



ADDRESSING DIGITAL HEALTH EQUITY

DEVELOPING A TELEMEDICINE PROGRAM September 18, 2023

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Reminder and disclosure

The information contained and delivered in this presentation are for educational and informational purposes only and should not be considered legal advice.

The views, opinions, and positions expressed are mine alone and do not necessarily reflect the views, opinions, or positions of my employers or affiliated organizations.

I hope the information presented will help you better navigate telehealth policy issues and support adding your voice to these discussions.

Overview

Utilization of digital health

- Motivation and data
- Digital divide and preferences

Framework for digital health equity

How do digital determinants impact health equity?

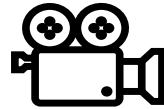
Applying framework to digital inclusion

- Role of law as a barrier or facilitator
- Industry and community-level approaches

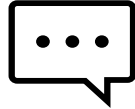
Upcoming Events Featuring Telehealth Law & Policy Issues

Definitions

Digital Health Tools and Patient's Emerging Role



Synchronous Tools
(videoconferencing)



Asynchronous Tools
(secure messaging, SMS)



Audio Digital Tools
(phone calls)



Mobile Health Applications
Digital Self-Care Tools
(collect and store biometric data)



Patient Portals



Remote Monitoring



PAIN MEASURING



Only 5% of Medicare beneficiaries use RPM. Estimates project 25% by 2025.

Benefits

Digital Health and Older Patients

Greater healthcare needs combined with limited mobility

Medication adherence

- Chronic conditions

Infectious disease outbreaks

Hospital care at home / Aging in place

End of life care

ARTICLE

Addressing Equity in Telemedicine for Chronic Disease Management During the Covid-19 Pandemic

Sarah Nouri, MD, MPH, Elaine C. Khoong, MD, MS, Courtney R. Lyles, PhD, Leah Karliner, MD, MAS

Vol. No. | May 4, 2020

DOI: 10.1056/CAT.20.0123

Motivation

Raymond Johnson, age 83, has arthritis, diabetes, high blood pressure, asthma, and was treated for heart failure as an inpatient at home.

Hospital stay could result in:

- [Sleep deprivation](#) and malnourishment
- [Excessive inactivity](#) - lying in bed for 4-5 days
- Hospital-acquired infection or COVID
- Readmission within a month and the debilitating pattern of **post-hospital syndrome**, which impacts 1/5 of Medicare patients.

THE NEW OLD AGE

What if You Could Go to the Hospital ... at Home?

Hospital-at-home care is an increasingly common option, and it is often a safer one for older adults. But the future of the approach depends on federal action.

[Give this article](#) [Share](#) [Bookmark](#) [121](#)



Raymond Johnson of Boston spent four days as an inpatient while he was being treated for heart failure: one day in a hospital, followed by three in his own apartment receiving hospital-level care in an alternative called hospital at home. Sophie Park for The New York Times

By **Paula Span**
Nov. 19, 2022

<https://www.nytimes.com/2022/11/19/health/medicare-home-hospital.html>

Post-hospital syndrome

20 percent of people **over 65** become delirious during a hospital stay.

Older patients may have **better health outcomes** if receive care at home.

- fewer readmissions
- lower mortality

Substantially reduces costs
Patients in hospital-at-home programs spend less time as inpatients and, afterward, in nursing homes.

Caren G. Solomon, M.D., M.P.H., Editor

Delirium in Hospitalized Older Adults

Edward R. Marcantonio, M.D.

This Journal feature begins with a case vignette highlighting a common clinical problem. Evidence supporting various strategies is then presented, followed by a review of formal guidelines, when they exist. The article ends with the author's clinical recommendations.

From the Division of General Medicine and Primary Care, Department of Medicine, Beth Israel Deaconess Medical Center, and Harvard Medical School—both in Boston. Address reprint requests to Dr. Marcantonio at Beth Israel Deaconess Medical Center, 330 Brookline Ave., CO-216, Boston, MA 02215, or at emarcant@bidmc.harvard.edu.

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JAMA
Network | Open

Original Investigation | Health Policy

Association of Costs and Days at Home With Transfer Hospital in Home

Shubing Cai, PhD; Orna Intrator, PhD; Caitlin Chan, SM; Laurence Buxbaum, MD, PhD; Mary-Ann Haggerty, CRNP; Caran S. Phibbs, PhD; Edna Schwab, MD; Bruce Kinoshian, MD

Abstract

IMPORTANCE New Centers for Medicare & Medicaid Services waivers created a payment mechanism for hospital at home services. Although it is well established that direct admission to hospital at home from the community as a substitute for hospital care provides superior outcomes and lower cost, the effectiveness of transfer hospital at home—that is, completing hospitalization at home—is unclear.

OBJECTIVE To evaluate the outcomes of the transfer component of a Veterans Affairs (VA) Hospital in Home program (T-HIH), taking advantage of natural geographical limitations in a program's service area.

DESIGN, SETTING, AND PARTICIPANTS In this quality improvement study, T-HIH was offered to veterans residing in Philadelphia, Pennsylvania, and their outcomes were compared with those of propensity-matched veterans residing in adjacent Camden, New Jersey, who were admitted to the VA hospital from 2012 to 2018. Data analysis was performed from October 2019 to May 2020.

INTERVENTION Enrollment in the T-HIH program.

MAIN OUTCOMES AND MEASURES The main outcomes were hospital length of stay, 30-day and 90-day readmissions, VA direct costs, combined VA and Medicare costs, mortality, 90-day nursing home use, and days at home after hospital discharge. An intent-to-treat analysis of cost and utilization was performed.

Key Points

Question Is transfer hospital in home (T-HIH) associated with increased days at home without being associated with increased costs?

Findings In this quality improvement study, T-HIH was significantly associated with 18% more days at home and significantly less posthospital nursing home use but was not associated with increased Veterans Affairs or Medicare costs.

Meaning These findings suggest that T-HIH provides benefits to patients, payers, and health care systems.

Author affiliations and article information are listed at the end of this article.

