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The Roles of medical interpreters in intensive care unit communication: A qualitative study

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Abstract

Objectives: To understand healthcare team perceptions of the role of professional interpreters and interpretation modalities during end of life and critical illness discussions with patients and families who have limited English proficiency in the intensive care unit (ICU).

Methods: We did a secondary analysis of data from a qualitative study with semi-structured interviews of 16 physicians, 12 nurses, and 12 professional interpreters from 3 ICUs at Mayo Clinic, Rochester.

Results: We identified 3 main role descriptions for professional interpreters: 1) Verbatim interpretation; interpreters use literal interpretation; 2) Health Literacy Guardian; interpreters integrate advocacy into their role; 3) Cultural Brokers; interpreters transmit information incorporating cultural nuances. Clinicians expressed advantages and disadvantages of different interpretation modalities on the professional interpreter's role in the ICU.

Conclusion: Our study illuminates different professional interpreters' roles. Furthermore, we describe the perceived relationship between interpretation modalities and the interpreter's roles and influence on communication dynamics in the ICU for patients with LEP.

Practice implications: Patients benefit from having an interpreter, who can function as a cultural broker or literacy guardian during communication in the ICU setting where care is especially complex, good communication is vital, and decision making is challenging.

Keywords

Critical care; Critical illness; Limited English proficiency; Patient care team; Patient care; Interpreter; End-of-life; Decision making; Interpreter modality; Interpreter mode

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1. Introduction

Globally, immigration has risen in recent years, resulting in increasing numbers of patients experiencing language barriers in the healthcare systems within their destination countries.[1-9] Language barriers are a leading cause of health disparities.[10-15] and negative health outcomes as well as decreased patient satisfaction.[16-26]

In the United States, over 25 million people have limited English proficiency (LEP) and that number continues to increase.[27] Research in the US has demonstrated that professional interpreters in healthcare can reduce language barriers, improve patient-clinician interactions, and also provide emotional support to patients and families.[28, 29] Interpretation over time has been perceived as a "simple one-to-one machine-like process",[30] however the literature highlights the importance of interpreters as part of the clinical team to overcome health disparities and improve the quality of care for patients with LEP.[31-36] When interpreters are involved, communication errors decrease, and cultural awareness, patient understanding as well as satisfaction with communication increase.[37-39] As well as benefitting patients, interpretation also offers clinical teams the opportunity to expand their knowledge and understanding of a range of cultural and social perspectives.[40] The literature characterizes interpreters as communication support, interlocutors, information providers, mediators, finally creators of safe environments for patients.[35, 41-46] In practice, professional interpreters are not always neutral and they may actively contribute as co-constructors during clinical interactions.[41, 47]

Alternative interpreting modalities may be used in situations when in-person professional interpreters are not available. These modalities include videoconference, telephone interpreters, family members, and bilingual staff who may be used to "get by".[48-52] There is overwhelming evidence that in-person professional interpreters are the preferred and recommended choice, however many studies indicate that they are underutilized in practice.[6, 21, 37, 38, 53-64]

Communication and decision making may be one of the most important components of ICU clinical practice.[65] Ideally decision making should be a collaborative endeavor in the ICU setting but often it is not.[66]

ICU patients are usually too ill or sedated to express actively their treatment preferences and values, therefore, family members play an important role in decision making in the ICU setting.[67] Even among those with language proficiency studies have shown that physician-family communication in the ICU was complicated and often incomplete. Language barriers magnify this issue further.[68]

Previous research conducted in the ICU setting describes differences in care for ICU patients who have LEP.[69, 70] A study done by Zurca et al. about communication with families with LEP in the pediatric intensive care unit, described how having a professional interpreter during rounds helped families understand the information provided.[71] Although studies showed the benefits of professional interpreters, some studies done in the ICU setting have shown that despite professional interpreters, content alterations during interpretation occur and have consequences such as miscommunication during family conferences, as well as

reduced emotional support and information exchange.[72, 73] These studies did not consider the positive aspects of interpretation alterations that may enhance communication with LEP patients in the ICU setting, and potential alternative approaches to the role of professional interpreters.

There is a gap in the literature exploring different interpreter roles and contributions within the ICU setting and during end of life discussions with patients and families with LEP.

