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The Impact of Language-Concordant Care and Interpretation Services on Healthcare Outcomes Among Spanish-Speaking Populations in the United States

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Abstract

This essay examines the impact of various interpretation methods on Hispanic patients' satisfaction and health outcomes in the United States. A retrospective analysis of previously published studies compares the effectiveness of language-concordant providers, in-person interpreters, remote interpretation, and ad hoc interpretation. The findings underscore the critical role of interpretation services, highlighting superior outcomes associated with language-concordant providers. Improved medication adherence and higher patient satisfaction, measured through surveys, were most notable among patients with Spanish-speaking providers. These results emphasize the importance of training healthcare providers in medical Spanish and strengthening interpreter services to ensure equitable care. The study also warns of potential risks to healthcare access if interpretation services are reduced, especially given the rapid growth of the Hispanic population.

Keywords: Healthcare access, Spanish-speaking patients, interpretation services in the United States.

Resumen

Este ensayo examina el impacto de diversos métodos de interpretación en la satisfacción y los resultados de salud de los pacientes hispanos en los Estados Unidos. Mediante un análisis retrospectivo de estudios publicados previamente, se compara la efectividad de los proveedores con concordancia lingüística, los intérpretes presenciales, la interpretación remota y la interpretación ad hoc. Los hallazgos subrayan el papel crucial de los servicios de interpretación, a la vez que destacan los mejores resultados asociados con los proveedores con concordancia lingüística. La mejor adherencia a la medicación y la mayor satisfacción del paciente, medidas mediante encuestas, fueron más notables entre los pacientes con proveedores hispanohablantes. Estos resultados enfatizan la importancia de capacitar a los profesionales de la salud en español médico y fortalecer los servicios de interpretación para garantizar una atención equitativa. El estudio también advierte sobre los posibles riesgos para el acceso a la atención médica si se reducen los servicios de interpretación, especialmente dado el rápido crecimiento de la población hispana.

Palabras clave: Acceso a la atención médica, pacientes de habla hispana, servicios de interpretación en los Estados Unidos.

I. Introduction

This essay aims to identify the most effective interpretation method for Spanish-speaking populations in the United States by evaluating its impact on healthcare outcomes and patient satisfaction through a retrospective literature analysis.

In 2023, Hispanics made up nearly one-fifth of the United States population, totaling just over 65 million and making them the second-largest group after the non-Hispanic White population (U.S. Census, 2024). Moreover, the Hispanic population grew by 1.16 million, or 1.8%, from the previous year, an increase driven by 722,000 births and 437,000 international migrants. At this rate of growth, projections estimate that the Hispanic population will reach approximately 26.9% of the U.S. population by 2060, with a potential high of 27.8% under a high immigration scenario and a low of 26.2% under a low immigration scenario (U.S. Census, 2023). Within this large and growing demographic, 42,064,953 individuals primarily spoke Spanish at home. Of these, **25,422,020 reported speaking English very well, while 16,642,933 spoke English less than very well**. As a result, the demand for bilingual medical professionals and interpretation services has become increasingly essential.

Currently, only 6.3% of physicians in the United States are Latino. Even in states like California—where Latinos comprise 39% of the population—only 6.4% of physicians are Latino (UCLA Latino Policy & Politics Institute, 2024). Further highlighting this disparity in **California, there were just 62.1 Spanish-speaking physicians per 100,000 Limited English Proficient (LEP)** individuals in 2019 (Martinez et al., 2022). This underrepresentation extends beyond physicians to other healthcare roles as well, with Hispanics comprising only 7% of registered nurses and just 9% of the nation's healthcare practitioners and technicians (Tyson, 2023). The absence of shared language can create mistrust between physicians and patients, as demonstrated by a study conducted by Shamsi et al. (2020), which found that 37% of Norwegian physicians reported patients withholding information due to language barriers. Conversely, 66.7% of patients from the same study reported experiencing a barrier when accessing healthcare, and 20% reported not seeking healthcare services due to fear of being misunderstood by their practitioner or not being able to understand them. These disparities underscore the critical need for interpretation services in healthcare settings across the United States.

