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The Reconfiguration of Healthcare Access Through a Remote Medical Interpreting System

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Abstract

This paper examines how remote medical interpreting changes language access in multilingual and multicultural healthcare settings by addressing the structural limitations of traditional medical interpreting. Cross-linguistic communication is essential to diagnosis, treatment, care coordination, and informed decision-making, yet conventional interpreting services are often limited by shortages of qualified interpreters, uneven language coverage, temporal and spatial gaps in provision, and weak quality assurance mechanisms. These constraints reduce the continuity, responsiveness, and reliability of language support, especially for patients with limited English proficiency and in time-sensitive clinical contexts. This paper identifies three major organizational pathways through which remote medical interpreting platforms reshape service delivery. First, they promote resource integration by pooling interpreter capacity, standardizing workforce preparation, and connecting interpreter access more directly with clinical systems. Second, they extend interpreting services across time and space, enabling more flexible deployment in dispersed, urgent, and workflow-intensive care environments. Third, they strengthen quality governance through standardized admission procedures, process traceability, and feedback-based evaluation. Overall, remote medical interpreting shifts healthcare language support from ad hoc assistance toward more organized, routinized, and institutionalized provision, while raising ongoing questions about equity, data governance, and the changing boundary between human expertise and technological support.

Keywords

Remote Medical Interpreting; Healthcare Access; Language Services

1. Introduction

In the post-pandemic era, improving equitable access to healthcare has become a pressing concern for health systems worldwide. In increasingly multilingual and multicultural healthcare environments, the capacity to enable cross-linguistic clinical communication has become a key determinant of healthcare access. Because clinical communication is fundamental to diagnosis, treatment, and care coordination, healthcare delivery depends heavily on professional interpreter services. Yet conventional in-person medical interpreting is often limited by insufficient capacity, delayed availability, and uneven coverage, which leaves patients with limited English proficiency at greater risk of communication breakdowns, information asymmetry, and adverse clinical consequences, especially in emergency and other time-sensitive contexts. At the same time, advances in audiovisual communication, mobile technologies, and platform-based service models have created new possibilities for delivering interpreter services beyond the constraints of physical co-presence. By enabling scalable service provision and more systematic quality governance, remote

medical interpreting offers a new organizational pathway for improving cross-linguistic communication and expanding healthcare access. Against this background, this article examines how remote medical interpreting reconfigures the mechanisms through which healthcare access is organized, mediated, and delivered, focusing on the interaction of technology, organization, and clinical context.

2. Challenges in Traditional Medical Interpreting

2.1 Imbalances in Interpreter Supply

Traditional medical interpreting continues to face a fundamental supply problem: too few qualified interpreters are available, and they are unevenly distributed across languages and settings. This problem reflects not only an insufficient number of qualified interpreters but also the limited capacity of training systems and the difficulty of ensuring access across a wide range of languages, especially where demand is unstable or resources are scarce. The workforce is difficult to expand because medical interpreting requires not only bilingual fluency but also medical knowledge, terminological precision, and ethical judgment. These competencies cannot be developed quickly. Globally, only about 30 percent of practitioners hold certified qualifications in medical interpreting, indicating that the professional workforce remains limited. The gap is especially visible in regions where demand has risen rapidly. Since 2022, demand for certified medical interpreters in the United States has grown much faster than supply, while the Asia-Pacific region has also faced a shortage of certified personnel exceeding 30 percent (Reports Insights Consulting Pvt Ltd, 2025). Training pathways also remain weak. In many countries, medical interpreter training is not yet well established as a formal field of education, and higher education offers only limited preparation for this work. Many practitioners, therefore, enter the field through short-term training or certificate programs (Nevado & Foulquié, 2024). This makes it difficult to develop the combination of medical knowledge, terminological competence, intercultural communication skills, and ethical awareness required in clinical settings. Interpreter resources are also unevenly distributed. Services tend to concentrate in dominant languages such as English, while patients who speak less commonly spoken or otherwise underserved languages often face greater difficulty obtaining timely access to professional interpreting (Brochez et al., 2025). The same problem appears in sign language interpreting, where stable provision remains limited in many healthcare institutions (Olson & Swabey, 2017). As a result, some language needs are consistently better served than others.