The objective of this study was to understand the perspectives of ICU physicians and nurses as well as interpreters about what they viewed as the professional interpreter's role during end of life and critical illness discussions with patients and families who have LEP in the ICU. Furthermore we gathered physicians', nurses', and interpreters' perceptions about the advantages and disadvantages of diverse interpretation modalities on the interpreter's role when communicating with patients and families who have LEP in the ICU.

2. Methods:

2.1. Study Design

Using methodology guided by grounded theory, we conducted a secondary analysis of semi-structured interviews of interpreters, ICU bedside nurses, and ICU physicians, who initially described their perceptions about the factors that influence decision making about end of life for patients and family members with limited English proficiency in the ICU.[74] The findings are reported in accordance with the COREQ guidelines.[75]

The study was implemented at a single center tertiary care hospital. The study was approved by the Mayo Clinic Institutional Review Board and oral consent was obtained from all participants.

2.2. Participants

As described elsewhere,[74] interpreters included were adults (≥ 18 years) who reported working in a general medical or surgical ICU. We did purposive sampling to recruit participants. We used email distribution lists to invite participants to participate in the study (113 physicians, 195 nurses, and 65 interpreters were contacted via email). We enrolled 16 physicians, 12 nurses and 12 interpreters. The 40 people are all those who responded affirmatively to the email sequentially within their professional group. We had more than 40 people respond to the email looking for participants. We did not record the exact number of positive responses to our invitations, although we estimate the number was 45-50. There were no recruitment difficulties and we cancelled scheduled interviews after thematic saturation was achieved.

2.3. Data Collection

The interview guide was developed by a multidisciplinary team (AKB, CJ, and MW) based on literature review, expert opinion, and clinical experience. The interview guide consisted of open-ended questions and was pilot tested with the assistance of a qualitative researcher who was not directly involved with the study (Appendix 1). Between November 2017 and April 2018, members of the study team (AKB, CAN, CJ) conducted one-on-one, in-person,

semi-structured interviews which lasted approximately 15 minutes with nurses to over 60 minutes with some interpreters and physicians. We audio recorded the interviews, transcribed them verbatim, and the resulting transcripts were anonymized. Data collection ceased once we reached data saturation, and no new themes were emerging based on our original interview questions.[76]

2.4. Qualitative analysis

For our first cycle of coding, we used line by line descriptive coding. The interview guide questions were not originally formulated to describe or explore the interpreter's role however this rich theme became evident during our initial coding procedures. After we identified the interpreter's roles description, we proceed with secondary axial coding, as part of grounded theory (Codebook Appendix 2) complemented with an exploratory coding method called hypothesis coding to further understand the interpreter role and interpretation modalities (Appendix 3).[74, 77] During that phase two, study team members (MUS, NES) coded in duplicate and met to reach consensus on each interview.

After the first cycle of coding was complete, we initiated our second cycle of coding, using axial coding we linked categories and subcategories in order to find relationships between the interpreter role and interpreting modalities.[77] Two study team members (NES, MUS) met to examine the codes looking for tendencies and patterns using memory cards and mapping analysis.[78] We were also guided during analysis by the framework of barriers to end-of-life decision making and care for patients with LEP obtained from previous qualitative work done.[74] Following these phases, the researchers (MUS, NES) developed overarching themes and selected representative quotes. Two other researchers (AKB, MW) reviewed the themes to guarantee reliability and credibility; using triangulation through multiple analysts.[79] We utilized NVivo software Version 11 (QSR Intl Inc; Burlington, MA) to manage and analyze data. We did not do formal member checking.

3. Results:

A total of 40 interviews were conducted. Participants' baseline characteristics are described in Table 1. We identified two themes to describe the views of the interpretation during end of life and critical illness discussions with patients and families who have LEP in the ICU: First, we describe three main roles for the interpreter (Table 2): Verbatim interpretation, Health literacy guardianship, and Cultural brokerage. Second, we present two sub-themes of interpretation modalities (Table 3): Advantages and disadvantages. We describe how different interpretation modalities relate to the interpreter's roles and influence communication dynamics with patients and families who have LEP in the ICU. Figure 1 illustrates our first theme representing how professional interpreters' roles mediate effects on clinicians, as well as patients and families with LEP. Appendix 4 represents the frequency in which respondents (physicians, nurses, professional interpreters) associated with themes and sub-themes to describe different disciplinary/role/modalities perspectives.

