

# Addressing Virtual Care Disparities for Patients With Limited English Proficiency

Aswita Tan-McGrory, MBA, MSPH; Lee H. Schwamm, MD; Christopher Kirwan, PhD; Joseph R. Betancourt, MD, MPH; and Esteban A. Barreto, PhD, MA

Although virtual platforms allow patients to access care while socially distancing,<sup>1</sup> patients with limited English proficiency (LEP) face structural barriers, including lack of access to technology, need for medical interpreters, unfriendly patient portals, and increased privacy concerns.<sup>2</sup> Notably, experts maintain that telemedicine without explicit adaptation was not designed for patients facing language, literacy, and technological barriers.<sup>2</sup> Medical interpreters may improve health outcomes, and the lack of video during an interpreter-assisted virtual encounter may negatively affect quality, safety, and health outcomes among patients with LEP.<sup>3-5</sup> Clinicians and interpreters often rely on nonverbal cues, such as body language or home environment, to assess patient comprehension of relevant information or to identify pertinent social determinants of health that may impair adherence to medical advice.<sup>6</sup> Although telephonic assessment may be sufficient to address some health care needs, it may represent an even more challenging barrier when caring for patients with LEP.<sup>7</sup>

With a surge in COVID-19, most of the ambulatory care delivery at Massachusetts General Hospital in Boston moved to virtual care.<sup>1,6,8</sup> Virtual care includes synchronous or asynchronous modalities such as phone, text, and video. Prior to COVID-19–associated regulatory changes, we conducted approximately 10,000 virtual visits per year in selected departments supported by internal financial adoption incentives.<sup>9</sup> Visits were integrated into the provider schedule view in the Epic electronic health record (EHR) and seamlessly launched a third-party video client from an icon within Epic. Patients joined via a link embedded in the Epic MyChart patient gateway portal.

From October 2019 to September 2020, our large academic medical center's Department of Interpreter Services provided 127,018 interpretations in the outpatient setting in 127 languages, with the top 5 languages being Spanish, Portuguese, Arabic, Chinese, and Haitian Creole. In this same time period, only 3% of interpretations were provided via video, with 83% of interpretations over the phone and 13% in person. With the move to virtual care on March 15, 2020, the number of interpretations by phone increased by 57% (Figure), but the number of video interpretations did not see a similar upward trend. We saw a similar trend in our larger

## ABSTRACT

During a surge of COVID-19 cases, the majority of care delivery at a large academic medical center moved to virtual care. Due to COVID-19–associated regulatory changes, virtual care is now delivered through telephone and videoconferencing platforms. Although virtual platforms allow patients to access care while socially distancing, patients with limited English proficiency (LEP) face structural barriers to these platforms, including lack of access to technology, need for medical interpreters, unfriendly patient portals, and increased privacy concerns.

Strategies for increasing access to virtual platforms and technology for patients with LEP included offering patient education in multiple languages, reducing barriers to patient portal enrollment, and addressing the technology literacy gap through the use of tablets and bilingual interns.

Strategies for addressing privacy concerns for patients with LEP included developing a low-literacy script and other actions that address patient concerns about Immigration and Customs Enforcement and mitigate perceived risk, as well as identifying a virtual platform that meets privacy regulations and does not require a patient to download an application to their phone or computer to join.

Strategies for integrating medical interpreters into virtual visits included assessing existing virtual platforms for the ability to host a third party, changing the electronic health record software (Epic) interface, and convening directors of interpreter departments at each site to ensure comprehensive system rollout.

Health care organizations that rely heavily on virtual visits to provide patient care will need to take all these challenges into consideration for patients with LEP.

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regional health care system, in which patients with lower odds of having a video virtual visit were those with LEP.<sup>10</sup> With the explosion in use of telemedicine to provide care in the COVID-19 pandemic, we deployed the following 3 strategies for addressing disparities in virtual care at our academic medical center (Table).