2.2 Temporal and Spatial Gaps in Interpreter Access

Interpreter services in traditional medical interpreting are not consistently available across healthcare settings. Even where such services exist, they tend to be concentrated in particular times, locations, and types of encounters, which limits their practical contribution to healthcare access. One important constraint concerns when interpreting support is available. In many healthcare systems, interpreter services are primarily organized around scheduled outpatient visits and other routine encounters. Provision is therefore concentrated during weekday daytime hours (Lundin, Hadziabdic, & Hjelm, 2018), when administrative coordination and staffing are easier to arrange. Outside these periods, during emergencies, nighttime visits, weekends, or holidays, interpreter access becomes far less predictable, and clinicians may need to proceed without professional language support (Price et al., 2012). Yet language needs do not arise only at isolated moments. Communication support is often required repeatedly across diagnosis, treatment, discharge planning, and follow-up care. Because traditional interpreting is typically arranged for individual encounters rather than integrated across the trajectory of care, language support often remains episodic. This episodic provision can weaken the continuity of communication and may affect patients' understanding of treatment plans and their ability to follow medical advice. Availability also varies substantially across locations and care settings. Interpreter resources are typically concentrated in large urban hospitals and in areas where language access infrastructures are more developed. By contrast, primary care facilities, community clinics, and healthcare institutions in rural or remote regions often have limited or inconsistent access to professional interpreting services (Gilbert et al., 2021). The reliance on in-person interpreting further reinforces these disparities. Because interpreters must usually be physically present, it can be difficult to mobilize services quickly across geographically dispersed sites. This requirement also makes traditional interpreting difficult to integrate into newer forms of healthcare delivery, including telehealth consultations, referral coordination across institutions, and home-based care.

2.3 Weaknesses in Quality Assurance

In many healthcare settings, interpreting is still treated as an auxiliary service rather than as a professionally managed

component of clinical care. As a result, mechanisms for maintaining and evaluating quality are often poorly established, and responsibility for communication outcomes is not clearly institutionalized. One major concern is the continued reliance on ad hoc interpreters. In everyday practice, interpreting is often carried out by patients' relatives, friends, or bilingual healthcare staff who have not received formal interpreter training (Bernardi & Gnani, 2022). Although these individuals may share a language with the patient, they often lack knowledge of medical terminology, intercultural communication, and the ethical standards that guide professional interpreting. Their involvement, therefore, increases the risk that important information will be omitted, altered, or inaccurately conveyed, especially in high-stakes interactions such as medication instructions, risk disclosure, and informed consent. Communication quality thus depends heavily on who happens to provide the interpretation at a particular moment. Even when professional interpreters are involved, systematic oversight is often limited, as clinical encounters usually unfold rapidly and leave little time for formal documentation or review of the interpreting process. Assessments of quality, therefore, tend to rely on subjective impressions from clinicians or patients rather than on structured evaluation of accuracy, completeness, or adequacy of risk communication. Without consistent records of interpreting encounters, it is also difficult to identify recurring problems or reconstruct communication when disputes arise. A further limitation is the weak role of feedback in improving interpreter performance, since concerns about quality are often expressed informally or through isolated complaints but do not necessarily lead to structured training, supervision, or staffing adjustments. Interpreters may receive little systematic feedback, which limits opportunities for professional development. When quality issues are handled mainly on a case-by-case basis, healthcare institutions struggle to learn from recurring communication problems or to implement broader improvements in service delivery.