Interpreter Roles

Verbatim interpretation—Verbatim interpretation describes strict linguistic interpretation of the clinician's words. Most of the interpreters described their role as verbatim interpreters. Interpreters were comfortable in this role and some rejected any modification or expansion of that role (quotes 2.1, 2.2, 2.3 and 2.4). However, some interpreters expressed frustration about the limits of simple verbatim interpretation (quote 2.5, quote 2.6 and 2.7).

Our results indicate that among physicians, the concept of the professional interpreters' role as verbatim translators remains strong. We observed that the majority of physicians gave a straightforward description of the interpreter's role as verbatim translators; in contrast with one nurse who referenced this role description. Physicians expressed mixed views about the verbatim interpreter role; some preferred this approach and others were less comfortable with it. (quote 2.8). Physicians also mentioned experiencing situations when tangential conversations occurred between the interpreter and patient or family member from which they felt excluded and did not understand what was discussed. (quote 2.9). Other physicians had a sense that sometimes the information relayed to the patient or family member was inadequate or incomplete. (quote 2.10).

Health literacy guardian—Physicians and nurses described the health literacy guardian role as important to alert clinicians when communication and understanding might be threatened. Participants highlighted the importance of this role in making sure patients and the clinical team understood each other including intervening beyond normal interpreting during discussions (quote 2.11, 2.12, 2.13). Interpreters were also seen as information advocates, especially when they empowered patients and families to ask questions when information was needed (quote 2.14). Interpreters also underscored patients' and families' right to be able to use an interpreter when needed (quote 2.15 and 2.16). Finally, interpreters provided practical information to improve understanding and outcomes (quote 2.17).

Clinicians and interpreters supported the view that interpreters should intervene if they thought patients or families did not fully understand the situation, potentially secondary to health literacy issues or some cultural or communication barrier. (quote 2.18 and 2.19)

Cultural Broker—Participants unanimously described the interpreter as functioning as a cultural broker acting as a bridge between diverse cultures, with diverse beliefs, medical systems, preferences, and ideologies. Interpreters viewed their role as a way to "break through some of the cultural barriers" or facilitating communication that incorporated background and patient's habits and preferences (quote 2.20). Interpreters also acknowledged the importance of their role to explain and clarify cultural differences between patient's expectations of the ICU environment and the actual ICU professional and institutional culture (quote 2.21). Sometimes interpreters needed to intervene when they detected cultural misunderstandings (quote 2.22 and 2.23).

One nurse voiced an opinion about the value of the interpreter as a person who could connect with patients, building trust and advising the clinical team. (quote 2.24)

Interpretation Modality

During the interviews participants described different examples representing how the different interpretation modalities positively or negatively influenced the interpreter's role during communication in the ICU with patients and families with LEP and the beneficial or harmful impact of these influences on the interactions with those patients and families. We found that participants referenced the effects of particular modalities on the three interpreter roles previously described.

Modalities advantages—Participants listed the advantages of having in-person professional interpreters during communication with patients and families with LEP in the ICU. Physicians and nurses equally discussed the positive effects of in-person professional interpretation for cultural brokerage to increase understanding of cultural norms (quote 3.1, 3.2, 3.3, 3.4, 3.5 and 3.6). Finally, participants affirmed the positive influence of in-person interpreters to resolve doubts/uncertainty and foster understanding among patients and families with LEP, within the health literacy guardianship role (quote 3.7 and 3.8).