**Strategy I: Increase Access to Virtual Platforms and Technologies for Patients With LEP**

**The challenge.** In response to the increased use of virtual visits during the COVID-19 surge, our academic medical center rolled out our video virtual visit platform (Zoom integrated into our Epic EHR) to all providers for increased security, privacy, compliance, and stability. The increased technical complexity of the Epic-integrated virtual visit technology and the required software downloads reduced the ease of use and quality of the user experience, especially for patients with LEP, who may have low baseline digital literacy, health literacy, and English language skills.<sup>7</sup> For example, the Epic-integrated Zoom platform requires enrollment in Patient Gateway (PG), our Epic patient portal. PG enrollment has been traditionally low among patients with LEP, which prevents the

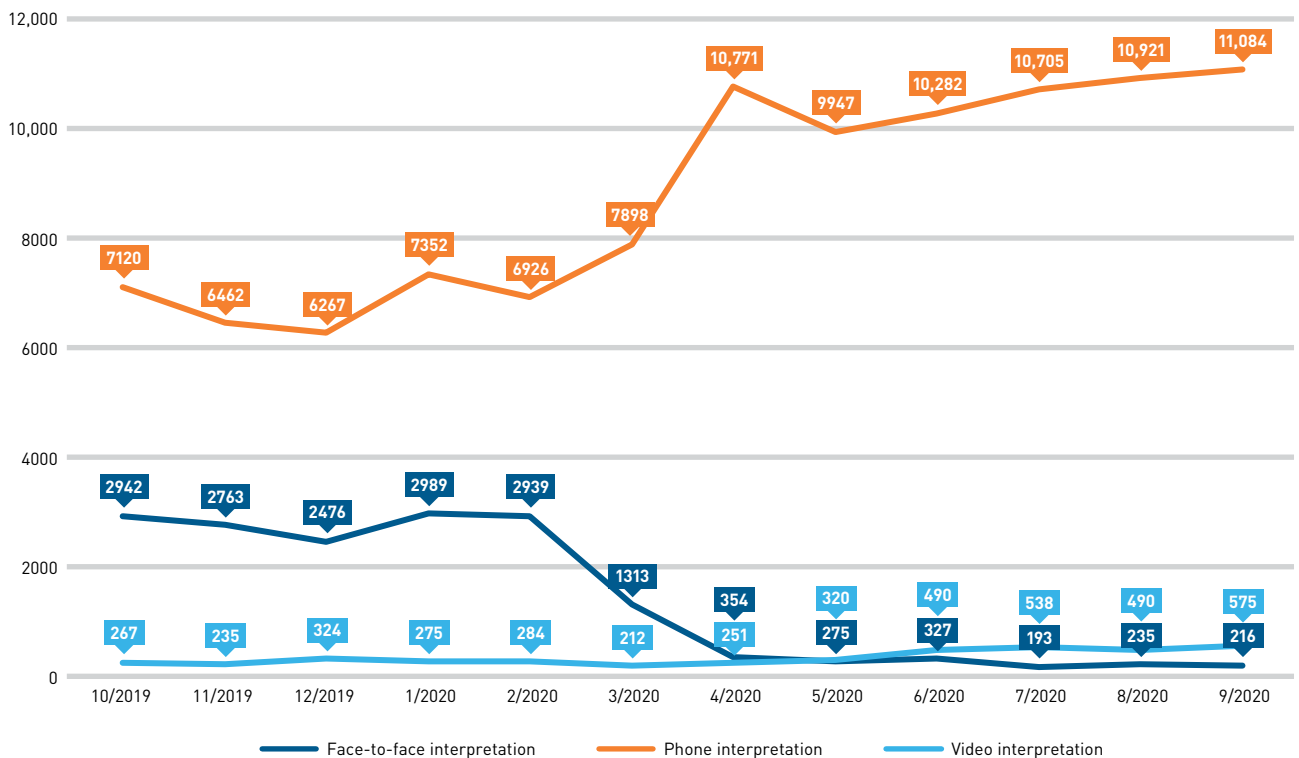
**TAKEAWAY POINTS**

Due to COVID-19–associated regulatory changes, virtual care is delivered through phone, video, and text-based applications. Although virtual platforms allow patients to access care while socially distancing, patients with limited English proficiency (LEP) face structural barriers to these platforms, including lack of access to technology, need for medical interpreters, unfriendly patient portals, and increased privacy concerns. This paper includes strategies for the following recommendations:

