters who explicitly talk about their rationale for this strategy. Several interpreters argued that adopting a conduit role protects them against malpractice lawsuits. Admitting to using this strategy may put interpreters at risk of lawsuits. However, as the interpreters talk about their roles and practices, the data suggest that they do participate in diagnostic tasks by collaborating with the provider to investigate information, examine physical symptoms, and even identify the specific illness.

Sandra talked about a situation where she was the only person who noticed a possible cause for the failure of a patient's infertility treatment. She explained,

[The patient] has been treated for ovaritis, but she was never treated for the glucose problem. The high glucose. Not until I was working there, I was the interpreter, I found out she has a history of diabetes in her family and she needed to be treated first as, like I said, a diabetic person. [...] *I think this is part of working as a team. Both of us are discovering what is going on.*

In Extract 006 the patient (Paula) is the same as the patient in Extract 001 and by this time, she has given birth to the baby. The provider (Heather) is examining the baby for the first time and the interpreter (Christie) initiated a comment that required the provider's attention.

Extract 006

```
601        H: She looks a little bit like (a rash). But I don't think that's a-
602        I: 她說她臉看起來有點紅腫
603           (He said her face looks like a bit reddish and swollen.)
604         [H examines the baby]
605    →   I: 膝蓋那邊也有一點 [points at the reddish spots on the baby's knees.]
606           (There's a little bit on her knees.)
607        H: Hmm?
608    →   I: I said, around the knees area.
609        H: Yes, she has here a rash.
```

In lines 605 and 608, the interpreter pointed out a symptomatic area—rash on the knees—that the provider failed to comment on. The interpreter used both verbal (line 608) and nonverbal (line 605) messages to participate in the diagnosing process, informing the provider about the location of the symptoms, which may be important to the diagnosis. Although similar behaviors may be performed by patients' family members, researchers need to look more closely at the consequences of the interpreters' behaviors; for example, the provider's perception and control of the provider–patient interactions when the interpreter participate in the diagnostic process. In the interviews,

interpreters also talked about similar experiences. For example, Vicky talked about an incident when the provider requested her presence after a long, frustrated interaction with the patient because the provider was unable to understand the patient's complaint and make an accurate diagnosis:

> So, I asked the mother, "What's the problem?" "Well, you know, it's itching at night." [I asked,] "How does it itch, okay? Does it run? You have blocks?" She said, "Yes." [I said], "*Well, the child has hives.*" […] So, the doctor gave her [name of a drug]. And that's it. […] So, you know, it's just hives. I used the Vietnamese term to describe it. "Yes," the mother said. I said, "Why couldn't you say it?" Because she wasn't sure if it was that.

In this particular incident, Vicky, rather than the physician, took the lead in obtaining a medical history. In contrast to the mother's hesitance to name the child's symptom, the interpreter, in fact, *named* the disease (i.e., hives). In addition, in Vicky's story, rather than challenging her diagnosis, the provider actually was appreciative of her assistance in identifying the illness and responded by prescribing the corresponding medication.

The interpreters talked about using the western, biomedical concepts to replace the patient's cultural-specific comments so that the providers can understand the illness. For example, Vicky explained,

> [The patients] would use terms that cannot even be translated in the English language. They would say, "I caught the wind." So, how do you understand that? "Caught the wind." It means she got a cold, she got it by standing at a place where the wind was passing by and she got a cold.

Finding the equivalent terminology of illness and illness symptoms in two different cultures and languages may seem intrinsic to interpreters' functions. In fact, interpreters in this study do not see this as a problematic behavior but a part of their duties in bridging the cultural differences.

Volunteering medically related information to the patients

By providing information independently, interpreters may help to conserve the providers' time. Some interpreters in this study noted that if they feel that the health-care services that are provided are not culturally appropriate or sensitive, they take initiatives in mending the problems. For example, Roland explained,

> I had to talk to [a HIV patient] because the social worker at [the hospital] really didn't do much at a cultural level. […] Since [the patients] know that I am from [name of agency], they often call and ask for other things. That was the case when they asked me to meet with them separately and explain more what actually was said in the appointment because they were shocked and they lost the ability to comprehend clearly.

Providing emotional support is not an expected performance of interpreters' code of ethics (cf. Dysart-Gale, 2005). Roland's comment about his contact with the patients outside of the medical encounter raised concerns about what type of information is exchanged in those settings. It is almost inevitable that in addition to emotional support, their interactions will include discussions about treatment options and medical advice. Christie explained, "I usually try to do my best to help the patients. So, besides translating in the doctor's office, I have to—*through my experience, I advice them this, I advice them that*. I counsel them to feel better. I do." Sandra mentioned an incident where a first-time mother was overly concerned about the baby's symptoms and was frustrated with the physician's lack of patience. She explained,

> I could tell that [the patient] was flustered. So, I told her, "Listen, I have had kids and my kids are the same color as your kids. And my kids got that, and it's nothing to worry about. It's a pigmentation that they get when you have a darker skin and you are under the sun. That there are some areas that turn brown." [… The doctor] didn't explain and *I kind of balanced that*.