Participants also stated the advantages of using other interpretation modalities and remarked that the immediate round the clock availability and broad language accessibility of video chat verbatim interpretation was useful. (quote 3.9, 3.10 and 3.11). Finally, some clinicians mentioned the benefits of using family members for Interpretation. The descriptions included the timeliness, accessibility, understanding of culture and trustworthiness for the patient. (quote 3.12, 3.13 and 3.14)

Modalities disadvantages—Participants referred to the limitations and concerns about the use of in-person interpreters, such as their limited availability which affects their participation and contribution for communicating with patients and families with LEP (quote 3.15, 3.16 and 3.17). Physicians mentioned the risk of technological difficulties with video chat remote interpretation that might affect the interpretation process with patients and families with LEP (quote 3.18 and 3.19). Nurses described the negative effects of remote interpretation related to the lack of cultural contextualization and the difficulties for building rapport (quote 3.20 and 3.21). Interpreters also noted that building rapport was harder with videoconferencing interpretation, and therefore it was unlikely that an interpreter could function as a health literacy guardian using this modality. (quote 3.22 and 3.23).

When mentioning family members as interpreters, some participants, highlighted the inaccuracy and uncertainty of family member's verbatim interpretation during the communication process (quote 3.24, 3.25 and 3.26)

4. Discussion:

4.1. Discussion

The purpose of this work was to describe the healthcare team perceptions of the role of in-person professional interpreters, and the influence of different interpretation modalities on the interpreter's role when communicating with patients and families with LEP in the ICU.

Our results highlighted a range of outlooks about the in-person professional interpreter role. Despite professional interpreters' role mediating provider-patient interactions, interpreters continue to be trained following the conduit model; which assumes that the ideal interpretation is the same for all interpreters, the interpreters' understanding is irrelevant, emotions should not be expressed, the interpreter's attitude must be neutral and interactions with other team members or family members must be avoided. We noted in our sample that this role generated contradictory feelings, some interpreters conveyed satisfaction and ease with their verbatim role whereas other interpreters found this role frustrating.[80-83] We found evidence from our sample that prioritizing patient understanding required interpreters to step outside of their usual role, showing an initiative to extend their role and this was often supported by physicians and nurses.

Hsieh who interviewed clinicians in general hospital settings, noted that clinicians and interpreters had conflicts when clinicians worry about interpreters controlling the narratives and disrespecting role boundaries.[84] Our study highlights the existence of these conflicts in the ICU setting as well. Furthermore as the ICU treats critically ill and dying patients, these concerns may be exacerbated compared to other settings due to the complexity of disease, need for timely communication and often difficult decision making.[67]

Our study underscored the role of interpreters as health literacy guardians, primed to avoid negative consequences from ill-informed decision making or misunderstandings. Within this role, there was also an opportunity to improve the quality of care delivered and to empower patients. Although advocacy has been cited as a potential function of interpreters it is possible that the prominence of this role theme in the ICU setting is due to the environmental and medical complexity where advocacy becomes even more important. [37, 49, 85]

Cultural brokering has been described in the literature previously, by clinicians referring to professional interpreters as helping clinicians to provide culturally sensitive care,[48, 86] and interpreters outlining their role as mediators between cultures.[41] Cultural brokerage empowered interpreter's sense of their role and its fundamental value to the patients, families and clinical team. Although we traditionally conceive of this as assisting clinicians in understanding patient and family backgrounds, in fact this is bidirectional and interpreter cultural brokering can assist patients in familiarizing themselves with the ICU culture and practice, which can be complex, unpredictable and time pressured; making interpreters "ICU cultural ambassadors".[87]

Among professional interpreters, conflict about what role they should adopt reflects training and professional codes of conduct. The International Medical Interpreter Association and the National Code of Ethics on Interpreting in Health Care guide interpreters to abide by the principles of beneficence, respect and fidelity for cultural relevance and patients' dignity and well-being.[88] According to these guidelines interpreters' need to intervene to protect patients from harm when necessary.[89, 90] However, there are situations in which ambiguity in their role arises. [84, 90, 91]

Participants in our study discussed the influence of different interpretation modalities on the interpreter's role. Participants described the benefits of in-person professional interpreters for communication with patients and families with LEP. Other work by Hadziabdic supported in-person interpreters for elderly patients facing end of life communication challenges.[92] Others have described the importance of paralinguistic clues that an in-person interpreter can elicit as helpful for supporting strong patient-clinician relationships.[81]

Remote interpretation modalities were also mentioned by many participants in our study. The participants in our study acknowledged the benefits of using video chat interpretation, but concerns related to the negative impact on communication during end of life discussions in critically ill patients still exist. Another study that evaluated about the use of video conference for interpretation services demonstrated that having access to videoconference interpreters is acceptable to patients and physicians, however that study was in an outpatient setting.[93]

Family members as interpreters were considered less useful for improving the communication process. This is important to take into consideration because the English proficiency of family members is not formally evaluated and if lacking could potentially contribute to interpretation mistakes and misunderstanding.[81, 82].

