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The Language of Equity in Digital Health: Prioritizing the Needs of Limited English Proficient Communities in the Patient Portal 2.0

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Abstract: Communication barriers faced by limited English proficient (LEP) patients have led to worse outcomes. Such disparities are entrenched in digital health and call into question the impact of tools such as patient portals, the primary digital touchpoint for patients. Over the last decade, portals have been implemented broadly but have done little to address the needs of LEP communities, who make up almost 10% of the U.S. population. The surge in telemedicine during the COVID-19 pandemic, which has relied in part on portals, increases the urgency for a comprehensive approach to digital disparities. We present recommendations grounded in the 7Ps of Stakeholder Engagement (policymakers, payers, product makers, purchasers, providers, patients, and principal investigators) for the next generation of portals (version 2.0). Our recommendations focus on expanding language accessibility, establishing messaging workflows to integrate language services, extending federal guidelines for language equity, and ensuring digital access and literacy.

Key words: Patient portals, limited English proficiency, telemedicine, health care disparities.

Background

As the primary digital health touch point provided by health care systems, patient portals facilitate a secure online relationship between patients and their clinical team.¹ In 2009, the Health Information Technology for Economic and Clinical Health (HITECH) Act offered both policy and financial incentives for the expansion of patient portals. Currently, more than 90% of health care systems provide access to patient portals for their patients.¹ While the research findings linking portal use to improvements in

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health outcomes are encouraging, national data show that underserved populations are substantially less likely to access a patient portal.^{2–4} One group that is notably left behind is the 25.6 million people in the U.S. who are limited English proficient (LEP).⁵ At Kaiser Permanente, a large health care system that has provided patient portals for almost two decades, uptake is low for Spanish-speaking Latino patients, as it is in other systems.^{6,7} This disparity is compounded by the fact that communication challenges have been the unfortunate norm for LEP patients.⁸ Limited English proficient patients already suffer from multiple gaps in care, including poorer access to consistent medical care, higher rates of hospitalization and readmission, and impaired health understanding.^{9–13} Moreover, the compounded inequities of the COVID-19 pandemic and the pre-existing lack of access to care (physically and digitally via telemedicine) that disproportionately affect LEP patients have increased the urgency of a comprehensive approach to addressing these digital disparities.¹⁴

Recommendations

In an effort to guide the next generation of patient portals (version 2.0), we lay out a systems-based approach applying the 7Ps Stakeholder Framework to envision and describe the needed collaborations among seven key health care stakeholders: policy-makers, payers, product makers (i.e., patient portal vendors), purchasers (i.e., health care organizations), providers, patients, and principal investigators (i.e., researchers) (see Box 1).¹⁵ Our recommendations focus on expanding language accessibility, establishing messaging workflows to integrate language services, extending federal guidelines for language equity to be inclusive of patient portals, and ensuring digital access and literacy.

Language Accessibility

Language accessibility can be promoted by a collaboration between purchasers, product makers, and policymakers. Language accessibility requires linguistically-tailored portal registration information, log-on sites, and the translation of all standard patient portal content (i.e., website headers and links). Several portal vendors (product makers) already offer these options including Epic's MyChart, though they have not been universally implemented by health care organizations. Next steps should include the translation of non-standard content (e.g., labs, medications, patient messaging, and OpenNotes) that require collaboration between technical content matter and culture/language experts. Health care organizations will need to allocate resources to promote language-accessible portals and request support from their portal vendors. Proactive federal and organizational policies could mandate accessibility features to reflect the new digital realities of patient portal communication. Additionally, providers and patients should continue to advocate for portals that support the providers-patient relationship regardless of English proficiency.

Integration of Language Services into Portal Messaging Workflows

Secure messaging is one of the key portal features that can nurture the patient-provider relationship outside of the clinical encounter, but it requires innovative workflows for LEP patients.^{16,17} Expanded language services (i.e., interpreters and translators) will be

Box 1.**FRAMEWORK FOR ACHIEVING PATIENT PORTAL
EQUITY AMONG LIMITED ENGLISH PROFICIENT
PATIENTS**

Policy makers	<ul style="list-style-type: none"> • Update federal requirements for language accessibility to include digital communication. • Expand funding support for language services. • Extend reimbursement to include clinical communication across portals. • Increase support for addressing gaps in Internet and device access.
Payers	<ul style="list-style-type: none"> • Include interpreter services as a part of reimbursement. • Expand payment parity to include communication across portals.
Product Makers (Patient portal vendors)	<ul style="list-style-type: none"> • Continue development of language accessible portals. • Apply evidence-based language and health literacy recommendations in portal design. • Explore the use of machine translation tools in secure messaging to serve as adjunct to interpreter workflows. • Partner with researchers to test the impact of portals using rigorous methods, ensuring LEP patients are included in the research process.
Purchasers (Health care organizations)	<ul style="list-style-type: none"> • Implement language accessible portals (if provided by vendors) along with expected communication policies and workflows. • Allocate technology support and interpreting resources to ensure facilitation of language-discordant communication. • Measure the use of portals among LEP patients. • Engage patients and their caregivers in increasing portal awareness, training, and use. • Collaborate with community organizations to support digital access and literacy. • Hire bilingual providers to match the patient population.
Providers	<ul style="list-style-type: none"> • Include portals as part of clinical care and communication with LEP patients. • Advocate for adapting portals for LEP patients. • Offer portals as part of standard care, regardless of patient's English proficiency.
Patient	<ul style="list-style-type: none"> • Actively engage in using the portal as a communication tool to extend clinical care. • Provide peer recommendation for portals in their community.
Principal Investigators (Researchers)	<ul style="list-style-type: none"> • Evaluate the impact of portals on the quality, cost, and outcomes of care for LEP patients. • Collaborate with portal vendors to develop workflows that promote communication, especially when language discordance is present.