- ▶ Increase access to virtual platforms and technologies for patients with LEP.
- ▶ Address the privacy concerns of immigrant patients.
- ▶ Integrate interpreters into virtual platforms.

utilization of the Epic-integrated platform for video visits.<sup>11</sup> Research indicates that patients with limited health literacy need more support in accessing online health portals<sup>12</sup> and that patients of color are less likely to be enrolled in patient portals and receive an access code and have lower odds of repeated portal use.<sup>13,14</sup> Patient portal access may be a function of not only patient characteristics and needs, but also provider behaviors and potential bias.<sup>15,16</sup> Furthermore, during the COVID-19 surge, our patient portal was primarily in English, although a limited version was available in Spanish. It would not, for instance, include a completely translated letter in Spanish from an English-speaking provider to a Spanish-speaking patient.

**FIGURE.** Outpatient Services Provided by Mode of Interpretation, FY 2020



FY, fiscal year.

## TRENDS FROM THE FIELD

**TABLE.** Strategies for Addressing Disparities in Virtual Care for Patients With LEP

Strategy I: Increase access to virtual platforms and technologies for patients with LEP	
Challenges	Recommendations
Increased security often leads to reliance on patient portals for virtual visit access. Due to low engagement with portals among patients with LEP, this becomes a barrier.	<ol style="list-style-type: none"> <li>1. Customize patient portal to include other top 5+ languages across the system.</li> <li>2. Encourage patient enrollment into the portal through targeted, multilingual patient education.</li> <li>3. Assist patients in portal self-enrollment through tip sheets and videos in multiple languages available on a public-facing repository.</li> <li>4. Increase diversity of teams who design and test systems to make sure they are inclusive of those patients with language barriers, low literacy, or lack of access to technology or broadband.</li> </ol>
Patients with LEP have limited access to technology or broadband.	<ol style="list-style-type: none"> <li>1. Increase technology access and education.</li> <li>2. Partner with payers, community-based organizations, faith-based organizations, and government agencies to provide broadband hotspots.</li> </ol>
Strategy II: Address the privacy concerns of immigrant patients	
Challenges	Recommendations
Concerns about ICE result in patients being hesitant to download virtual platforms, enroll in patient portals, and engage in virtual video visits.	<ol style="list-style-type: none"> <li>1. Develop low-literacy hospital-approved script that addresses patients' concerns about privacy and what is shared with ICE.</li> <li>2. Offer guidance to providers on asking about and documenting immigration status in patient record.</li> <li>3. Educate patients about rights and protections.</li> <li>4. Identify a secure virtual platform that patients can join by clicking on a text message link.</li> </ol>
Strategy III: Integrate interpreters into virtual platforms	
Challenges	Recommendations
Secure video platforms that meet security standards do not easily accommodate more than 2 users.	Identify a secure virtual platform that supports an easy-to-use interface to which interpreters can easily be added.
Standard EHR scheduling software workflow makes it challenging to add interpreters to the visit.	Customize EHR software workflow with input from interpreter leads across system.

EHR, electronic health record; ICE, Immigration and Customs Enforcement; LEP, limited English proficiency.