Despite this need, a study published in 2016 found that only **68.8% of hospitals in the United States offered language services, with significantly fewer services available in private for-profit and public hospitals** (Wiles et al., 2023). Furthermore, with approximately eight in ten Spanish-dominant Hispanic adults preferring to see a Spanish-speaking healthcare provider, this raises important concerns about the potential disservice, or even harm, that many Spanish-speaking patients may experience when accessing medical care (Funk & Lopez, 2022). With all this in mind, I aim to analyze the varying levels of interpretation services—including language-concordant providers, in-person interpreters, remote interpreters, and ad hoc interpreters—and assess the extent to which each contributes to patient outcomes and satisfaction. I hypothesize that language-concordant providers lead to the best patient health outcomes and satisfaction compared to other forms of interpretation because there is less nuance lost in translation.

II. Direct and Implicit Broader Healthcare Inequities Linked to Language Barriers

Lack of a common language leads to both implicit and direct disparities in quality of care, trust between patients and medical providers, and medical understanding for LEP patients. As noted earlier, 39.56% of the Hispanic population reported speaking English less than "very well" (U.S. Census Bureau, 2023). This LEP subgroup is among the most vulnerable to healthcare disparities, including increased rates of discrimination and dissatisfaction with care. Barrera et al. (2024) found that adults with LEP are less likely to report having a provider who they feel explains concepts in a way they can understand, compared to English-speaking adults (81% vs. 89%). The same survey also reports patients with LEP feeling that their physician does not spend enough time with them (68% vs. 76%) or include them in decision-making about their care (63% vs. 82%) also compared to English-speaking counterparts (Barerra et al., 2024).

For example, in a 2013 survey conducted at a public health department clinic with 1,344 participants, **25% of patients with Limited English Proficiency (LEP) reported difficulty scheduling appointments**. Furthermore, **29% of Spanish-speaking patients indicated that their medical issues remained unresolved after a doctor's visit, compared to only 10% of English-speaking patients**—a statistically significant difference of 19% (Escobedo et al., 2023).

This finding underscores the extent to which language barriers contribute to inequitable healthcare outcomes for monolingual Spanish-speaking patients.

Additional disparities have been observed in medication adherence. In a 2017 study, Fernández et al. found that LEP Latinx patients were significantly less likely to adhere to their prescribed medications than English-speaking Latinx and white patients. Physicians without specific cultural training may view the lack of medication compliance as laziness on the part of the patient and perpetuate stereotypes of the immigrant community, but a 2020 study makes the connection between this miscommunication and approximately 50% of patients overall having trouble using or understanding a prescribed medication, leading to adverse effects and noncompliance (Shamsi et al., 2020). By the end of the follow-up period, 54.2% of LEP Latino patients were non-adherent to their oral diabetes medications (Fernández et al., 2017). While provider-patient language concordance was not directly associated with these outcomes, the findings nevertheless reflect the persistent disadvantage faced by LEP Latinx individuals in navigating the healthcare system.

Implicitly, not being able to understand one's doctor or one's symptoms, and conversely, feeling as if one's doctor does not understand the patient, leads to increased stress around health in general. Stress has long been proven to be positively associated with increased risks of developing or worsening cardiovascular disease and worsening existing chronic illnesses (Chiang, 2018). As stress about one's health condition and care is an everyday occurrence, the importance of having comprehensive interpretation services borders a line of a fundamental human right all patients should receive, as not having language services extends beyond negligence and harm. The absence of professional language interpreting services significantly harms patients with limited English proficiency (LEP), as evidenced by multiple studies. Medical errors and adverse outcomes-including death, irreversible injuries, and major organ damage-are more likely when professional interpreters are not utilized (Flores, 2015; The Hastings Center, 2023). **Miscommunication due to language barriers leads to misdiagnosis, inappropriate treatment, and delays in emergency care, exacerbating risks to patient safety** (The Hastings Center, 2023). Patients without interpreter support experience longer hospital stays and higher readmission rates, often linked to communication failures rather than the underlying illness (Wiles, 2023). Systematic reviews confirm that LEP patients face increased risks of physical

harm, diagnostic testing overuse, and reduced access to preventive care when interpreter services are lacking. The use of ad hoc interpreters, such as family members or untrained staff, introduces interpretation errors-particularly omissions and clinically significant mistranslations-that compromise care quality (Nápoles, 2015). Additionally, inadequate interpreter services correlate with lower patient and provider satisfaction, disparities in healthcare access, and legal liabilities for institutions (The Hastings Center, 2023). The use of professional interpreters reduces errors and improves outcomes, underscoring their necessity for equitable, patient-safe care (Wiles, 2023).

