



# Perspective Educating Clinicians to Improve Telemedicine Access for Patients with Limited English Proficiency

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**Abstract**: The COVID-19 pandemic prompted the rapid incorporation of telemedicine into healthcare systems, resulting in increased access challenges for patients in the United States with limited English proficiency (LEP). Non-English-language speakers face challenges with telemedicine that magnify pre-existing barriers to language-appropriate care, such as difficulty accessing professional medical interpreters and navigating both electronic health information and online patient portals. Improved medical education on telehealth would increase equitable care for linguistic minorities. Medical education targeting telehealth care delivery should include clinician instruction on working with interpreters in telehealth contexts, increasing patient access to telehealth resources, and addressing patients' language needs for telemedicine.

**Keywords:** telemedicine; language barriers; patient-doctor communication; limited English proficiency; health disparities; education

# 1. Introduction

The coronavirus disease 2019 (COVID-19) pandemic and resulting rise in use of telemedicine services have dramatically changed the delivery of medical care [1]. While telemedicine offers both convenience and safety, it presents specific challenges, particularly for patients with limited English proficiency (LEP) [2]. Numerous studies have demonstrated that health outcomes are more positive when doctors and patients speak the same language [3] or when professional interpreters mediate medical conversations [4]. A continuing lack of language-concordant clinicians and underuse of professional medical interpreters therefore negatively impact health outcomes for LEP patients. Physicians do not request a professional medical interpreter, even when needed, due to a lack of time or immediate access to interpreters [5]. With the pandemic's effects on both volume of patients and acuity of care, these vulnerabilities for non-English-speaking patients have been heightened [6].

The COVID-19 pandemic has exacerbated existing inequities throughout the U.S. for Spanish speakers, who comprise the largest LEP population in the nation [7]. Spanishspeaking patients have been disproportionately affected by COVID-19 [8]. Early in the pandemic, reports described disproportionate SARS-CoV-2-positive results for the Hispanic population in the Mission District of San Francisco [9] and death rates in New York City [10]. Recent data show Hispanics with 2.3 times the rate of deaths due to COVID-19 compared to white, non-Hispanics [11] and a lower rate of COVID-19 vaccinations [12].

Although U.S. Census data demonstrate significant sustained and projected growth in Hispanic LEP populations [13], health systems have yet to fully address the inequities rooted in language [14]. In this essay, we explore challenges that telemedicine presents in education, specifically the context of teaching healthcare professionals to care for patients



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**Copyright:** © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). with LEP. We recommend improvements to telehealth for linguistic minorities by training clinicians to address patient language needs during telemedicine encounters and ensuring that clinicians have the resources they need to do so effectively. While we focus on Spanish-speaking patients in the United States, these recommendations can be applied to benefit all patient populations with LEP and those who communicate in non-English languages in other countries.

#### 2. Language Interpretation Challenges during COVID-19

Skilled medical interpretation is especially critical during a pandemic to provide high-quality care and to deliver clear, accurate, and timely communication to patients [6]. U.S. hospitals, and particularly clinics, often find language interpretation delivery to be economically burdensome in normal times and, even more so, during a pandemic when resources are restricted [15]. State language reimbursement for patients on Medicaid and the Children's Health Insurance Program (CHIP) is limited; only 15 states cover the cost of language services [16]. Early in the pandemic, healthcare systems were challenged by the sudden need to provide both in-person and remote interpretation, often without the interpreter workforce or financial resources to provide both types of services [15]. Some hospitals and clinics consequently reduced or suspended in-person professional interpretation or furloughed interpreters due to lack of personal protective equipment and cost-cutting strategies during COVID-19 [17].

Hospital and clinic systems have experienced logistical challenges when using telemedicine with patients, particularly community health centers caring for LEP populations [18]. Due to costs, some institutions have a limited number of electronic devices with cameras and microphones and none designated for interpreter use [19]. Other healthcare systems continue to lack software for three-way video-interpretation capabilities [20]. Early in the pandemic, changes to incorporate language mediation presented additional hurdles for informatics personnel [21], whose system priorities understandably superseded the need to implement technology for remote interpreters. Even when the technology is available, telehealth interpreters have the added difficulty of performing remote interpretation when they cannot easily view the entire room, read body language, or understand when clinicians' speech is muffled by masks and other protective gear [6].