As an inpatient at home,
Mr. Johnson and his caregiver
relied on digital health and
“recommend to anyone”

Doctor saw him by **video**

24/7 monitoring via a small
sensor attached to his chest,
which transmitted to the
hospital:



- heart and respiratory rates
- temperature
- activity levels



Why U.S. Patients Declined Hospital-at-Home during the COVID-19 Public Health Emergency: An Exploratory Mixed Methods Study

Journal of Patient Experience
Volume 10: 1-9
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sagepub.com/journals-permissions
DOI: 10.1177/23743735231189354
journals.sagepub.com/home/jpx



Nels Paulson, PhD¹, Margaret P. Paulson, DO², Michael J. Maniaci, MD³ ,
Rachel A. Rutledge, MHA, MAcc⁴, Shealeigh Inselman, BA.⁵, and
Stephanie J. Zawada, MS⁶ 

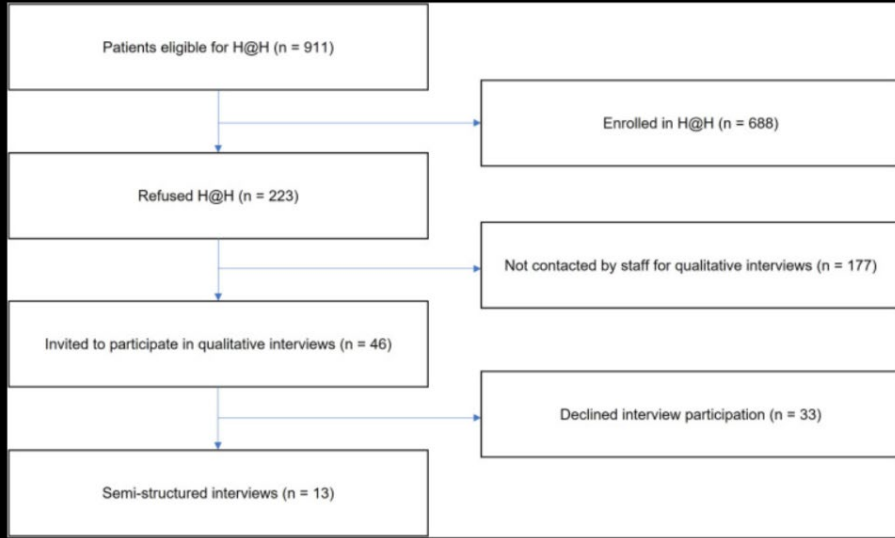
Abstract

To understand why US patients refused participation in hospital-at-home (H@H) during the coronavirus disease 2019 Public Health Emergency, eligible adult patients seen at 2 Mayo Clinic sites, Mayo Clinic Health System—Northwest Wisconsin region (NWWI) and Mayo Clinic Florida (MCF), from August 2021 through March 2022, were invited to participate in a convergent-parallel study. Quantitative associations between H@H participation status and patient baseline data at hospital admission were investigated. H@H patients were more likely to have a Mayo Clinic patient portal at baseline (P -value: .014), indicating a familiarity with telehealth. Patients who refused were more likely to be from NWWI (P -value < .001) and have a higher Epic Deterioration Index score (P -value: .004). The groups also had different quarters (in terms of fiscal calendar) of admission (P -value: .040). Analyzing qualitative interviews ($n = 13$) about refusal reasons, 2 themes portraying the quantitative associations emerged: lack of clarity about H@H and perceived domestic challenges. To improve access to H@H and increase patient recruitment, improved education about the dynamics of H@H, for both hospital staff and patients, and inclusive strategies for navigating domestic barriers and diagnostic challenges are needed.

Keywords

hospital-at-home, remote care, home hospitalization, patient preferences

<https://journals.sagepub.com/doi/pdf/10.1177/23743735231189354>



Lack of Clarity about H@H

- Patient unfamiliar with ACH (mentioned 5 times by 4 individuals)
- Provider advised against ACH (mentioned 4 times by 4 individuals)
- Misinformation related to H@H (mentioned 10 times by 4 individuals)

Domestic Challenges to Care at Home

- Desire to keep home habits the same (mentioned 10 times by 7 individuals)
- Home responsibilities for patient (mentioned 10 times by 5 individuals)
- Too much disturbance in home (mentioned 10 times by 5 individuals)

I think I'd prefer the hospital because I won't have to be trying to get up and **prepare food**. I don't know what they do when they do the home hospital approach as far as food and stuff like that because I'm **real weak**. I wouldn't have been able to properly take care of myself, I don't think.

I could have been at home watching my own TV, sitting in my own chair. I know **I'm capable** of figuring out how to flush my line and run an IV, but do I want to introduce any other **infections**?

CMS waiver for hospital-at-home designed to address COVID-

19-driven capacity issues

Dec 14, 2020

Leading Health Innovators Launch Alliance To Advance Care In The Home

Coalition to focus on site of service flexibility for clinical care in the wake of pandemic

Amazon Care, Intermountain, Ascension launch hospital-at-home healthcare alliance

Jackie Drees - Wednesday, March 3rd, 2021 Print | Email

Jun 14, 2021, 08:30am EDT | 1,405 views

Where Hospital-At-Home Programs Are Heading After Last Year's Boom



Ashish V. Shah Forbes Councils Member
Forbes Technology Council COUNCIL POST | Membership (Fee-Based)
Innovation

[Global Edition](#) [Telehealth](#)

Kaiser, Mayo, Medically Home found coalition to promote advanced hospital-at-home services

Federal regulators should "put guardrails on, but let us continue the good work," says Mayo Clinic's Dr. Michael Maniaci.

Hospital at Home: Users Group

**182 hospitals/systems
now have a program- up
from 5-10 pre-pandemic**

To date:

296 hospitals

across 37 states

participate in the

**Acute Hospital Care
at Home (AHCaH)**

[program](#) since Nov.
2020.

HEALTH INC.

With Workers In Short Supply, Seniors Often Wait Months For Home Health Care

June 30, 2021 - 5:03 AM ET

PHIL GALEWITZ

FROM KHN



Modernize with awareness of older adults' vulnerabilities to:

- Social isolation and loneliness
- Abuse
- Cognitive and sensory impairments

Nearly 820,000 people across 41 states Average wait time is three years

<https://files.kff.org/attachment/Issue-Brief-Key-State-Policy-Choices-About-Medicaid-Home-and-Community-Based-Services>

Digitally Enabled Medicaid Home and Community-Based Services

Digitally Enabled Medicaid Home and Community-Based Services, in DIAGNOSING IN THE HOME, I. Glenn Cohen, et al., eds., Cambridge University Press (forthcoming 2023)

[Arizona Legal Studies Discussion Paper No. 23-11](#)

Posted: 13 Apr 2023

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Date Written: April 13, 2023

Definitions

Digital Health Equity

Everyone should have a **fair and just opportunity** to engage with and benefit from **digital health tools.**

Individuals and communities have the information technology capacity that is needed for **full participation in the society and economy** of the United States.