Despite these challenges, interpretation services have been shown to significantly improve health outcomes for LEP Latinx patients. A study by Jimenez et al. (2012) examined the impact of consistent versus inconsistent use of interpretation services on patients' self-reports of pain management. The results indicated that patients who consistently received interpreter support were significantly more likely to report better pain control and a more favorable perception of their provider's helpfulness. Although the study focused specifically on pain management, its findings highlight the broader importance of consistent access to professional interpretation in reducing healthcare disparities for LEP patients.

However, this raises a critical question: Are all types of interpretation equally effective?

III. Types of Interpretation and Their Effects on Patient Outcomes and Satisfaction

This investigation focuses on four main types of interpretation: language-concordant providers, in-person interpreters, remote interpreters (via telephone or video call), and ad hoc interpreters (such as staff or family members). The first type, **language-concordant providers**, refers to physicians who speak the same language as their patients, allowing for direct communication without the need for a third-party interpreter (Lopez et al., 2023). The second type, **in-person interpreters**, includes both professional and volunteer interpreters who are trained to serve the most commonly spoken languages within a given patient population (Stanford Medicine, 2023). The third type, **remote interpreters**, consists of interpreters who provide services via telephone or video connection. These services may be offered by trained volunteers—such as those at CommunityHealth—or by commercial companies and local

agencies. The provider and patient may be in the same location or in different locations during the encounter (Stanford Medicine, 2023). Lastly, **ad hoc interpreters** are bilingual individuals, often clinic staff or family members, who are not professionally trained in medical interpretation but are called upon in situations where no formal interpreter is available (Heath et al., 2023).

Evaluating Interpretation Types in Healthcare for LEP Patients

Starting with ad hoc interpreters and their relationship to patient satisfaction, researchers Kuo and Fagan (1999) examined satisfaction levels of both physicians and patients when using professional versus ad hoc interpreters (such as family members). They found that **patients reported significantly higher satisfaction when family members served as interpreters (85.1%) compared to physicians' satisfaction in the same context (60.8%)**. Based on these results, the researchers recommended further investigation into the use of family members as interpreters, while also cautioning that interpreter preferences and experiences may differ between providers and patients.

Another factor to consider when relying on ad hoc interpreters is the extra role of interpreting places on family members of LEP patients. Oftentimes, using **"ad hoc"** as the main form of interpretation services means expecting children and/or spouses to translate complicated medical histories, symptoms, and treatment plans – **a role they are neither trained for nor necessarily chose to take on, leading to adverse effects for both the patient and the ad hoc.** Studies have shown that mistakes by untrained interpreters (e.g., family or friends) are more likely to result in clinically significant harm compared to errors by professional interpreters (Rajani et al, 2019). **Healthcare organizations also face substantial financial risks when relying on ad hoc interpreters;** for example, a single mistranslated term in one case triggered a $71 million malpractice lawsuit after a patient suffered quadriplegia (Rajani et al., 2019). Having a family member translate personal medical issues can also be an uncomfortable situation, especially when discussing reproductive health and other sensitive topics, thus violating patient privacy. In addition to ad hoc translating causing adverse effects for patients, it can also increase stress for the ad hoc family member due to fear of miscommunication and a greater sense of responsibility. Given that ad hoc translators are often children of patients, this stress is compounded by the sudden, unprepared nature of such responsibilities, which can disrupt family dynamics and contribute to anxiety or burnout. Studies highlight that children forced into this

role face additional risks, including academic challenges and emotional distress, as they navigate adult conversations beyond their maturity level (Flores, 2013). For adult family members, the lack of professional training and support systems exacerbates the stress of managing both linguistic accuracy and emotional strain. However, the study also found that **both patients and physicians reported the highest satisfaction rates when using professional hospital interpreters, 92.4% and 96.1%, respectively.** Despite these higher percentages, the difference was not statistically significant and thus cannot be considered conclusive (Kuo and Fagan, 1999). Overall, these reasons highlight the importance of hospitals and clinicals implementing quality, trained, and formal translation services.