## 3. Training to Provide Language-Appropriate Telemedicine Care

Currently, not all clinicians receive training on working effectively with interpreters [22], let alone working with interpreters while using telemedicine [23]. Lack of both training and interpreter availability reduces the likelihood that physicians will access interpreters during medical encounters; this effect is worsened under pandemic conditions [6]. Bilingual clinicians help address communication difficulties by reducing the need for an interpreter during telemedicine encounters, but the U.S. continues to have an inadequate supply of physicians for Spanish-speaking populations [24].

Best practice guidelines and health-system training protocols must be developed for non-English telemedicine encounters. Professional education designed to teach and assess communication skills must explicitly address patient language needs during telemedicine encounters. Clear policies should be developed around language and interpreter use [17] for both faculty and learners. Instruction is essential for all clinicians on the linguistically appropriate use of technology with patients, including training to consider and recognize language skills and limitations, work appropriately with interpreters, and understand patients' barriers to digital access and telehealth. Professional education should also provide resources for medical language training to students and faculty wanting to use non-English language skills in telemedicine [25].

Additionally, the entire healthcare team—including, but not limited to physicians, nurses, health professional students, front desk staff, and patient service representatives—should receive training regarding language impact on health outcomes and potential roles to facilitate communication with patients demonstrating LEP. Finally, multilingual

staff should receive training to accurately identify their language skills and limitations. Practical training for practicing clinicians, students, and staff should include telemedicine simulations with linguistically diverse patients.

## 4. Resources Needed for Effective Telehealth for Linguistic Minorities

In addition to language interpretation, effective telehealth care for patients who communicate in non-English languages requires institutional access [21] for effective telemedicine, competent bilingual clinicians, and language-concordant assistance for patients' digital access [26].

# 4.1. Clinician Resources

To care for linguistically diverse patients, healthcare systems must improve access to necessary equipment, advocate for telemedicine platforms that facilitate three-way visits, and develop organizational protocols for telemedicine visits with patients who do not speak English (Table 1). These resources should also be available for training purposes to enable clinicians to practice using telehealth technology involving medical interpreters [6,27]. Furthermore, hospitals and health centers should identify and assess clinician non-English language skills so they can appropriately pair patients with clinicians who speak the same language [6], obviating the need for a medical interpreter in language-concordant encounters. Through intentional hiring, retention, and training strategies [25], institutions should increase the number of clinicians able to provide language-concordant [28] telehealth; telehealth clinicians need not be limited to a specific geographic area. In sum, increased documentation and understanding of patients' languages, improved language-interpretation resources, and increased attention to clinician language proficiencies would enhance language-concordant care.

#### 4.2. Digital Access for Non-English-Language Speakers

Even when clinicians have access to interpreters during telemedicine visits or when clinicians have the medical language skills to provide care in Spanish, many Spanish-speaking patients are unable to access phone or video interpretation services for telehealth visits due to a variety of technological limitations [2]. Prior studies demonstrate that Spanish-speaking patients with LEP are less likely to use technology to access health-care [26,30]. They may not have reliable internet [31] and are often unable to readily understand instructions for setting up telemedicine technology, especially when instructions are unavailable in Spanish. In general, patients with LEP do not receive training to use digital health tools [2]. Furthermore, they have difficulty accessing interpreters to help them navigate telemedicine [15]. For example, a San Francisco study early in the pandemic found that after telemedicine implementation, visits with LEP patients decreased significantly from 14% to 7% [2]. A more recent study found that non-English language was associated with a 50% reduction in telemedicine use [32]. Telehealth access for Hispanic patients continues to be problematic [33].