Population Groups Disproportionately Impacted by the Digital Divide

- Older adults
- Racial and ethnic minority groups
- Disability
- Low socioeconomic status
- Living in rural areas
- Limited English Proficiency



A screenshot of the Arizona Telemedicine Program website. The header is red with the program's logo and name. A dark blue navigation bar contains links for Home, Blog, About Us, Distance Education, and Applications & Network. Below the navigation bar, a breadcrumb trail reads "Home » Encounters with Telehealth: Older Adults with Limited English Proficiency Living Rurally". The main content area features a blog post titled "Encounters with Telehealth: Older Adults with Limited English Proficiency Living Rurally" by Alissa Hafezi, dated September 29, 2022. Below the text is a photograph of an elderly person's profile as they look at a laptop screen displaying a telehealth session with a female healthcare provider.

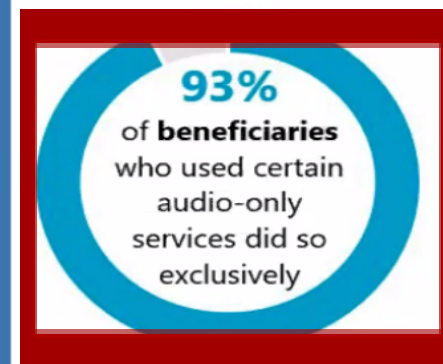
<https://telemedicine.arizona.edu/blog/encounters-telehealth-older-adults-limited-english-proficiency-living-rurally>

Low Tech Use

Digital Health and Older Patients

- Almost 1 in 5 beneficiaries used certain audio-only telehealth services, with the vast majority of these beneficiaries using them exclusively.
- Older beneficiaries were more likely to use these audio-only services than younger beneficiaries.
 - Notable because older beneficiaries were less likely to use all telehealth services than younger beneficiaries.

The vast majority of beneficiaries who used certain audio-only services **did not use any audio-video telehealth services.**



Source: OIG analysis of CMS data, 2022.

Table 1. Rates of Telehealth Use and Audio-only vs. Video Modality, by Demographic Categories, April 14, 2021 – August 8, 2022

	% with a Telehealth Visit in Previous Four Weeks April 14, 2021 to August 8, 2022	Second Cohort* (July 21, 2021 to August 8, 2022)		
		% with a Telehealth Visit in Previous Four Weeks	% of Telehealth Visits by Video in Previous Four Weeks	% of Telehealth Visits by Audio-only in Previous Four Weeks
Race and Ethnicity				
Hispanic or Latino	23.9	22.7	49.7	50.3
White alone, not Latino	20.7	19.6	61.3	38.7
Black alone, not Latino	26.1	25.0	50.1	49.9
Asian alone, not Latino	21.7	20.8	49.5	50.5
Two or more races + Other	25.5	24.2		
Age				
18-24 years	17.6	16.0	72.5	27.5
25-39 years	20.7	18.6	69.3	30.7
40-54 years	22.7	20.9	60.9	39.1
55-64 years	23.6	21.1	52.1	47.9
> 65 years	24.6	22.0	43.5	56.5
Education				
Less than high school	24.5	24.0	38.8	61.2
High school or GED	20.7	19.7	46.5	53.5
Some college/Associate's degree	22.8	21.6	58.3	41.7
Bachelor's degree or higher	22.4	21.3	66.7	33.3
Household Income				
Less than \$25,000	26.4	25.3	47.6	52.4
\$25,000 - \$34,999	23.3	21.9	48.9	51.1
\$35,000 - \$49,999	21.8	20.6	53.3	46.7
\$50,000 - \$74,999	21.0	19.9	56.9	43.1
\$75,000 - \$99,999	20.2	19.2	62.0	38.0
> \$100,000	20.4	19.4	67.9	32.1
Insurance				
Medicare	26.8	25.5	46.1	53.9
Medicaid	28.3	26.8	53.4	46.6
Private	20.2	19.2	65.3	34.7
Other Health Insurance	24.4	23.1	53.8	46.2
Uninsured	9.4	9.0	46.9	53.1
Census Region				
Northeast	23.3	22.3	59.6	40.4
South	21.3	20.1	58.0	42.0
Midwest	18.7	17.7	57.7	42.3
West	24.9	23.9	54.1	45.9



- **Highest video telehealth use** occurred among:
 - young adults ages 18 to 24 (72.5%)
 - those earning at least \$100,000 (68.8%)
 - those with private insurance (65.9%)
 - White individuals (61.9%)
- **Lowest video telehealth use** occurred among:
 - those without a high school diploma (38.1%)
 - adults ages 65 and older (43.5%)

<https://aspe.hhs.gov/sites/default/files/documents/4e1853c0b4885112b2994680a58af9ed/telehealth-hps-ib.pdf>

<https://www.aspe.hhs.gov/reports/updated-hps-telehealth-analysis-2021-2022>

Use of Telemedicine among Office-Based Physicians, 2021

ONC Data Brief | No.65 | March 2023

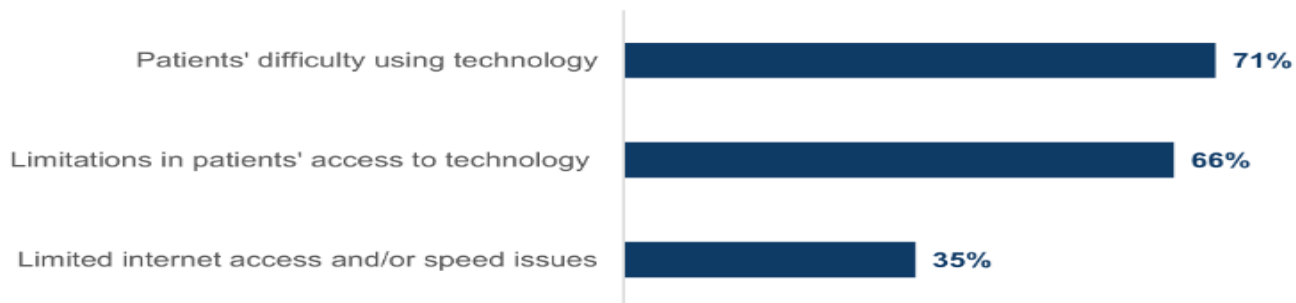


Office of the National Coordinator
for Health Information Technology

Patients' difficulty using telemedicine tools was the most common reported barrier affecting physicians' use of telemedicine.