In a later study, researchers compared patient satisfaction between AT&T remote telephone interpretation and ad hoc interpreters. They found that Spanish-speaking patients reported similar levels of satisfaction when using remote interpretation as they did with language-concordant providers, though this finding was not statistically significant (77%; P = .57). Importantly, patients who relied on ad hoc or family interpreters were significantly less satisfied at 54% and 49%, respectively, and with a P-value of .007 (Lee et al., 2002). Taken together, the findings from both studies highlight the potential dissatisfaction patients experience when relying on untrained ad hoc interpreters, such as hospital staff or family members.

In terms of health outcomes, a 2007 study by Jacobs et al. compared patients who were assisted by enhanced interpreters—defined as two trained Spanish medical interpreters who had completed a year-long intensive community college program focused on medical vocabulary and interpreting ethics—with those assisted by other types of interpreters. The study found no statistically significant differences in health outcomes—including length of hospital stay, number of specialty consultations, number of radiology tests, rehospitalizations within three months of discharge, or adherence to follow-up outpatient visits—between patients who used enhanced interpreters and those who used ad hoc, telephonic, or standard in-person interpreter services. **However, patients who received care from language-concordant providers reported the highest levels of satisfaction** (Jacobs et al., 2007)**.**

In-person interpreting is generally considered superior to remote methods in healthcare settings due to enhanced communication quality and cultural sensitivity. Studies indicate that **providers and interpreters consistently rate in-person encounters higher, as they allow for better visual cues, nonverbal communication, and rapport-building,** which are critical for

accurate interpretation and patient trust (Locatis et al., 2010). While patients often rate all methods similarly, qualitative feedback reveals a preference for in-person services, particularly in complex or emotionally charged interactions, where nuances like body language and tone are vital. **Remote interpreting, though cost-effective and accessible, faces challenges such as technical limitations** (e.g., poor video/audio quality) **and reduced ability to manage cultural or contextual subtleties, which can compromise care quality** (Locatis et al., 2013). However, remote methods like video interpreting may serve as practical alternatives for straightforward consultations or emergencies, especially in resource-limited settings. Overall, in-person interpreting remains the gold standard for ensuring patient safety and effective communication, while remote solutions should be tailored to specific clinical contexts

Building on these findings, a 2020 study by Hartford et al. found that LEP children who received no interpretation services were less likely to be admitted to the hospital than English-proficient (EP) children, reinforcing the idea that any form of interpretation is preferable to none at all. Furthermore, a 2012 study conducted by Flores et al. compared professional in-person interpreters, ad hoc interpreters, and no interpreters on health outcomes. The study found that **professional interpreters made significantly fewer clinically consequential errors** (12%) compared to ad hoc (22%) and no interpreter (20%) situations. Based on these findings, the authors recommended that professional interpreters receive a minimum of 100 hours of training to improve both the quality of interpretation and patient safety (Flores et al., 2012). Taken together, these studies suggest that professionally trained interpreters—whether in-person or remote—are superior to ad hoc or untrained interpreters in ensuring patient safety and satisfaction. However, the question remains: how do they compare to language-concordant providers?

In 2017, researchers Parker et al. investigated the health outcomes of LEP Latino patients with diabetes who switched between language-concordant and language-discordant primary care providers. They measured outcomes using HbA1c levels (a marker of glycemic control), low-density lipoprotein (LDL) levels, and systolic blood pressure (mmHg) to compare the two patient groups. While no significant differences were found in blood pressure or LDL control, the researchers observed a significant improvement in glycemic control among patients who switched to language-concordant care. Within one year, patients receiving care from

Spanish-speaking providers experienced a 0.22-point reduction in HbA1c levels, a 10% increase in the proportion of patients with controlled blood sugar (HbA1c < 8%), and a 4% decrease in the proportion with poor glycemic control (HbA1c > 9%). In contrast, patients who switched to language-discordant providers showed no significant changes in glycemic control. These findings strongly suggest that **language-concordant providers offer superior care for LEP** patients, particularly in managing chronic conditions such as diabetes. This improvement may stem from the fact that language-concordant providers are often of Latinx descent and thus may be better able to empathize with patients' cultural backgrounds and lifestyles, fostering stronger rapport and communication. Consequently, the findings of this study highlight a clear need for more language-concordant, Spanish-speaking Latinx providers in healthcare.