3. Pathways of Remote Interpreting Systems Enpowering Medical Interpreting

3.1 Resource Integration Through Remote Medical Interpreting Platforms

The resource integration enabled by remote medical interpreting platforms lies in its ability to pool interpreter capacity, standardize workforce preparation, and connect language support more directly to clinical systems. By doing so, remote platforms reduce the fragmentation that has long limited interpreter services in healthcare and make language support easier to mobilize across settings. The first dimension is scale. Under traditional arrangements, healthcare institutions depend largely on local interpreter capacity, which makes broad coverage difficult to maintain, especially for low-incidence languages or sudden shifts in demand. Remote platforms reduce this constraint by allowing providers to draw on interpreters across sites and regions through centralized dispatch. Language Line, for example, offers on-demand interpreting in more than 240 languages, while Martti provides medically trained interpreters in more than 250 languages, including ASL. In this way, interpreter availability becomes less dependent on local staffing alone. The second dimension is workforce preparation. Resource integration is not only about reaching more interpreters, but also about making their qualifications more consistent. Martti requires more than 120 hours of healthcare-specific training and an ILR Level 3 standard. Boostlingo states that its healthcare interpreters complete medical terminology training and annual HIPAA-related training, while LanguageLine emphasizes formal testing and training for medical interpreters, including the Medical Interpreter Certification Test (MICT). The third dimension is institutional integration. Traditionally, interpreter services often have to be arranged separately through phone calls, manual booking, or other forms of coordination outside the encounter itself. Remote platforms reduce this separation by linking interpreter access to EHR and telehealth systems. LanguageLine promotes integration with EHR and telehealth workflows, and Martti highlights Epic integration and one-click access. Once interpreter access is built into the systems clinicians already use, language support becomes easier to incorporate into routine care.

3.2 Expanding the Reach of Medical Interpreting Across Time and Space

Remote medical interpreting platforms extend language support across both space and time. Unlike traditional models that rely on on-site interpreters and locally organized staffing, remote platforms allow interpreters to participate in clinical encounters without being physically present. Language services, therefore, become less dependent on the resources and operating hours of individual institutions and better able to respond to dispersed and time-sensitive care needs. Spatially, remote platforms enable interpreter resources to be deployed across institutions and regions rather than confined to a single site. Under traditional arrangements, hospitals must organize services around the needs of their own patient populations, but cost and scale often make it difficult to cover less commonly spoken languages or respond quickly to changing demand. Remote access addresses this limitation by connecting institutions

to a broader pool of interpreters when local capacity is insufficient. This is especially valuable in rural and remote areas, in smaller healthcare facilities, and in settings where multilingual demand is difficult to predict or sustain through in-house provision alone. Remote interpreting also changes how language support is delivered within healthcare organizations. Rather than being limited to fixed rooms or centralized service points, interpreter access can move with the clinical encounter. Platforms such as LanguageLine and Martti use mobile carts and tablet-based devices to bring interpretation directly to bedside interactions, emergency departments, and other clinical settings, making language support easier to integrate into routine care. The temporal implications are equally important. By drawing on interpreters across regions and time zones, remote platforms extend access beyond the staffing hours of individual institutions. This is particularly significant in emergencies, at night, on weekends and holidays, and during public health crises. Remote medical interpreting, therefore, makes cross-linguistic communication more consistently available across locations and throughout the course of care.