FINDINGS

- ★ The most common barriers for telemedicine use experienced by physicians involved patients' difficulties using and accessing telemedicine technology.
- ★ Over 1 in 3 physicians reported internet access and speed issues as an issue affecting their use of telemedicine.
- ★ Less than 1 in 4 physicians reported telemedicine is not appropriate for their practice (26%) and telemedicine platform is not easy to use (18%).



[https://www.healthit.gov/data/data-briefs/use-telemedicine-among-office-based-physicians-2021#:~:text=FINDINGS,%E2%98%85&text=Not%20having%20any%20telemedicine%20platform,person%20visits%20\(under%2050%25\).](https://www.healthit.gov/data/data-briefs/use-telemedicine-among-office-based-physicians-2021#:~:text=FINDINGS,%E2%98%85&text=Not%20having%20any%20telemedicine%20platform,person%20visits%20(under%2050%25).)

By Gillian K. SteelFisher, Caitlin L. McMurtry, Hannah Caporella, Keri M. Lubell, Lisa M. Koonin, Antonio J. Neri, Eran N. Ben-Parath, Ateev Mehrotra, Ericka McGowan, Laura C. Espino, and Michael L. Barnett

Video Telemedicine Experiences In COVID-19 Were Positive, But Physicians And Patients Prefer In-Person Care For The Future

ABSTRACT To help inform policy discussions about postpandemic telemedicine reimbursement and regulations, we conducted dual nationally representative surveys among primary care physicians and patients. Although majorities of both populations reported satisfaction with video visits during the pandemic, 80 percent of physicians would prefer to provide only a small share of care or no care via telemedicine in the future, and only 36 percent of patients would prefer to seek care by video or phone. Most physicians (60 percent) felt that the quality of video telemedicine care was generally inferior to the quality of in-person care, and both patients and physicians cited the lack of physical exam as a key reason (90 percent and 92 percent, respectively). Patients who were older, had less education, or were Asian were less likely to want to use video for future care. Although improvements to home-based diagnostic tools could improve both the quality of and the desire to use telemedicine, virtual primary care will likely be limited in the immediate future. Policies to enhance quality, sustain virtual care, and address inequities in the online setting may be needed.

The increased use of telemedicine during the COVID-19 pandemic has been hailed as key to ensuring health care access in future pandemics, as well as a boon for patients who generally cannot easily access in-person care.^{1,2} However, the expansion of telemedicine during the pandemic was driven by a series of temporary regulatory and payment changes that will likely expire at the end of the nationwide public health emergency declaration.³ There is ongoing debate about postpandemic telemedicine policies, particularly in primary care, where telemedicine can facilitate access to preventive services, management of chronic conditions, mental health screening, and triage for infectious disease.^{4,5} One key factor in this debate is the perspective of providers

and patients. Depending on their interest in using video-based care, policies to sustain telemedicine in the postpandemic era may need to adapt to demand.

Prior studies examining physicians' and patients' perceptions of telemedicine during the pandemic have largely found high overall satisfaction with telemedicine for primary care during the pandemic, but there are important limitations. Many examined care in single systems or settings for specialized populations⁶⁻⁷ or relied on a relatively broad definition of satisfaction, such as willingness to recommend a practice to others.⁸ Few studies have been national in scope or asked providers or patients to make direct comparisons between in-person and virtual care. Further, only a few studies addressed the perceived quality of clinical care.^{9,10} Quantifying

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User Experience

Satisfaction high

Yet, strong preference to return to in-person care

- 80% of primary care physicians
- 64% of patients
- Older patients less likely to want to use video visits (even if have internet access)
- May reflect comfort level and concerns about age-based discrimination in an online setting.

Lack of preference is a problem for digital care to become a meaningful part of the health system.

Framework for Digital Health Equity

Tech policy

Getting vaccinated is hard. It's even harder without the internet.

REVIEW ARTICLE OPEN

Check for updates

A framework for digital health equity

Safya Richardson¹*, Katharine Lawrence², Antoinette M. Schoenthaler¹ and Devin Mann²

We present a comprehensive Framework for Digital Health Equity, detailing key digital determinants of health (DDoH), to support the work of digital health tool creators in industry, health systems operations, and academia. The rapid digitization of healthcare may widen health disparities if solutions are not developed with these determinants in mind. Our framework builds on the leading health disparities framework, incorporating a digital environment domain. We examine DDoHs at the individual, interpersonal, community, and societal levels, discuss the importance of a root cause, multi-level approach, and offer a pragmatic case study that applies our framework.

npj Digital Medicine (2022)5:119; <https://doi.org/10.1038/s41746-022-00663-0>

INTRODUCTION

Decades of research have identified health differences, based on one or more health outcomes, that adversely affect several defined populations, including rural populations, persons with low incomes, racial and ethnic, and sexual and gender minorities¹. Early work in the field of health disparities focused on identifying and describing these differences and their potential causes. In the last two decades, there has been a growing understanding of the role of systemic oppression as a root cause of disparities, as well as a commitment to discovering effective interventions^{2,3}. The field's focus on health equity reflects this shift. Health equity refers to the absence of health inequalities; differences in health that are unnecessary, avoidable, unfair, and unjust⁴.

As the field of health disparities has matured, we've simultaneously witnessed the digital transformation of healthcare. The Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009 sparked the long-awaited adoption of electronic health records (EHRs) by healthcare systems across the country and eventually the development of patient portals, allowing patients online access to key elements of their medical charts. Today, over 95% of hospitals use a government-certified EHR and allow their patients to view health information online⁵. HITECH additionally spurred private industry investment in digital health, including mobile health, wearable devices, remote patient monitoring (RPM), and telehealth, which now is noted in billions per year.