Challenge	Recommendations for Training			
	Hospitals & Health Centers	Health Professions Schools & Educators	Individual Clinicians & Healthcare Teams	
Language Interpretation for Telemedicine Encounters	<ul> <li>Prioritize language-concordance in telehealth [6]</li> <li>Increase access to professional interpreters [28]</li> <li>Acquire and implement equipment/technology for three-way video interpretation</li> <li>Create clear policies around language and interpreter use [17] for clinical staff</li> <li>Include a member of the language-services team in committees determining telehealth policy and implementation</li> </ul>	<ul> <li>Include practice telemedicine and in-person encounters with linguistically diverse patients</li> <li>Diversify pool of standardized patients, including diverse linguistic profile, and use simulation for staff telehealth training</li> <li>Create clear policies around language and interpreter use for faculty and learners [28]</li> </ul>	<ul> <li>Advocate for systems changes (e.g., telehealth navigators, interpreter access, video interpretation, language policies)</li> <li>[6] to allow personnel to appropriately interact with linguistically diverse patients</li> </ul>	
Digital Access for Patients with LEP who Communicate in Non-English Languages	<ul> <li>Develop protocols for telemedicine visits with patients (e.g., through partnerships with national telehealth organizations) [29]</li> <li>Provide written and oral telemedicine information in patients' language and via preferred sources (e.g., WhatsApp, Facebook, YouTube instructional videos, use of telehealth language support staff) [29]</li> <li>Inform patients of legal right to language access during healthcare visits [14]</li> </ul>	• Include topics about digital access, including telemedicine and language access, in coursework regarding social determinants of health	<ul> <li>Refer patients to resources for free/low-cost internet access for telehealth visits [29]</li> <li>Provide written and oral telemedicine information in patients' languages</li> </ul>	
Language-Appropriate Telemedicine Care	<ul> <li>Increase number of bilingual clinicians who can provide language-concordant telehealth through hiring, retention, and training [25]</li> <li>Provide practical training to all clinical staff to work with interpreters, including during telemedicine (e.g., determining when interpreters are needed, the most appropriate type of interpretation, how to use technology, and how to handle dilemmas during interpreted telemedicine) [27]</li> <li>Provide practical training for multilingual staff to accurately identify their language skills and limitations</li> </ul>	<ul> <li>Provide practical training for multilingual students/faculty to accurately identify their language skills and limitations [28]</li> <li>Provide courses/resources in medical language training for students/faculty who wish to use non-English language skills during patient care [25]</li> </ul>	<ul> <li>Advocate for practical workplace training to help personnel work appropriately with interpreters, including during telemedicine</li> <li>Reflect upon individual language skills and limitations [28]</li> </ul>	

Table 1. Challenges and Recommendations for	Training to Improve	Language-Appropriate	Telemedicine Services.
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Patients with LEP require improved instructions and access to telemedicine services. Clinicians and staff, particularly at primary, urgent, and emergency care centers, who are often the initial point of contact for patients, should be trained to use appropriate protocols and resources to ensure that patients who communicate in non-English languages are able to access telehealth services. To this end, healthcare systems must develop specific protocols for telemedicine visits with patients speaking non-English languages [27,29]. They should provide information about telehealth options in the patient's language—both in print and digital media—including how to schedule a telehealth visit, access the technology, and connect online. When patients do not have access to an electronic device or the internet, healthcare professionals can help connect them with local or federal resources to obtain free or low-cost devices or internet access. Patient materials should include information on legal rights to language access [14] during all healthcare visits, including telemedicine. Hospitals and clinics can improve patient access to telemedicine by training telehealth navigators who either speak the patient's language or can work with an interpreter to walk the patient through steps to using telehealth. By training support staff in telemedicine logistics, the medical professional can dedicate more time to patient care, focusing on patient needs, rather than technology or logistics.

#### 5. Conclusions

Telemedicine during the COVID-19 pandemic has magnified significant and persistent systemic inequities related to medical care for patients who speak non-English languages. Importantly, clinicians must be trained to use telemedicine with interpreters and to support digital access for non-English speaking patients, particularly as some aspects of telemedicine are expected to continue even when pandemic restrictions ease. Based on population and language demographics in the U.S., the need for health communication in Spanish is only expected to increase. Improved professional training is essential to establishing equitable telemedicine and long-term preparedness in health systems. In the face of unpredictable future crises, patients will then be able to appropriately access needed services through multiple modalities. Patients who speak non-English languages must be included in future clinical trials to study the effectiveness and accessibility of new healthcare technology. To achieve ongoing effectiveness, medical education and healthcare systems must enable access to telemedicine services for all patients, no matter which language is spoken, and thus address health inequities for linguistically diverse populations.

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