Limitations:

This study has several limitations. First, we conducted the study in a tertiary care academic medical center in the Midwest. Furthermore, the languages spoken by the patients in our ICUs are primarily Arabic and Spanish and our findings may specifically reflect interpretation in the context of these languages and cultural backgrounds.[94] Therefore, the generalizability of the study findings may be limited and the reflections of the interpreter's role may not apply in other settings where the interpreter's role and function may be different. Second, we interviewed a relatively small number of bedside nurses, physicians, and interpreters. In addition, our study may have had a tendency to selection bias, due to the recruitment methods used (email distribution list), in which participants may have self-selected to participate in the study due to having an affinity with this topic. Although our sample size was small, we did reach thematic data saturation across all groups. In addition, measures were taken to ensure trustworthiness, including coding in duplicate and triangulation by interviewing diverse member groups from the healthcare team (physicians, interpreters, and nurses) and a study team that included health research and disparities experts and clinicians. These measures strengthened the relevance of the discoveries. Third, we could not develop a conceptual framework from our data because in order to develop a future conceptual framework for this study population, further data would need to be collected, such as patient and family perspectives as well as perhaps observations of interpreters working in clinical practice. Fourth, this study focuses on participants' reflections about language and cultural differences within the ICU. Due to the nature of ICU care including endotracheal intubation and sedation, communication barriers can occur for all patients whether they are English proficient or have LEP, our work focused on patients with LEP, interpreter use and communication. Fifth, we did not gather perceptions of

patients and families with LEP about their views of the interpreters' role and this is an area that research efforts should address in order to broaden our understanding.

4.2. Conclusion:

Our findings provide relevant new insights about the role of professional interpreters and interpretation modalities in the ICU, an area not previously described. Professional interpreters are fundamental for improving bi-directional verbal and non-verbal communication by providing reliable, understandable, and culturally tailored interpretation between patients and families with LEP and clinicians in the ICU. Regardless of the role or modality, professional interpreters are essential during communication in the ICU. Finally this work highlights the need for future research to further identify ways to implement ideal interpretation strategies in the ICU to improve practice and quality of care.

4.3. Practice implications:

The interpreter's' role, verbatim interpretations, cultural brokerage and health literacy guardian, are influenced by the interpreter's comfort with functioning beyond expected roles. Patients may get benefits from having an interpreter who can function as a cultural or literacy guardian in the ICU setting where care is especially complex, good communication is vital, and end of life decision making is challenging. For serious end of life discussion in-person professional interpreters may provide more advantages towards the relationship building and communication with patients and families with LEP. Currently due to the COVID-19 pandemic clinician, interpreter, and patient interactions have been directly affected causing communication dynamics to change in unprecedented ways. Due to concerns about transmission of infection and need to save PPE for clinicians, there has been a decrease in use of in-person interpretation. Video interpretation has increased. Although we have highlighted the role of in-person professional interpreters, this new "normal" in patient care should make us aware of the relevance of remote interpreter modalities. Public policies and advocates are needed to help develop remote interpretation systems that ensure the best quality interactions, respecting the values, cultures, and desires of LEP patients and families. Our findings about the importance of health literacy guardianship, cultural brokering and verbatim interpretation are especially relevant during COVID-19. Since family members may not be present during care in the ICU and able to advocate for their loved ones, the need for a cultural broker and health literacy guardian becomes paramount for patients with LEP.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