The coronavirus disease 2019 (COVID-19) pandemic highlighted both the continued impact of long-standing systemic oppression on disparate health outcomes as well as the growing importance of digital healthcare. Several studies found significant differences in successful telehealth use in disparity populations^{6–8}. Access to digital health is becoming an increasingly important determinant of health. There has been a growing recognition of access as just one of several determinants in the digital environment that impact outcomes^{9,10}. These digital determinants of health (DDoHs), including access to technological tools, digital literacy, and community infrastructure like broadband internet, likely function independently as barriers to and facilitators of health as well as interact with the social determinants of health (SDoH) to impact outcomes^{11,12}.

As digital health becomes increasingly essential, a framework for digital health equity detailing key DDoHs, is needed to support the work of leaders and developers in the industry, health systems operations, and academia. Digital health solution developers

include computer scientists, software architects, product managers, and user experience designers. The digital transformation of health requires leaders and developers to understand how digital determinants impact health equity. In this article, we present the Framework for Digital Health Equity, an expansion of the leading health disparities framework. We examine key DDoHs at the individual, interpersonal, community, and societal levels, discuss the importance of a root cause, multi-level approach, and offer a pragmatic case study as an example application of our framework.

DEFINITIONS

Health disparity populations

The framework applies to all health disparity populations. As defined by the US Office of Management and Budget, these include racial/ethnic minorities, socioeconomically disadvantaged populations, underserved rural populations, and sexual and gender minorities (which include lesbian, gay, bisexual, transgender, and gender-nonbinary or gender-nonconforming individuals). We acknowledge and support the special emphasis placed by the NIH/NID on the historical trauma experienced by American Indian groups that were displaced from their traditional lands and African-American populations that continue to endure the legacy of slavery. We additionally include a focus on individuals with disabilities, including those with limitations in their ability to see, see color, hear, etc., that might impact digital accessibility.

Digital environment

The digital environment is enabled by technology and digital devices, often transmitted over the internet, or other digital means, e.g. mobile phone networks. This includes digital communication, RPM, digital health sensors, telehealth, and the EHR. The digital environment includes elements of the physical/built environment, sociocultural practices, and understanding, as well as the habits and behaviors that dictate how we use these tools. The digital environment exists within and outside of the formal healthcare system.

Social determinants of health

SDoH are defined by the Centers for Disease Control and Prevention as "conditions in the environments in which people are born, live,

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Framework for Digital Health Equity





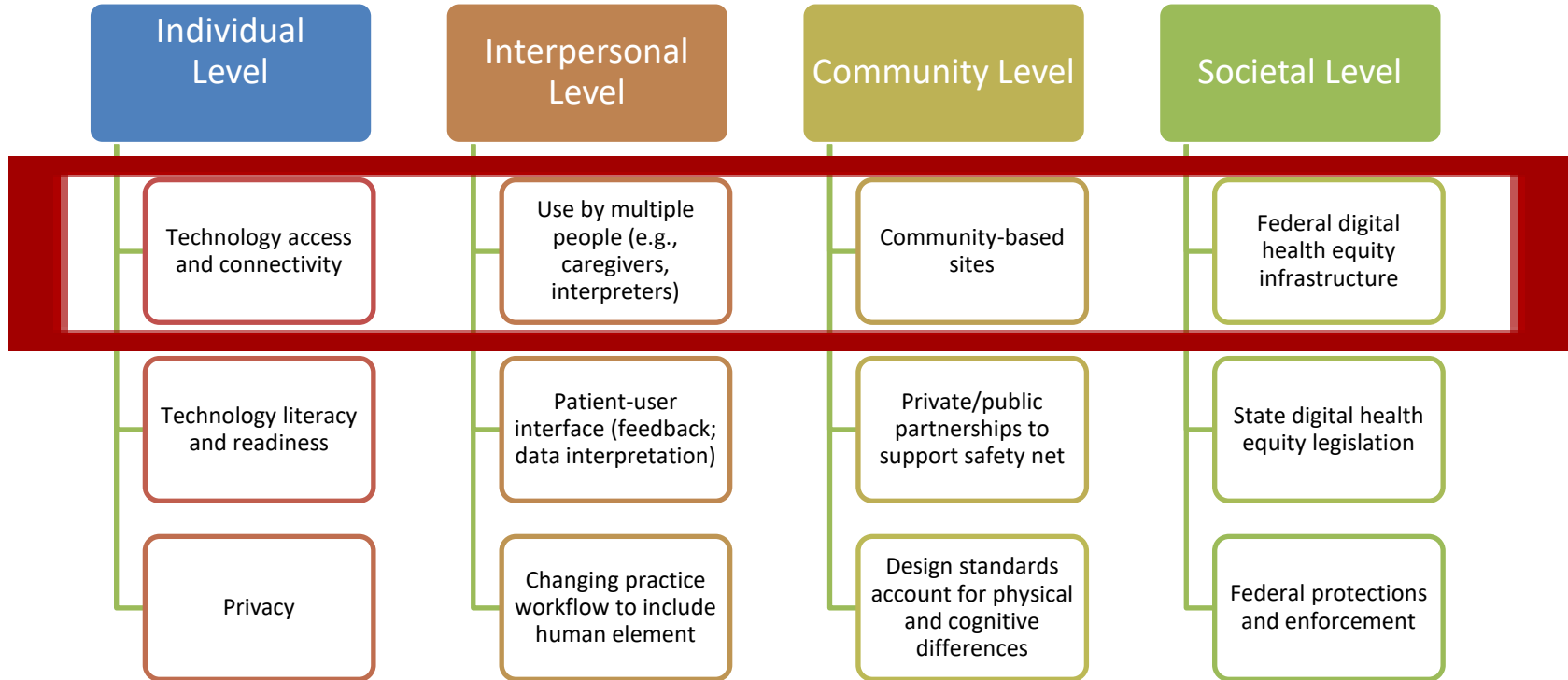
		Levels of Influence*			
		Individual	Interpersonal	Community	Societal
Domains of Influence (Over the Lifecourse)	Biological	Biological Vulnerability and Mechanisms	Caregiver–Child Interaction Family Microbiome	Community Illness Exposure Herd Immunity	Sanitation Immunization Pathogen Exposure
	Behavioral	Health Behaviors Coping Strategies	Family Functioning School/Work Functioning	Community Functioning	Policies and Laws
	Physical/Built Environment	Personal Environment	Household Environment School/Work Environment	Community Environment Community Resources	Societal Structure
	Digital Environment	Digital Literacy, Digital Self-Efficacy, Technology Access, Attitudes Towards Use	Implicit Tech Bias, Interdependence (e.g. shared devices), Patient–Tech–Clinician Relationship	Community Infrastructure, Healthcare Infrastructure, Community Tech Norms, Community Partners	Tech Policy, Data Standards, Design Standards, Social Norms & Ideologies, Algorithmic Bias
	Sociocultural Environment	Sociodemographics Limited English Cultural Identity Response to Discrimination	Social Networks Family/Peer Norms Interpersonal Discrimination	Community Norms Local Structural Discrimination	Social Norms Societal Structural Discrimination
	Health Care System	Insurance Coverage Health Literacy Treatment Preferences	Patient–Clinician Relationship Medical Decision-Making	Availability of Services Safety Net Services	Quality of Care Health Care Policies
Health Outcomes	 Individual Health	 Family/ Organizational Health	 Community Health	 Population Health	