critical to appropriately extending patient portals to LEP patients. The asynchronous nature of written communication requires more complex portal communication workflows for providers, patients, and interpreters. Translating text-based communication is limiting in that it does not capture gestures, vocal cues, or allow for immediate clarification, which are important to ensure communication nuances are relayed across languages. Additionally, it is unknown how the inclusion of interpreters as part of a communication workflow will affect response times as well as patient and provider satisfaction. However, interpreters are already a limited resource and health care organizations may not be able to support the translation of portal messages, in addition to interpreter's current work.^{18–20} Further, translation also requires a different skillset since interpretation focuses on oral communication, whereas translation focuses on written communication. An overall restructuring of the way policymakers and payers financially support interpreter services could address both digital and analog challenges. As an alternative solution, translation technology may offer support to limited interpreter resources and should be explored as an integral component of patient portals. Machine translation tools, such as Google Translate, offers a potential adjunct to standard interpreter-reliant workflows. Though there has been hesitation to adopt this freely in the health care setting, there is evidence to support its use, and there are ongoing developments driving machine translation closer to human parity.^{21,22} Further, principal investigators (researchers) could play a critical role in evaluating the development and implementation of health-focused machine translation tools alongside product makers.

Language Accessibility Guidelines

We admit that these innovations will pose logistical challenges—especially as it relates to portal communication across language discordant patient-provider relationships. While current language accessibility guidelines do not explicitly describe the requirements for health care organizations with regard to online communication, there are legal grounds for insisting on adapting portals for use by LEP patients.²³ Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of national origin, which directly affects LEP patients. Furthermore, the U.S. Department of Health and Human Services' National Standards for Culturally and Linguistically Appropriate Services (CLAS) in Health Care states that the denial or delay of medical care due to linguistic barriers constitutes discrimination and requires that recipients of Medicaid or Medicare funds provide adequate language assistance to patients.²⁴ The Affordable Care Act also prohibits discrimination based on limited English proficiency.²⁵ These legal protections should be applied to digital communication. If inclusive federal policies are applied to health technologies, portal vendors (product makers) will be prompted to further develop multilingual patient portals. Currently, when attempting to communicate using portal messaging, providers and patients may rely on their own limited familiarity with the language, machine translation, or staff or family members who can read and write in the patient's language. This is very similar to non-digital interactions.^{19,26,27} Further, prioritizing the hiring and appropriate compensation of bilingual staff would facilitate communicating with LEP patients on portals, as well in person.

Digital Access and Literacy

Addressing portal inequities faced by all underserved patients requires addressing initial barriers related to digital divides due to lack of broadband Internet access, device access, and digital literacy.^{28–30} With more recent data showing that LEP patients have close to equal rates of Internet access compared with the general population, addressing the remaining broadband access gaps is a critical step towards portal equity.³¹ Policies investing in broadband infrastructure as well as subsidized Internet services address the need for access to the Internet, which is increasingly a social determinant of health (SDOH).³² Health care organizations should develop screening and referral processes that provide LEP patients with language-accessible information to obtain access to the Internet or devices. This approach would include organizational dashboards that report portal use, Internet access, and device metrics across patient languages. To address digital literacy challenges, LEP patients would benefit from unique linguistically-tailored training and support to use patient portals. Collaboration with community organizations (e.g., libraries) and community health workers can facilitate increasing LEP patients' digital literacy.³³

Improving LEP-accessible patient portals in the context of telemedicine

During the COVID-19 pandemic, many health care organizations have relied on telemedicine solutions that require portal access. This rapid rise in telemedicine has led to a focus on enrolling patients in portals.³⁴ Purchasers, providers, and patients have had to rapidly develop workflows that facilitate integrating interpreters as part of telemedicine visits.³⁵ The early data demonstrating gaps in telemedicine use among LEP patients reveal an opportunity to rapidly apply our recommendations.^{36,37} Additionally, telemedicine expansion during the pandemic has been largely driven by the commitment to reimbursement parity for in-person, telephone, and video visits.³⁸ To achieve patient portal equity, policymakers and payers must extend fair reimbursement for clinical care delivered over patient portals that takes into account interpreter services and bilingual providers. Payment structures supporting patient portal messaging could further reinforce the portal as an embedded part of care delivery and encourage product makers, health care organizations, and providers to ensure equity for LEP patients.³⁹

Conclusion

Patient portals have the potential to significantly expand access to health care, improve the quality of care, and improve the care experience for all patients, including LEP patients. With communication playing such a critical role in care delivery, portals offer a new avenue to address existing communication barriers faced by LEP patients. There is an opportunity for policymakers, purchasers (health care organizations), payers, product makers (vendors), providers, principal investigators (researchers), and patients to achieve language equity on patient portals. Without this commitment, these technologies will widen, rather than close, digital and health disparities.

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