3.3 Quality Assurance Through Remote Medical Interpreting Platforms

Remote medical interpreting systems institutionalize quality governance through standardized admission, data-driven process management, and dual track evaluation. Unlike traditional on-site medical interpreting, which relies largely on interpreters' individual experience and retrospective subjective assessment, remote platforms embed screening, traceability, and feedback into their operational structure. Quality assurance is thus relocated from individual ethical responsibility to an institutional framework of continuous monitoring and corrective intervention. On the supply side, remote platforms do not treat bilingualism alone as a sufficient threshold for entry. Instead, they operationalize risk control through admission screening, competence assessment, and compliance requirements. Language proficiency is converted into standardized and verifiable criteria, reducing errors caused by inadequate comprehension or unstable expression. Martti, for example, requires ILR Level 3 proficiency, while LanguageLine uses standardized language testing before admission. Assessment also extends beyond general linguistic ability to medical contextual competence. Through specialized testing and structured training, platforms incorporate medical terminology, clinical procedures, norms of information transfer, and professional ethics into the evaluative framework. LanguageLine's use of MICT and Martti's requirement of at least 120 hours of medical interpreter training illustrate this logic. At the process level, remote platforms address a major blind spot in traditional quality oversight by making the interpreting process itself traceable. Conventional on-site interpreting has relied mainly on real-time judgment and ex post subjective evaluation, with little systematic documentation of the interactional process. Remote platforms instead capture data across the service workflow and convert key stages, such as service requests, interpreter connection, session duration, and post-encounter evaluation, into analyzable records. LanguageLine, Boostlingo, and Jeenie all incorporate interpreting activity into reviewable data systems through operational indicators, rating logs, and quality checks.

4. Conclusion

Overall, remote medical interpreting has moved healthcare language support beyond ad hoc assistance toward more organized, routinized, and institutionalized provision. By integrating interpreter resources, reducing spatial and temporal barriers, embedding language support more directly into clinical workflows, and strengthening quality oversight, these platforms have improved service coverage, response time, and procedural consistency. Yet important challenges remain. Technical availability does not automatically translate into meaningful access. Patients who speak less commonly spoken languages, sign language users, and those with limited digital literacy may still face barriers in obtaining, using, and fully benefiting from these services. At the same time, the mechanisms that make remote interpreting more manageable and traceable, such as ratings, service logs, recordings, and algorithmic dispatch, also complicate questions of accountability, privacy, data security, and dispute resolution. The growing use of artificial intelligence, automatic speech recognition, and machine translation within interpreting workflows adds further complexity, especially in high-risk clinical contexts where the limits of technological assistance, the boundary of human judgment, and the allocation of responsibility must be clearly defined. The next stage of development should therefore not be understood simply as platform expansion or technical upgrading. More important are the institutional questions: how technical access can be converted into meaningful access, how responsibility should be distributed across multiple actors, and how the boundaries of human-machine collaboration should be defined. Addressing these issues is essential if remote medical interpreting is to become a genuinely accessible, governable, and trusted form of healthcare language support.

References

Bernardi, E., & Gnani, F. (2022). The impact of the COVID-19 pandemic on medical interpreters/cultural mediators in Italy. *FITISPos International Journal*, *9*(1), 54-77.

Brochez, N., Islam, B., Mian, Q., & Forbes, K. L. (2025). Training and usage of language interpretation services among health care providers in a large Canadian pediatric centre. *Paediatrics & Child Health*, *30*, 176-183.

Gilbert, A. S., Croy, S., Hwang, K., LoGiudice, D., & Haralambous, B. (2022). Video remote interpreting for home-based cognitive assessments: Stakeholders' perspectives. *Interpreting*, *24*(1), 84-110.

Lundin, C., Hadziabdic, E., & Hjelm, K. (2018). Language interpretation conditions and boundaries in multilingual and multicultural emergency healthcare. *BMC International Health and Human Rights*, *18*, 23.

Nevado Llopis, A., & Foulquié Rubio, A. I. (Eds.). (2024). Medical interpreting: Training the professionals. Peter Lang.

Olson, A. M., & Swabey, L. (2017). Communication access for deaf people in healthcare settings: Understanding the work of American Sign Language interpreters. *Journal for Healthcare Quality*, *39*(4), 191-199.

Price, E. L., Pérez-Stable, E. J., Nickleach, D., López, M., & Karliner, L. S. (2012). Interpreter perspectives of in-person, telephonic, and videoconferencing medical interpretation in clinical encounters. *Patient Education and Counseling*, *87*(2), 226-232.

Reports Insights Consulting Pvt Ltd. (2025). Interpreting market size, scope, growth, trends and by segmentation types, applications, regional analysis and industry forecast (2025-2033). Reports Insights Consulting Pvt Ltd.