Fig. 1 Framework for digital health equity. National Institute on Minority Health and Health Disparities Research Framework Expanded for Digital Health Equity.

Applying Framework for Digital Inclusion of Older Patients



Infrastructure Investment and Jobs Act

\$65 billion for digital equity

\$42.5 billion
for broadband
infrastructure

\$14.2 billion
for \$30
internet
subsidy

\$2.8 billion for
digital literacy

Additional
funds

H. R. 1412

To establish the Foundation for Digital Equity, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MARCH 7, 2023

Ms. MATSUI (for herself, Ms. BONAMICI, Ms. ESHOO, Mr. SMITH of Washington, Mr. GRIJALVA, and Mr. CARTER of Louisiana) introduced the following bill; which was referred to the Committee on Energy and Commerce

A BILL

To establish the Foundation for Digital Equity, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Digital Equity Foun-
5 dation Act of 2023”.

6 **SEC. 2. FOUNDATION FOR DIGITAL EQUITY.**

7 (a) DEFINITIONS.—In this section:

8 (1) ASSISTANT SECRETARY.—The term “Assist-
9 ant Secretary” means the Assistant Secretary of

3

(9) DIGITAL INCLUSION.—The term “digital inclusion”—

(A) means the activities that are necessary to ensure that all individuals in the United States have access to, and the use of, affordable information and communication technologies, such as—

- (i) reliable fixed and wireless broadband;
- (ii) internet-enabled devices that meet the needs of the user for telehealth, remote work, remote schooling, or other purposes; and
- (iii) applications and online content designed to enable and encourage self-sufficiency, participation, and collaboration;

(B) includes—

- (i) obtaining access to digital literacy training;
- (ii) the provision of quality technical support; and
- (iii) obtaining basic awareness of measures to ensure online privacy and cybersecurity.

Digital Equity Foundation Act of 2023

[https://track.govhawk.com/
public/bills/1748272](https://track.govhawk.com/public/bills/1748272)

SENATE No. 655

The Commonwealth of Massachusetts

PRESENTED BY:

Adam Gomez

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act relative to telehealth and digital equity for patients.

Digital health literacy screening program to identify low digital health literacy and support effective use of telehealth technology, including:

- educational materials about how to access telehealth in **multiple languages**, and in alternative formats;
- hold digital health literacy workshops;
- integrate digital health coaching;
- offer in-person **digital health navigators**; and
- partner with local **libraries** and/or community centers that offer digital health education services and supports.

Legislative Telehealth Definition

Interactive use of **audio**, video or other electronic media, including asynchronous store-and-forward technologies and remote patient monitoring technologies, for the practice of health care, assessment, diagnosis, consultation or treatment and the transfer of medical data; and

Audio-only if an audio-visual telehealth encounter is not reasonably available due to the patient's functional status or lack of technology or infrastructure limits, as determined by the healthcare provider.



AZ HB 2454

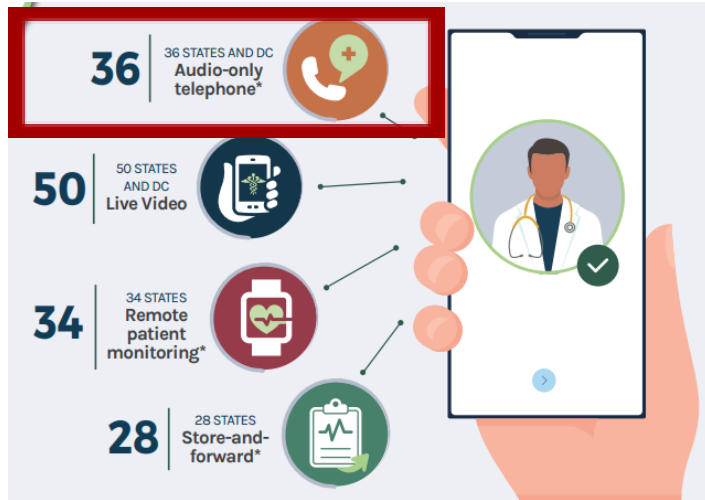
Enacted May 2021

Title 36, Chapter 36
Public Health & Safety,
Telehealth

[Sec. 3601: Definitions](#)

[Sec: 3601-3608](#)

Legislative Telehealth Definitions re: Modalities Parity and Medicaid Reimbursement Impact Access to Healthcare