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List of abbreviations

ICU	Intensive care unit
LEP	limited English proficiency

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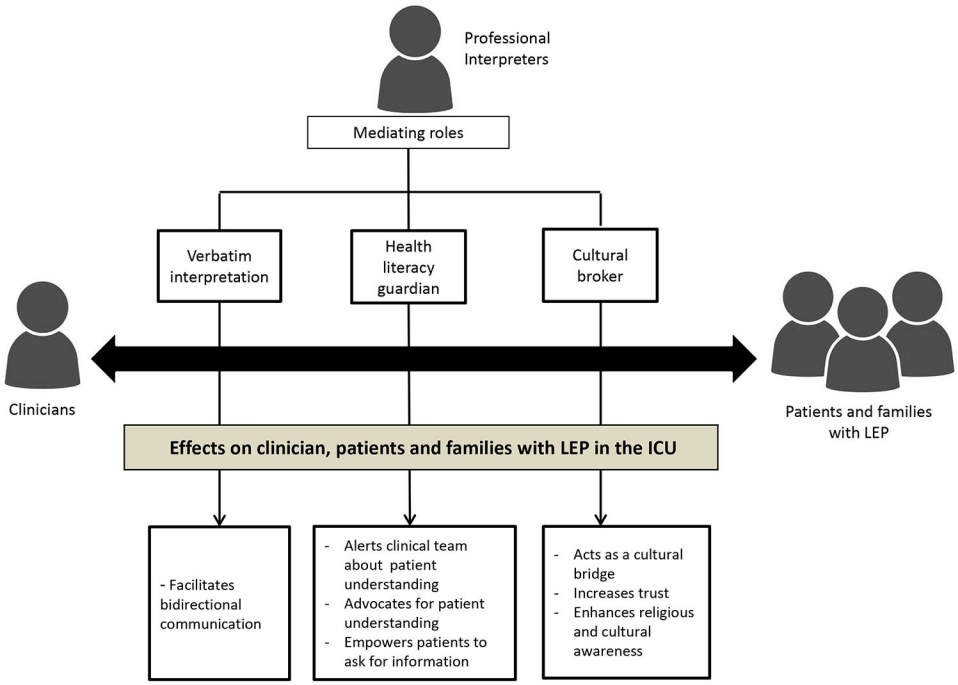

Figure 1.

Graphic representation of Professional interpreter's role effects on clinician, patients and families with LEP in the ICU

Table 1.

Baseline Characteristics of Participants

	Interpreter (N=12)	**Nurse (N=12)**	**Physician (N=16)**
Female sex, n (%)	10 (83)	11 (92)	5 (31)
Age Range	30-65	20-35	30-65
Nationality			
US born, n (%)	1 (8)	12 (100)	9 (56)
Languages Interpreted		NA	NA
Spanish	5 (42)	NA	NA
Somali	1 (8)	NA	NA
Arabic	3 (25)	NA	NA
Mandarin Chinese	1 (8)	NA	NA
Lao	1(8)	NA	NA
Hmong	1 (8)	NA	NA
Time in ICU practice or working as interpreter	2-20 years	2 months-11 Years	4-30 years

Table 2.

