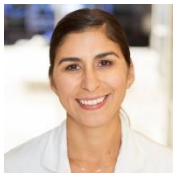
How Health Technology Navigators in Los Angeles' Safety Net Bridge the Digital Divide



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New Health Technology Navigator Program Can be Model for Other Health Systems to Follow

In the Los Angeles County Department of Health Services (LAC DHS), the second largest safety net health system in the United States, it was no surprise to still see large lines of patients waiting to print their medical records and/or refill medications, despite the exciting integration of digital health in our systems in 2016.

Many of us in operations, research, and leadership at LAC DHS knew that there had to be a better way to equip our patients with all the possible health services accessible to them — and that it was a matter of health equity to be able to do it. This was already our first impression in the early days of the US Affordable Care Act's implementation — when electronic health records (EHRs) became a reality, and, patient portals, an expectation of patient care.

Digital health has the potential to increase health services and improve outcomes, and it has long been championed as a means of expanding access to care for patients served by safety net health systems.

Safety net patients, however, face multilevel digital barriers that have mitigated these potential benefits.

LAC DHS is one such **safety net health system —** the majority comprised of racial/ethnic minorities, low-income, Limited English Proficient (LEP), and other vulnerable groups at risk for disparities; groups that are also **more likely** to be affected by access barriers related to the time, effort, and cost of in-person care.

Through our research at LAC DHS, we learned there were gaps in patient guidance and navigation on digital health.

We realized our staff needed to pitch the importance of the technology from the lens of "how this would improve the quality of life for their family and home network," and we recognized we needed to build

a **patient's digital literacy** and confidence to use the technology; it was not enough to equip patients with **Internet-connected devices**.

This echoes a recent study in the ***Journal of Medical Internet Research*** which showed that even though patients had access to digital devices and used the internet previously (as we observed with our own safety net patients), they were unable to perform web-based health tasks without assistance.

When the COVID-19 pandemic reduced access to in-person care, this ongoing *(but albeit too slow)* discussion around improving connection to telehealth in the safety net transformed into an urgent one.

The abrupt transition from in-person visits to telehealth left our safety net system, and many others, ill-prepared to support telehealth adoption among patients, especially those who would be most negatively impacted by inequitable implementation: patients with chronic conditions and LEP individuals.

But, our under-resourced staff simply did not have the time to focus on patient-centered digital health engagement. And despite using state and county resources to implement more user-friendly and bilingual telehealth software, increase access to free smartphones, and develop culturally-tailored marketing and promotion campaigns to improve patient portal registrations, we found **very few patients** went on to use the patient portal after enrolling — particularly Spanish-speaking patients.

In the summer of 2021, we recruited pre-health college students who needed clinical volunteer opportunities during the pandemic — a new workforce to help patients get comfortable and confident using health technology in a meaningful way.

These tech-savvy students used iPads and other educational materials in clinic waiting rooms to help enroll patients and show them how to use the patient portal while they waited for their appointments. And over the course of the 2-month pilot project, our students were able to double patient portal enrollments from baseline in the clinics observed. These impressive results validated this model and enabled our leadership to approve a novel health technology workforce.

In November 2021, the LAC DHS Office of Patient Access and Patient Engagement launched the Health Technology Navigator program — the first formal workforce of this kind in a health system.

As of November 2022, the program has grown to 15 community health workers whose essential job functions include:

- Enrolling patients in the patient portal
- Helping patients download the health system mobile application
- Helping patients practice navigating the portal (like viewing labs or renewing medications)
- Connecting patients with **smartphone and data service plans** that they qualify for under Medicaid

Most of these health technology navigators are bilingual and come from the local diverse communities that LAC DHS serves. They are in the 20-30s age range, comfortable with mobile applications and smartphones, have strong communication skills, and are able to "pitch" technology to patients leveraging their backgrounds in retail. Their education backgrounds vary from GEDs to bachelor's degrees.

Since this program's implementation, patient portal enrollment has increased by 8% for active patients in primary care.

We also observed increases in:

- Actual usage of the portal (e.g., increased rates of checking lab results, increased medication refills through the portal, etc.)
- Self-scheduled appointments for urgent care, flu vaccine, COVID-19 vaccine, and telehealth visits
- Staff satisfaction around patient portal enrollment as evidenced by staff surveys and feedback

Looking ahead, we are seeking to formalize the curriculum and training of the Health Technology Navigators program so that other health systems across the country may use this same model to build a similar workforce.

Our health technology navigators are also working to distill their patient engagement approaches into training that can be used by lay health system volunteers at LAC DHS.

We have also hired a small call center workforce to help close the gap for patients who received invitations to join the patient portal but have not enrolled. This workforce is testing new technology including bidirectional texting and outbound call campaigns to help patients digitally engage.

This novel digital health workforce is working to increase health literacy in the Los Angeles Safety net, but we have learned this is also a matter of equity, diversity, inclusion, and justice.

In their interactions with patients, our health technology navigators have reported recurring themes in the barriers preventing patient portal engagement; each deserves its own solutions and attention in national efforts to close the digital divide:

- **Lack of home broadband access**
- Limited data plans
- Lack of or poor quality Internet-connected devices
- **Lack of multilingual digital health platforms**

Since it is not possible to engage all patients with a 1:1 navigator, future work in this space needs to focus on developing algorithms and **digital readiness screeners** to identify which patients need more engagement and education for better health outcomes.

Through the LAC DHS Equity, Diversity, Inclusion, and Antiracism community listening sessions, advocates noted the importance of digital health and the work LAC DHS health technology navigators were doing to engage patients within underserved neighborhoods — settings that have been historically disenfranchised.

Our community members' response is a call to action for others.

The Health Technology Navigator Program can be a model for health systems to follow, especially safety nets that are working to make healthcare and digital health more equitable for their patients and communities.

About the Authors

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Dr. Alejandra Casillas is an assistant professor of medicine in residence, in the Division of General Internal Medicine and Health Services Research at the UCLA David Geffen School of Medicine. Her current research portfolio is composed of multiple studies that investigate how electronic health tools are received in the Los Angeles county safety net health system, and how the healthcare system can develop a more meaningful experience for these underserved populations. She completed her undergraduate studies at Harvard College and medical studies at Harvard Medical School, where she received the Dean's Community Service Award. She then finished her internal medicine and primary care residency training at the University of California San Francisco before returning to Los Angeles as a Robert Wood Johnson Clinical Scholar and receiving a master's degree at the UCLA Fielding School of Public Health.

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Dr. Anshu Abhat is an Assistant Professor of Medicine at the UCLA David Geffen School of Medicine. She also serves as the Director for Digital Patient Engagement at the Los Angeles Department of Health Services where she develops the strategy for patient-facing communications and implementation of technology tools for LA County patients including patient portal, text messaging, mobile applications, and patient education websites and works with diverse teams within LA County including primary and specialty care, patient access, information technology, and patient experience to customize these tools for patients. Her research focuses on how to engage vulnerable, language-diverse patients using technology. Dr. Abhat is a national lecturer on topics related to point-of-care ultrasound in Internal Medicine and patient engagement using technology in the safety net. She completed her undergraduate studies and medical studies at the University of California, San Diego. She completed her master's of public health at the Harvard T.H. Chan School of Public Health. She then finished her internal medicine training at the University of Washington before returning to Los Angeles to join the faculty at Harbor-UCLA.