Below is a summary of the interpretation types:

Type of Interpretation Service	Definition	Main Advantages	Main Disadvantages
Language-Concordant Provider	The provider speaks the same language as their patient	- Direct understanding between patient and provider improves management of chronic conditions and lowers overall stress - Typically have the same cultural background as LEP patients, leading to increased empathy and better patient rapport	- Limited availability
In-Person	Includes both professional and volunteer interpreters, who are present on-site	- Improved understanding of cultural contexts and subtleties - Improved visual cues, nonverbal communications, and rapport-building, and therefore, increased patient trust	- Can be costly and logistically challenging - Limited availability both for language type and overall availability of consistent interpreters
Remote	Includes both professional and volunteer interpreters who provide services via telephone or video connection	- Flexible, cost-effective, and rapid access - Useful in both emergencies and straightforward consultations and for rare	- Less personal, harder to build rapport, and can't read body language - Technical issues and lack of visual cues

		languages - High patient satisfaction	(especially phone) - May hinder communication in complex or sensitive scenarios - Less likely to manage cultural or contextual subtleties and hinder quality care
Ad Hoc	Bilingual individuals (i.e. clinic staff or family members) who are not professionally trained in medical interpretation	- Can be used immediately if present, and no direct cost - Higher patient satisfaction when family members serve as interpreters	- High risk of errors and miscommunication - Breaches of confidentiality and ethical concerns - Increased burden on the ad hoc interpreter

Table 1. Interpretation Services Available in the United States

Overall, while any form of interpretation is better than none, **healthcare settings should aim to utilize professionally trained interpreters, ideally with at least 100 hours of specialized training in medical vocabulary and interpreting ethics. For the best possible outcomes, healthcare systems should ultimately prioritize hiring and training Latinx, Spanish-speaking providers to deliver language-concordant care**.

IV. Potential Consequences of Federal Funding Cuts in the U.S. Healthcare System

Given the importance of interpretation services for individuals with LEP in healthcare, it is crucial to continue expanding and promoting these services across the United States. However, due to ongoing federal budget cuts under the current presidential administration, interpretation services in the United States are at greater risk than ever, as many states depend heavily on federal funding to support these services.

As mentioned earlier, in 2016, only 68.8% of hospitals in the United States provided language services, with significantly fewer offerings in private for-profit and public hospitals (Wiles et al., 2023). This gap in accessibility is particularly concerning in states like Arizona, Illinois, Indiana, Montana, New Hampshire, North Carolina, Utah, and Virginia, which are at higher risk due to recent budget cuts. These states currently rely heavily on the Affordable Care

Act's (ACA) Medicaid expansion programs, which, as of 2024, cover approximately 3.7 million low-income individuals (Galewitz, 2024). Under the ACA, Section 1557 mandates that federally funded healthcare providers offer language interpretation services to ensure meaningful access for LEP patients, with specific requirements such as free qualified interpreters and translated documents by July 2025. Federal enforcement of Section 1557 ensures that qualified interpreters- not machine translation, or untrained staff- are prioritized, directly reducing clinical risks, while non-compliant systems may expose patients to harm. The ACA's 10% threshold rule (requiring translation services for languages spoken by over 10% of a county's LEP population) further standardizes care in compliant states, whereas inconsistent adherence elsewhere exacerbates inequities in follow-up care and chronic disease management. While all states have access to the ACA, not all states (including the ones aforementioned) have embraced its benefits to the full extent.

Recent budget cuts to vital aspects of the ACA pose a major threat to quality healthcare access, as a decrease in coverage of the ACA will directly decrease language interpreting services and exacerbate health disparities for LEP patients for the reasons discussed previously. Reductions in federal funding for Section 1557 will force healthcare providers to rely on ad hoc interpreters or machine translation, which increases the risk of medical errors and adverse events.

V. Reflection: From Experiences to Action

Growing up, I witnessed my mother, an immigrant from Quito, Ecuador, face numerous challenges navigating the U.S. healthcare system. As I grew older and developed a better understanding of health literacy, I began assisting her by clearly presenting medical information to support her decision-making. These early experiences sparked a strong desire to support others facing similar barriers. This motivation led me to volunteer as a Spanish interpreter for CommunityHealth, one of the nation's largest volunteer-run free health clinics, based in Chicago, Illinois. Through this role, I have had the opportunity to assist over 50 Spanish-speaking patients to date, providing interpretation services via webcam and phone. This experience has not only deepened my commitment to bridging language gaps in healthcare but also strengthened my resolve to continue serving Spanish-speaking communities after graduation.