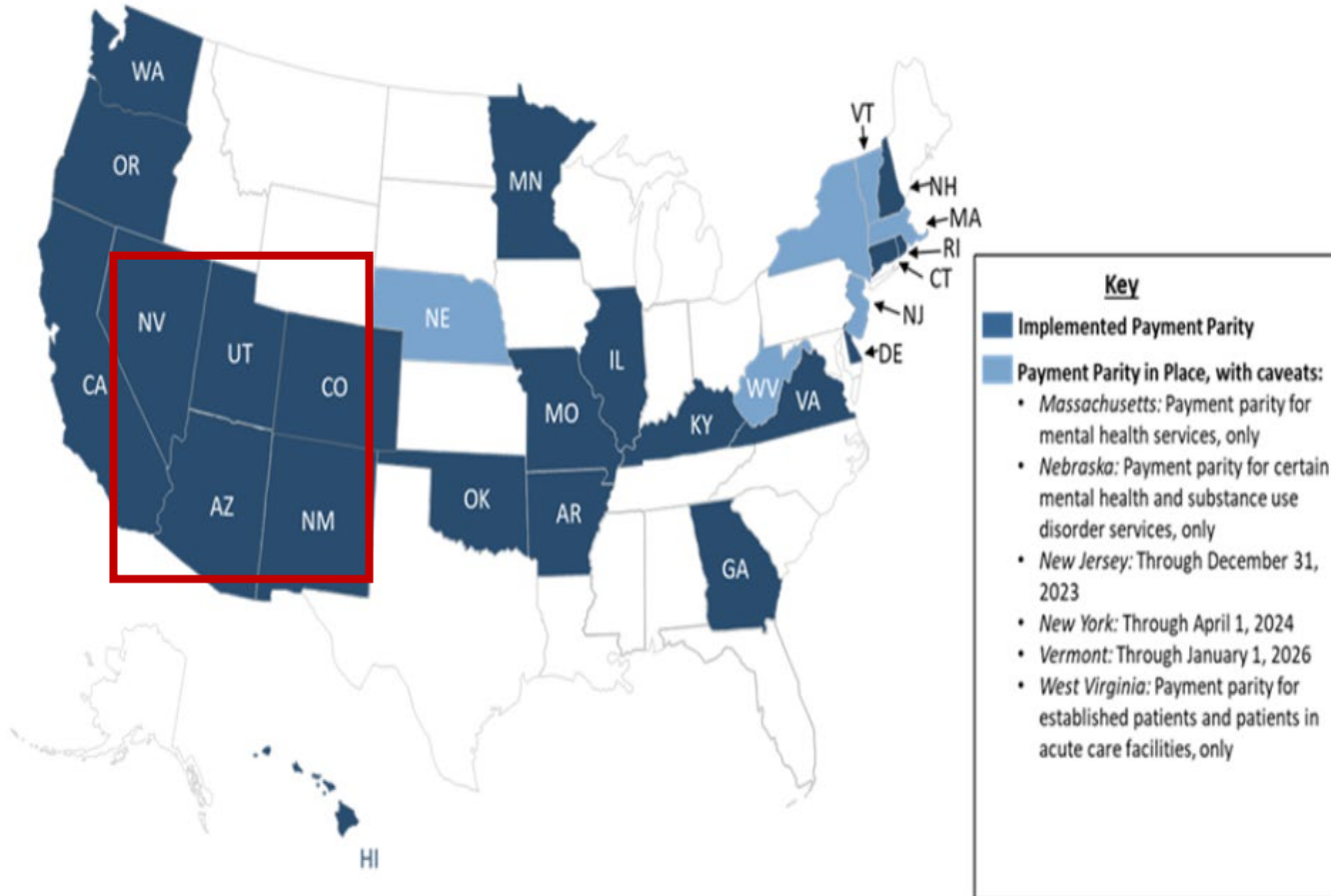
Telehealth Advisory Committee

Submitted [report](#) re: **audio-only** on 12/2021 and [amended](#) on 3/2022.

Source:

<https://www.cchpca.org/resources/state-telehealth-laws-and-reimbursement-policies-report-spring-2023/>

Figure 1. Map of States With Laws Requiring Insurers to Implement Payment Parity (as of April 2023)



**21 states:
Explicit Payment
Parity**

**6 states:
Payment Parity
with **Caveats****

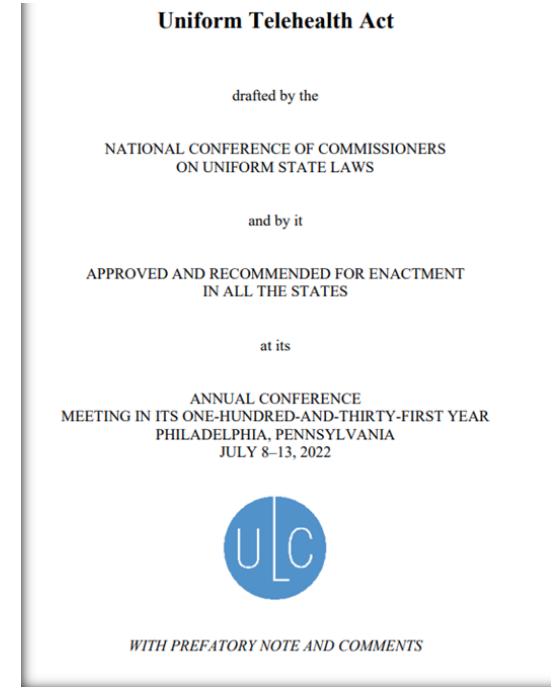
**23 states:
No Payment Parity**

Source:
<https://www.jdsupra.com/legalnews/executive-summary-tracking-telehealth-6103521/>

Uniform Telehealth Act

Telehealth definition

Use of **synchronous or asynchronous telecommunication technology** by a practitioner to provide health care to a patient at a different physical location than the practitioner.



<https://www.uniformlaws.org/committees/community-home?CommunityKey=2348c20a-b645-4302-aa5d-9ebf239055bf>

October 2022

HealthAffairs

DEA Telehealth Proposal Brings Risks, Not Patient Protections

[Georgia Gaveras, DO](#)

MARCH 23, 2023

“Choosing a psychiatrist should not simply be determined by proximity.

Expertise, ability, and therapeutic alliance — the trust and safety a patient feels with their psychiatrist— are all critical for successful outcomes.”

DEA's Proposed Rules for Telehealth Prescribing of Controlled Substances Post-PHE

Join us: March 23, 2023

9am PDT, 10am MDT, 11am CDT, 12pm EDT

Objectives:

1. Understand key provisions of the proposed rules and new process if the rules go into effect.
2. Increase understanding of the current public comment period and how to participate.
3. Learn what to do now in case the proposed rules go into effect post-PHE.