In short, interpreters in this study see these behaviors as complementary, rather than overlapping or competing, roles and responsibilities to that of providers, arguing that their experience and cultural background allow them to provide services when they perceive the providers are not able to provide optimal care due to limited time, cultural differences, or neglected information. In Extract 007, the interpreter (Christie) initiated the following conversation with the patient (Paula) and summarized the main points of the provider's (Heather) instruction after the provider left the exam room.

Extract 007

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701              [Provider left the room]

702        I: Oh, okay. Okay. 她還要給另外一個醫生來看。

703           (Oh, okay. Okay. She is going to bring another doctor to examine the
704           baby.)

705        P: 喔, okay.

706           (Oh, okay.)

707        I: 這個 form 是今天的 [hands over the form that the provider gave her

708           earlier]
709           (This form is for today.)

710        P: 兩點半，這是今天的？

711           (Two-thirty. Is this for today?)

712        I: 對啊，九月十二啊 [checks the date on the form]

713           (Yeah, September 12.)

714        P: 是不是同一個 appointment 還是另外一個？兩點半還有嗎？還要來嗎？

715           (Is it the same appointment or is it another appointment? Is there
716           an appointment at 2:30? Should I come again?)

717        I: 沒有，這就是你今天的門診。

718           (No, this is your appointment today.)

719        P: 喔，okay，她搞錯時間了

720           (Oh, okay, she/he mixed up the time.)

721   →    I: 其實，我跟你說那個什麼-凡士林，我不曉得啦，反正醫生是說如果你覺得需要你就去買這

722           個藥準備，如果他有覺得皮膚有時候太乾燥，皮膚有-表皮有脫落，或是他覺得有點癢、會

723           不舒服的時候，你才考慮擦。但是我知道，有時候他們是用凡士林，反正你看情形嘛。反正

724           她說主要是你要保持那部位要乾燥。對。尤其是晚上睡覺前，你看看那尿片是乾的，不要讓

725           她溼溼的這樣睡得話，他就比較容易紅疹。

726           (Actually, Let me tell you- Vaseline. I don't know. Basically, the
727           doctor said that if you feel that is necessary, you should buy the drug.
728           If it feels that the skin is too dry, the skin- there's scales on the
729           skin, or that the baby is itching or uncomfortable, you should use it.
730           But I know that sometimes, they use Vaseline. It's your judgment call.
731           Basically, she mainly wanted you to keep that area dry. Right.
732           Especially before the baby goes to bed at night. Make sure that the
733           diaper is dry. Don't let her sleep in a wet diaper. The baby is more
734           likely to get rash that way.)