**What we did.** Strategies to increase access to the virtual platform for patients with LEP included (1) health care system actions to enhance accessibility of PG through a custom build beyond the current limited Spanish version to include the top 5 languages spoken in our patient population; (2) increasing PG enrollment through targeted patient education pilots regarding the benefits of becoming a PG user; and (3) launching a targeted marketing and education campaign in multiple languages with a focus on patients with limited technology and health literacy. In the targeted patient education pilot project, bilingual staff called patients to inform them about the portal and invite them to enroll. Language concordance in this patient outreach resulted in an increase of patients with LEP who were more willing to learn about PG. The marketing and education campaign focused on the PG multistep self-enrollment process, including identity verification or authentication, which may be difficult for patients with LEP to navigate.<sup>12</sup> We worked with a multidisciplinary team to

develop tip sheets and short videos in multiple languages on how to launch a virtual visit using different devices (eg, desktop computer, smartphone, various operating systems). The video scripts were reviewed by medical editors for literacy and were recorded by bilingual providers. Some low health literacy patient education materials in multiple languages were uploaded to a public-facing online repository; they have received 3388 page views as of August 19, 2021, and could be utilized at various points of care, such as virtual visits.<sup>17</sup>

**The challenge.** The enhanced security and privacy of the Epic-integrated modality introduced additional barriers to caring for patients such as those with limited digital literacy<sup>7</sup> and LEP.<sup>3</sup> In particular, immigrants, who may include those with LEP or lack of digital literacy, are more likely to be affected by the digital divide, which includes access to computers and/or telephones and the internet.<sup>18</sup>

**What we did.** To increase technology access, one of the affiliated community health centers explored the use of donated Amazon Fire tablets in a small feasibility pilot. This provided 43 behavioral health patients with LEP and technology barriers with a tablet they could keep and paired them with a bilingual student intern to help patients with (1) registering their device, (2) setting up an email account, (3) self-enrolling in the patient portal, (4) downloading Zoom, and (5) joining a video virtual visit. This pilot aims to address 2 of the 3 barriers, technology and digital literacy (with access to broadband being the third), that make up the digital divide.<sup>18</sup> Approximately 19% of patients

identified for the pilot could not participate due to lack of reliable access to internet. We have successfully enrolled our first cohort of patients, and the pilot is still ongoing and will provide insights and recommendations for engaging patients with LEP in accessing virtual visits. Our feasibility pilot highlighted that creative solutions may need to include a partnership with payers, community-based organizations, and faith-based organizations to provide broadband hotspots that patients can use to access virtual care.

### Strategy II: Address the Privacy Concerns of Immigrant Patients

**The challenge.** Immigrant patients, who may include patients with LEP, may have concerns about how their information may be collected and shared with Immigration and Customs Enforcement.<sup>19</sup> This can be a barrier to enrollment in patient portals or downloading applications such as Zoom or other virtual visit platforms on

smartphones or computers. Pre-COVID-19, there was no hospital-approved scripted guidance for staff, providers, and/or interpreters to use when patients raised these concerns.

**What we did.** With input from immigrant advocates, health center providers, interpreters, and the Office of General Counsel, we developed a low-literacy script that described ways in which the hospital keeps information secure under the Health Insurance Portability and Accountability Act (HIPAA) and under what circumstances personal and health information is shared with law enforcement (eg, if there is a valid warrant or other court order). Clinicians must be educated on whether and how to ask patients about their immigration status and that of their family members or housemates; they also should avoid documentation of such status on a patient's medical record to reduce stigma or unnecessary risk should immigration enforcement officers obtain access to the medical record.<sup>19</sup> Patient education through distribution of cards in multiple languages by the Immigrant Legal Resource Center helps to outline the rights and protection of immigrants under the US Constitution.<sup>20</sup> To address the barrier of patients' reluctance to download an application to their personal phone or computer, we identified the need for a virtual platform that meets privacy regulations and does not require a patient to download a new application to their phone or computer to join.