Interpreter Role

Interpreter Role	Quote
Verbatim interpretation	
Role definition	2.1."As a medical interpreter, we just basically interpret everything the provider says [or what] the patient or the family says. We're not supposed to provide any personal opinion." (Interpreter) 2.2."We're not supposed to say anything regarding any of the medical appointments or provide any opinions or advice." (Interpreter) 2.3. "We can do is all basically just facilitate the communication. There are lots of things we cannot do [explain and give advice], but we actually are the front line to interact with the patient and providers." (Interpreter) 2.4. "We don't want to make the patient make the decision, because that's not my job." (Interpreter)
Role conflict/ dilemma	2.5."[As interpreters], we can probably [be] more helpful than we are now. But [with] our job limitations, we cannot say or do anything besides interpretation. That's one thing that's a dilemma for us." (Interpreter) 2.6."Our rules as interpreters [are] very strict … You have to translate the message in English … In very rare cases, we have to advise or to say something more. [and we should be able to say more if needed]." (Interpreter) 2.7. "Then you just feel really, really difficult, because, on one hand, you want to help [the patient and family], but on the other hand, you're not supposed to." (Interpreter)
Clinical team perspectives	2.8. "[When interpreters adapt the interpretation], I try to clarify … by saying [to the interpreter] it's okay to just translate [exactly what the patient is saying] rather than adding something from [your] perspective--which taints things in terms of what the patient or their family might be wanting to say … Most of our in-person interpreters do a very good job of repeating exactly what you're saying." (Physician) 2.9. "[Sometimes patients and interpreters] might start having a conversation on their own … Then I start wondering what's going on there because [the interpreters and patients] shouldn't be doing that." (Physician) 2.10. "The translator might automatically be simplifying, or the translator might automatically be condensing what they say [to the patient] into 'medicalese'--and I don't know what—how much the translator is altering the sophistication of [the patient's] language". (Physician)
Health literacy guardian	
Role definition	2.11. "If I have information [patient related] maybe affecting a decision or the diagnosis or maybe in the benefit of the patient, absolutely I step up and say [to the clinical team], "Please, I have something to say." (Interpreter) 2.12. "They'll [interpreter] pull you [physician] aside and they'll alert you about any family member who might be driving the conversation, who might not be as astute or sophisticated." (Physician) 2.13. "If you see there's some cultural barrier or communication barrier, that you thought the provider and the patient had some misunderstanding with each other—yes, then that's our interpreter's job to intervene. Intervening—we're not supposed to do too often—just when really, really necessary." (Interpreter)
Clinical team and interpreter perspectives	2.14. "The interpreter should be empowered to intervene if they notice there's something wrong (with understanding)." (Physician) 2.15. "We… have to empower [patients and families] to really ask what they don't understand and really help them communicate so they have a better understanding of what's going on." (Interpreter) 2.16. "When I see that patients really want an interpreter and they're not getting one, [I] at least try to advocate for that right for them to be able to communicate their needs." (Interpreter) 2.17. "I [physician] want to say I think that the interpreters here do a very good job of advocating for patients." (Physician) 2.18. "As the interpreter, since we know what this patient's … difficulty will be … sometimes we suggest that the provider, 'Can you please write down the name [of the medication], the dose, how to take that?" (Interpreter) 2.19. "We have to explain the provider and say, "Hey, at this time right now, the patient doesn't understand exactly what is going on." (Interpreter)
Cultural Broker	
Role definition	2.20. "I understood my role here—to facilitate communication between the patient, the family, and the providers… taking in consideration our cultures, habits, and everything." (Interpreter)
Clinical team and interpreter perspectives	2.21. "An interpreter usually understands both cultures [patients and clinical team] and tries to translate the cultural differences." (Physician) 2.22. "If we [identify that] …. or sense something could be a misunderstanding for cultural reasons, [we] try to get the provider or patient to identify that and get on the same page." (Interpreter) 2.23. "[Beyond the role of interpreting is the role of] cultural ambassador to the patient—somebody who knows not just the language, but could give you some insight into some of the cultural reasons." (Physician)
Trust builder	2.24. "For [patients and families, the interpreter] is a familiar face, in a sense—someone who [patients and families] can connect with better than they can connect with someone who doesn't speak their language." (Nurse)

Table 3.