735        P: 嗯

736           (Hmm.)
```

In this interaction, the interpreter conserved medical resources in two ways. First, the interpreter independently provided, verified, and confirmed information for the patient (lines 702–720), which is a task that is normally done by the provider and helps to reduce the actual encounter time with the provider. The interpreter's comment in lines 721–725 serves at least two functions. First, the interpreter summarized the earlier provider–patient conversation, which allowed the patient to better understand the diagnosis and treatment and helped the providers to conserve their time checking the patient's understanding. Second, the interpreter also brought in a new option, Vaseline, which was not mentioned by the provider (see line 730, ''But I know that sometimes they use Vaseline'').

None of the interpreters in this study explicitly claimed that they provide medical information to the patients. The data from both participant observation and interviews, however, suggest that they do. It is challenging to solicit interpreters' rationale for such behaviors because no one would agree that these are appropriate behaviors (i.e. this behavior directly contradicts their training). Interpreters talked about their frustration and helplessness when the providers' lack of communicative competence leads to substandard care (also see Hsieh, 2006). Because interpreters provide services to many patients, it is possible that they are knowledgeable about the appropriate content and successful interactional sequences and apply them during problematic provider–patient interactions.

Discussion

Interpreters' understanding of their roles has a significant impact on their management of the dynamics of the provider–patient interactions and the role performance of other speakers (Hsieh, 2004). In the interviews, the interpreters often justified the co-diagnostician role by stating that providing quality health-care service is a team effort and they are part of the team. Researchers have highlighted the importance of collaboration between health-care providers, providing services as a team (Dieleman et al., 2004). From this perspective, it seems that the interpreters' co-diagnostician role is not only legitimized but also justified by situating themselves as a member of the health-care team. Nevertheless, team collaboration in health-are settings is not without conflicts. Past studies have shown that understanding individuals' roles and functions is critical to the team satisfaction and collaboration (Dieleman et al., 2004).

The problem of the overlapping roles and services between interpreters and providers, however, is a complicated issue. First, interpreter-mediated interactions imply that the provider's identities and roles are mediated by the interpreter. The current study suggests that interpreters assume providers' goals and focus on diagnostic efficiency. Because identities and communicative goals are often inferred rather than explicitly discussed (Tracy, 2002), it is unclear how the interpreters identify, evaluate, and assume the providers' communicative goals. Do interpreters identify the providers' goals by paying close attention to the dynamic, emergent interactions or by presuming the providers' expected roles?

This study suggests that interpreters' preconception of providers' expected roles, rather than their assessment of the emergent interaction, may have a significant influence on their co-diagnostician role. Interpreters in this study situated the providers in a traditional, authoritarian role. The finding of interpreters' emphasis on providers' goals (Extract 001) and medical information (Extract 004) is also supported by past literature (Bolden, 2000; Davidson, 2000). In addition, the interpreters were found to ignore the provider's effort to reduce face threats (Extract 002) and to impose an authoritative identity on the provider (Extract 003). These behaviors were independent of the providers' actual communicative goals during the interactions and reinforced the hierarchy in health-care settings (i.e., giving the physicians a higher status). The emergence of patient-centered care means that interpreters' failure to reflect providers' effort to develop an equal, collaborative relationship with the patients may pose a significant challenge to the providers' management of the provider–patient interactions.

The second problem for the overlapping roles and services between providers and interpreters is interpreters' practice *outside* of a medical encounter. An important finding of the current study is that interpreters were found to overtake providers' responsibilities outside of the medical encounter. In past studies, researchers have noted co-diagnostician behaviors *during* a medical encounter (Angelelli, 2004; Davidson, 2000). There are no studies that examine interpreters' communicative behaviors outside of a medical encounter, which reflects the prevalent ideology of conceptualizing interpreters as a role that only is

meaningful in provider–patient interactions. However, interpreters often spend a significant amount of time with patients alone (Hsieh, 2006). This study suggests that it is important to examine interpreters' roles and functions both inside and outside of medical encounters.

Researchers have suggested interpreters' familiarity and knowledge of medical encounters as reasons for their active involvement (Angelelli, 2004; Hsieh, 2006). The current study, however, highlights some important issues that warrant researchers' careful consideration. For example, interpreters were found to provide information and advice that were not provided by providers in the medical encounter (Extract 007). Interpreters, however, are not medical experts and what they perceived as similar illnesses between patients may, in fact, to be quite different. A patient is not in a position to evaluate the quality of the information and may still believe that the advice is given by the provider, rather than the interpreter. Alternatively, a patient may interpret this as the interpreters' willingness to act as patient advocates or as the sign of the providers' lack of competence. In addition, there is no system in place to ensure the quality of information that is independently provided by the interpreters, which may increase the risk of malpractice lawsuits.

Interpreters' outsider position also creates challenges in their interpreting task and motivates them to seek information about the patient's medical history (e.g., Extract 005). It is possible that by initiating information seeking when they are alone with the patient, an interpreter may be able to conduct the interpreting session with greater accuracy and efficiency. However, because a patient may perceive the interpreter as their advocate (Kaufert & Koolage, 1984) and a health professional (i.e., an authority figure), the patient may feel obligated to provide privileged information. As a result, the interpreters' information seeking behaviors may become an intrusion to the patient's privacy.