### Strategy III: Integrate Interpreters Into the Virtual Platforms

**The challenge.** We identified the need to continue to explore and find a video platform that meets privacy regulations but is browser based so it does not require the patient to download a separate application to their phone or computer. It also must have the ability to accommodate a third party such as a spoken language or American Sign Language interpreter. At the beginning of the COVID-19 pandemic, there were regulatory changes and waivers to privacy and payment requirements, which allowed providers to deliver virtual care via telephone and popular videoconferencing platforms such as FaceTime, Zoom, and WhatsApp. Although such platforms were able to accommodate patients who were not enrolled in PG, privacy, compliance, and security issues make these less ideal as long-term solutions. Many patients use popular platforms such as WhatsApp for making international phone and video calls, but the lack of privacy raises concerns about using them in a virtual visit.<sup>21</sup>

**What we did.** We identified a single enterprise-supported application, Doximity, that supports an easy-to-use interface to which medical interpreters can be prescheduled or added on the fly. Doximity is a HIPAA-compliant application that provides browser-based access to high-quality video without any software download simply by clicking on a text message link. We have partnered with the company to create custom text messages in the patient's preferred language to initiate a virtual video visit.

**The challenge.** Integrating third parties such as medical interpreters into the actual visit proved challenging in the workflow from both a system and a user perspective. EHR software such as Epic is designed around billable health care encounters and thus may

not have a straightforward mechanism to schedule and incorporate nonbillable services such as interpreter services.

**What we did.** Resolving this issue requires increased customization of the EHR scheduling software, as well as working with both onsite interpreters and third-party vendors, who provide interpreter services that in-house staff cannot provide. Customization of the EHR included adding a video column, which allowed for both the clinician and the interpreter to join a video visit with a click on the camera icon; adding an interpreter column, which improves communication between interpreters and clinicians, thus reducing no-shows or last-minute cancellations; and changing scheduling so that interpreters can see upcoming visits for patients with LEP and assign interpreters, reducing the need of practice staff to call the interpreter department.

Health care organizations will undoubtedly rely heavily on virtual visits to provide patient care in the future. As such, they will need to take all these challenges into consideration if they are to provide high-quality care and address disparities for patients with LEP. Unfortunately, virtual visit platforms and systems are by default built for the technology-literate, English-speaking patient who has a smartphone, tablet, and/or computer.<sup>2,7</sup> Given the likelihood that payment reimbursement for audio-only visits will be reduced or discontinued after the public health emergency ends, health care organizations and policy makers should consider the impact on access to virtual care for those without broadband or technology.<sup>10,22</sup> Ideally, systems, workflows, and platforms must be reviewed by staff who have the lived experience of low digital literacy, language barriers, and lack of access to technology or broadband. We have recently partnered with CRICO, our medical malpractice insurer, to develop best practices for the conduct of virtual visits.<sup>23</sup>

In short, although virtual platforms allowed many patients to safely access care during the worst of the COVID-19 pandemic, they unintentionally disenfranchised a large segment of the population, especially those with LEP. Although many health systems had to go live with virtual care platforms that were not intended for such rapid scaling, going forward we must commit ourselves to be more intentional with our design and implementation of virtual care so that we may truly meet the mission of providing quality care for everyone. ■

**Author Affiliations:** Disparities Solutions Center, Department of Medicine (AT-M), Center for Telehealth (LHS), Medical Interpreter Services (CK), and MGH Equity and Community Health (JRB, EAB), Massachusetts General Hospital, Boston, MA; Massachusetts General Brigham (LHS), Somerville, MA; Harvard Medical School (LHS, JRB, EAB), Boston, MA.

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## TRENDS FROM THE FIELD

**Address Correspondence to:** Aswita Tan-McGrory, MBA, MSPH, Disparities Solutions Center, Massachusetts General Hospital, 100 Cambridge St, 16th Fl, Boston, MA 02114. Email: [atanmcgrory@mgh.harvard.edu](mailto:atanmcgrory@mgh.harvard.edu).

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