Interpretation modality

Modality	Modality advantages
In-person	3.1. "… So my experience tells me that this [Interpretation] is best done face-to-face, best done with an interpreter who understand the cultural norms for that particular group, and the interpreter can oftentimes give cues to the team or providers, things to establish this relationship, which is the cornerstone for effective care". (Physician) 3.2. …"Because, oftentimes, they [Interpreters] have cultural understandings that I don't know. Then sometimes then they'll ask me, "I'd like to say this to the family. Does this make sense to you?" and so it can be a little bit—not just a direct translation, but also help with cultural interpretation". (Physician) 3.3. "It would be nice to actually have a relationship with an interpreter … I think having an in-person interpreter and having the cultural background would probably be the best". (Nurse) 3.4. "I think the in-person interpreter for them [patients and families with LEP], it's a familiar face. Someone who they can connect with better than they can connect with someone who doesn't speak their language or understand their culture". (Nurse) 3.5. "Only certain interpreters can be there during that time [end of life conversations]. It will give great support for the doctors, for the nurses, for the family, that bridge for everyone. You really have to have that cultural expert". (Interpreter) 3.6 "You [healthcare team] have the interpreter here, and then you have the cultural broker, who is an interpreter, but plays more at a cultural". (Interpreter) 3.7. "I've been seeing that the in-person interpreter is better than the iPad interpreter. Cuz this person can translate sometimes the emotions of the family, and also can resurrect any doubts, concerns or anything that probably being an English speaker we could not understand. I think that's helpful". (Physician) 3.8 "I know when we got an in-person interpreter, things got better as far as understanding, especially the family understanding a little bit more what was going on". (Nurse)
Videoconferencing interpretation	3.9. "With the iPad, really they're available 24/7. It's much easier to use for interpretation. I do find myself using it all the time. Does that still impair communication? I'm sure it does". (Physician) 3.10. "I would say in the past, waiting for the interpreter was not very easy. Now, we have a tool for communication and interpretation [iPad] at our disposal that we should not even think about not using it". (Physician) 3.11. "I mean it's been a lot more helpful having the iPad interpreter, because its pretty much 24/7, for the most part, for most of the languages anyway that we see up here". (Nurse)
Family members	3.12. "We [Healthcare team] are often – maybe even overly – reliant on that family member to either translate for the patient or to communicate what they believe the patient's wishes would be. I think oftentimes for convenience sake, unfortunately, and for time sake, we utilize those family members". (Physician) 3.13. "There are some advantages to using family because they have insight into the patient and culture. The disadvantage is that sometimes you're getting their filtered view and not the parent, or whatever, the family member's view. (Physician) 3.14. "I think they [Patients and families with LEP] engage the best when there's actually a family member there to be the arbiter back and forth to the patient. Because like I've said before, some of the personal issues and nuances can get lost in the translation because the patient is speaking with somebody who is a stranger to them". (Nurse)
Modality	**Modality disadvantages**
In-person	3.15. "I will always use an interpreter if I can for [verbatim] interpretation. Or an iPad interpreter or the phone, or something. Realistically, we use family more than I wish we did, because sometimes it's the middle of the night, or sometimes you're popping into the room for five minutes and you've got 15 other patients to see. You don't have time to wait for an interpreter to be paged and to come. (Physician) 3.16. "I think that we need more availability of in-person interpreters. In-person interpreter's availability for interpretation… I find it very difficult". (Physician) 3.17. "I've found in the past that the interpreter can—the in-person interpreter can be hard to get a hold of and be frequently late. They're hard to schedule correctly for interpretation. (Nurse)
Videoconferencing interpretation	3.18. "The in-person interpreters, I think, generally do a better job interpreting than the iPad interpreters, particularly with the fact that the ICU is noisy, a lot of background noise, oxygen, et cetera". (Physician) 3.19. "Sometimes, of course, you [Healthcare team] have to use the iPad for translation, which still works way better than the phone, but still, they're [Interpreters] not in the room. They're not sensing maybe the tension or the lack of tension or understanding the dynamics". (Physician) 3.20. "Especially if we [Healthcare team] have the iPad interpreter we can always use, but they're not always the kind of cultural interpreter that might be necessary". (Nurse) 3.21. "The availability of interpreters is beneficial. If we could have more and have them more readily available, that would be ideal. Because like I was saying, the iPad interpreter doesn't necessarily help with the cultural context of things". (Nurse) 3.22. "For the ICU and end of life, I will never recommend use of the iPad for interpretation. That will be something—I will not say it's bad, but it's not very nice. We're talking and interpreting about death and dying situations, and just having the machine here sounds to me not very personal, however, it has been done many times". (Interpreter) 3.23. "I feel like a lot of our Spanish speaking patients aren't quite prepared for the fact that their loved one could actually die there in the hospital. I think a lot of that is due to the fact that they don't get an interpreter consistently or maybe they try to use the iPad". (Interpreter)
Family members	3.24. "Even when they [Patients with LEP] have a family member there who speaks fluent English, I still try to have an interpreter as much as possible to make sure that they're not just covering up with their English". (Physician)

Modality	Modality advantages
	3.25. “I don’t really feel like that's a great thing to use family as interpreters just in case, again, I don't know what they're saying, and if they're truly telling what I'm saying, and repeating what the patient's saying back. (Nurse) 3.26. “Sometimes staff doesn’t call the interpreters. They use a family member. They think that the family's speak and understand more English than they actually do. That could lead to many misunderstandings. Maybe even false information”. (Interpreter)