The third problem is the difficulties in determining interpreters' responsibilities in mediating cultural differences in health-care settings. For example, interpreters' effort to juxtapose the western biomedical ideology and the patient's distinctive illness ideology may be problematic. When Vicky interpreted "caught the wind" as "having a cold," the interpretation seems straightforward. However, illness ideology can be quite different across cultures. For example, researchers noted that the compliant of weak-kidney from a Vietnamese male patient is "a cultural syndrome, a folk illness designation for such disorders as erectile dysfunction, PTSD, depression, and anxiety" (Hinton, Nguyen, Tran, & Quinn, 2005, p. 130) that "cannot simply be glossed as some Western disorder" (p. 133). Should the interpreter provide the illness ideology of the patient's culture to the provider or explain the patient's complaint in a biomedical language that the provider can understand? Should the providers expect the interpreters to be knowledgeable about the complexity of the cultural syndrome, which requires them to be *medical* (as opposed to linguistic or cultural) experts of the folk illness? What are the appropriate and effective ways for an interpreter to collaborate with providers to examine whether the symptoms were resulted from biological or cultural causes? Answers to these questions have considerable implications for interpreters' code of ethics and trainings.

The questions I raised here are not only questions for the appropriate roles and responsibilities for interpreters but also for providers. The answers should not be a universal rejection of the interpreters' co-diagnostician behaviors; rather, researchers should consider when, where, and what types of the co-diagnostician behaviors are appropriate or inappropriate. The typology presented here provides the first step to answer these questions. By identifying the areas that interpreters' roles may overlap with that of providers, researchers can examine the causes, potentials, and consequences of these communicative strategies more specifically.

From an institutional perspective, researchers should examine the institutional expectations and available resources for medical interpreters. For example, it is unrealistic to expect interpreters to conserve the providers' time and workload without allowing them to actively evaluate and manage the content and the process of provider–patient interactions and take initiatives to ensure the quality of care. On the other hand, to consider the possibilities for interpreters to adopt some of the co-diagnostician behaviors, researchers need to (a) examine the ethical guidelines for these behaviors, (b) explore the training required for the interpreters' expected roles, and (c) investigate the institutional resources and barriers that may facilitate or hinder the interpreters' performance.

From an interpersonal perspective, researchers need to examine the collaboration between the provider and the interpreter in managing the communicative process. For example, a provider may have different role expectations for the interpreter depending on the communicative needs of the contexts. From this perspective,

researchers should examine (a) the variables that influence the providers' role expectations for the interpreters, (b) the contextual cues that motivate interpreters' choice of strategies, and (c) the strategies that are effective in signaling the providers' communicative goals and role expectations.

In conclusion, interpreters' communicative strategies often are motivated, intentional behaviors that aim to meet the communicative needs of the contexts. As researchers recognize the complexity of interpreters' roles and functions in health-care settings, the communicative model for interpreter-mediated interaction should provide realistic role expectations for interpreters and effective strategies to manage the communicative needs of the individuals involved in the medical encounter.

Acknowledgments

References

Angelelli, C. V. (2004). *Medical interpreting and cross-cultural communication*. Cambridge, UK: Cambridge University Press.

Atkinson, P. (1997). Narrative turn or blind alley? *Qualitative Health Research*, *7*, 325–344.

Bolden, G. B. (2000). Toward understanding practices of medical interpreting: Interpreters' involvement in history taking. *Discourse Studies*, *2*, 387–419.

Cooper, R. A., & Tauber, A. I. (2005). Viewpoint: New physicians for a new century. *Academic Medicine*, *80*, 1086–1088.

Davidson, B. (2000). The interpreter as institutional gatekeeper: The social-linguistic role of interpreters in Spanish–English medical discourse. *Journal of Sociolinguistics*, *4*, 379–405.

Dieleman, S. L., Farris, K. B., Feeny, D., Johnson, J. A., Tsuyuki, R. T., & Brilliant, S. (2004). Primary health care teams: Team members' perceptions of the collaborative process. *Journal of Interprofessional Care*, *18*, 75–78.

Dysart-Gale, D. (2005). Communication models, professionalization, and the work of medical interpreters. *Health Communication*, *17*, 91–103.

Flores, G., Laws, M. B., Mayo, S. J., Zuckerman, B., Abreu, M., Medina, L., et al. (2003). Errors in medical interpretation and their potential clinical consequences in pediatric encounters. *Pediatrics*, *111*, 6–14.

Haakana, M. (2002). Laughter in medical interaction: From quantification to analysis, and back. *Journal of Sociolinguistics*, *6*, 207–235.

Hatton, D. C. (1992). Information transmission in bilingual, bicultural contexts. *Journal of Community Health Nursing*, *9*, 53–59.

Hinton, D. E., Nguyen, L., Tran, M., & Quinn, S. (2005). Weak kidney and panic attacks in a traumatized Vietnamese male. *Culture, Medicine and Psychiatry*, *29*, 125–135.

Hsieh, E. (2004). *"I am not a robot!": Interpreters' roles and communicative goals in health care settings*. Paper presented at the annual meeting of National Communication Association, Chicago, IL, November.

Hsieh, E. (2006). Conflicts in how interpreters manage their roles in provider–patient interactions. *Social Science & Medicine*, *62*, 721–730.

Jefferson, G. (1984). On the organization of laughter in talk about troubles. In J. M. Atkinson, & J. Heritage (Eds.), *Structures of social action: Studies in conversation analysis* (pp. 346–369). Cambridge, UK: Cambridge University Press.

Kaufert, J. M., & Koolage, W. W. (1984). Role conflict among 'culture brokers': The experience of native Canadian medical interpreters. *Social Science & Medicine*, *18*, 283–286.

Leanza, Y. (2005). Roles of community interpreters in pediatrics as seen by interpreters, physicians and researchers. *Interpreting*, *7*, 167–192.

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage.

Tracy, K. (2002). *Everyday talk: Building and reflecting identities*. New York: Guilford.