After four months of volunteering with CommunityHealth, I have observed several recurring challenges faced by patients. One notable issue is the lack of consistent primary care, which often results in providers having limited or no access to patients' longitudinal health histories. As a result, each new encounter can feel like starting from scratch, making it more difficult to deliver comprehensive and informed care. Additionally, many patients who have seen other providers prior to their visits at CommunityHealth report that their concerns were not resolved, or that they lost access to care due to a lack of health insurance. The current executive administration's recent budget cuts to the ACA only exacerbate this issue. To further expand on the current administration's impact on patients, President Trump's immigration policies have also directly affected patients through an increased fear of deportation. As many LEPs are immigrants, either legal or undocumented, many patients I have encountered have expressed fear of going outside, even to go to doctors or for exercise, due to this fear. As a result, even when there are free clinics, free nutritionists, and free exercise options to deal with a lot of the diseases immigrants tend to experience (e.g., diabetes, hypertension, cardiovascular disease), patients are unable to access them due to the current political climate.

From my own experience, I also see a need for formal interpretation services. Growing up, my older brother and I always served as interpreters for our mother. From mortgage payments to doctor visits to school enrollment, every major decision was inadvertently funneled through us, placing immense background stress on young children to "get it right." Even now, my brother continues to serve as my mother's translator at her doctor's visits, which requires him to take time off from school to drive my mother to her appointments, be in the appointments with her, and translate. When my mom does go to appointments by herself, she says she has never been provided a language interpreter. Instead, she does what she can to communicate with her English-speaking providers, leading to some areas of miscommunication and, at best, a lack of full understanding of her conditions. In addition to the daily stress my mom already experiences from her multiple jobs to make ends meet for our family, this added stress has led her to have many health issues over recent years – and I know our family is not the only story of the American healthcare system needing to improve for its immigrant habitants.

Overall, my personal experience and my research have revealed gaps in the system that need to be addressed by further research. For one, more longitudinal research needs to be done on the impact of different forms of interpreting on patient outcomes. This can be done in the

form of surveys or interviews of patient and provider experiences with and without interpreting services. As the effects of the Trump administration roll out, research also needs to be done on the extent patients lose access to vital interpreting services, as well as the stress before and the enforcement of the ACA cuts.

VI. Conclusions

The findings of this study underscore the importance of employing well-trained providers and interpreters to support Spanish-speaking patients. Through a comprehensive retrospective analysis of existing literature, various interpretation modalities were compared based on patient satisfaction and health outcomes. Overall, **language-concordant providers emerged as the most effective and preferred method for fostering patient rapport and minimizing communication errors**. This was followed by in-person interpretation, then remote interpretation, with ad hoc interpretation ranking lowest in effectiveness..

Despite their advantages, language-concordant Spanish-speaking providers remain in short supply within the healthcare workforce. As a result, hospitals and clinics should prioritize the training and deployment of in-person interpreters, with remote interpreters as a secondary option. To minimize errors, interpreters should ideally receive a minimum of 100 hours of specialized training in medical terminology, cultural competency, and interpreting ethics before working with patients. Additionally, although Spanish-speaking patients may report higher levels of trust when interpreted by family members, the significant risk of miscommunication associated with ad hoc interpretation cannot be overlooked. If used as a last resort, hospitals should consider providing structured interpretation guides or informational pamphlets to minimize errors and support more accurate communication.

Lastly, this study considered the potential implications of **the current presidential administration's stance on the Affordable Care Act (ACA),** which **raises serious concerns about the future of federal funding for interpretation services**. Hospitals and clinics that rely heavily on ACA funding should consider preemptive measures, such as developing training programs for volunteer interpreters or offering interpretation training modules for ad hoc interpreters—such as staff members or family caregivers of chronically ill patients—who can

complete them at their own pace. In conclusion, healthcare systems should prioritize the recruitment of language-concordant providers to better serve and support Spanish-speaking patient populations, and prioritize high-quality interpreter training to enhance both patient satisfaction and health outcomes.

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