Presenters:

Christa Natoli, CTeL Executive Director

Ben Steinhafel, CTeL Director of Policy & External Affairs

Tara Sklar, JD, MPH, ATP Associate Director Telehealth Law & Policy

Facilitator: Elizabeth Krupinski, PhD, SWTRC Director

CTeL



To register visit: www.Telemedicine.Arizona.edu

Webinar recording:

<https://swtrc.wistia.com/medias/xrud2yhaq2>

Palliative Care in Alabama

“Fewer than 40% of hospitals in Alabama offer palliative care services.”

“16% of households in rural Alabama (54 counties) lack a vehicle.”

Multidisciplinary palliative care model isn't feasible in rural areas.

*“It's an **equity issue**, patients should get access to all levels of care. Not just curative and preventative, but also humane care for serious illness.”*

Along with improving quality of life for patients, palliative care also appears to cost hospitals less than other intensive treatment.

LEADING TO HEALTH



Here, with Tracy McCammon (right), a surgeon and palliative medicine physician, with the University of Alabama at Birmingham, regularly visit patients, such as David Bane, whose use of dog, Bane, to manage treatment and support advance care planning.

Bringing Palliative Care To Underserved Rural Communities

With home visits and modern technology, palliative medicine physicians in Alabama are overcoming long-held resistance.

Since McCammon, usually dressed in scrubs and a black cardigan, sits on the edge of a rickety chair near the foot of Bane's bed for nearly an hour, making the conversation friendly. The several-hour session is jammed with medical supplies, the empty space still marked by rubber mats, and a small table holding a spill-over from a nearby basket. A colorful, laminated family picture hangs on the wall.

They talk about the side effects of the chemotherapy pills that Bane is taking and related insurance headaches. They laugh about her shopping adventures at Home Depot, where Bane would rescue from his

ing the fabric sales with a friend and then take the evidence from her home by leaving the bags in the back of the truck.

Bane, who has advanced renal cancer, is coping with a painful leg wound that's been slow to heal, making it difficult for her to put much weight on it. Sometimes, she tells McCammon, she'll cry by a wave of excitement just up that leg.

"What do I do? Try? And I just visit to see." But she's been able to make it down the stairs some on recent days, when her grandchildren visited from New York City.

Finally McCammon, a surgeon and palliative medicine physician, asks Bane if she'd like a look at the advance directives paperwork that she'd been sent.

"I got it and I read over it. But she... it was never really able to fill it out."

McCammon explains that there are only a few times each week to see all the patients who are getting palliative care at the University of Alabama at Birmingham (UAB) Health System, one of many sites in which the academic system is striving to break beyond the walls of the downtown Birmingham campus. UAB, which includes the UAB and UAB Hospital, has offered palliative services for two decades, adding an expansion unit in 2016. But over the course of the last several years, UAB clinicians have stepped up their efforts to educate more residents about the benefits, particularly those who practice elsewhere or bring in new areas of the state.

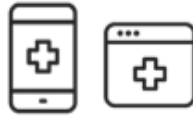
The expanded UAB Home Visit program to include palliative care visits to patients like Bane. They've created an advisory group of African American patients from Birmingham to give their insights into how to improve communication with Black patients, screen diagnoses. They're tapping video technology and beginning the program here to more broadly conducting virtual palliative consults with clinicians and

Photograph by Dawn Boyd



Home

Online exams
Virtual visits



On the go

Mobile app
Patient portal
Clinical chats
Digital outreach



Schools



Business



Prisons



Rural clinics

Enhanced video visits: preventative, primary, behavioral, specialty care

Libraries; Faith-based centers



Ambulatory + Ancillary

Specialist consults
Support services: labs



EMS Transport

Prehospital consults



Hospital

Specialist consults + patient monitoring



Post Acute



Home

Hospital recovery at home
Chronic care monitoring

Expanding care venues into the community

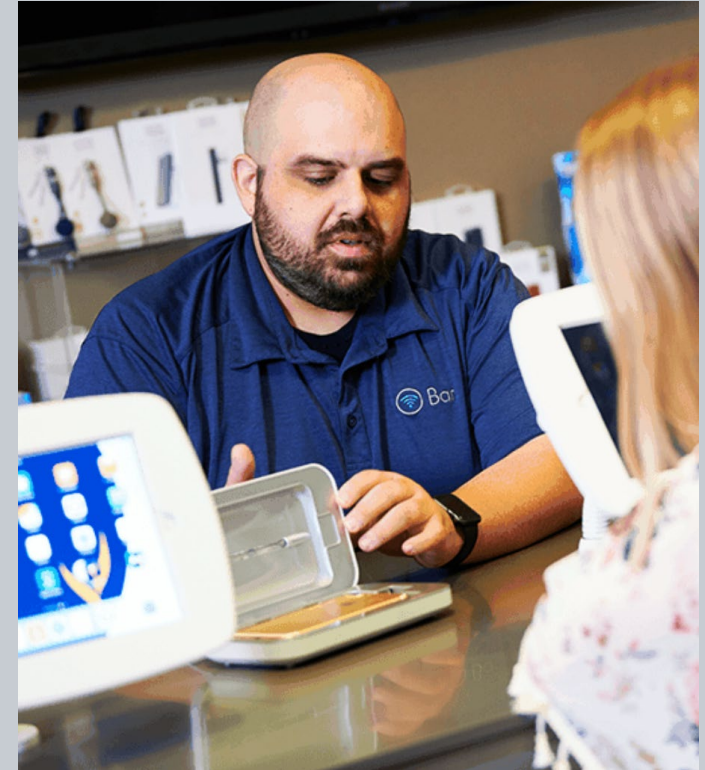
Address medical distrust and support access points to routine care

Engage Diverse Patient Voices to Increase Engagement & Trust

Ochsner Health launched **O Bar**, an interactive experience for patients to try different physician-curated digital health tools.

Staffed by a full-time **technology specialist** who helps patients:

- choose the right health technology
- provide setup guidance and support (e.g., troubleshoot connectivity issues, better engage with devices).



Source:

Ochsner Health Website, <https://www.ochsner.org/shop/o-bar>; Is the Digital Divide the Newest Social Determinant of Health?, Patient Engagement HIT, <https://patientengagementhit.com/news/is-the-digital-divide-the-newest-social-determinant-of-health>



We provide seniors and low-income communities with devices, instructions, and free tech-support to connect them to their physicians via TeleHealth, friends and family using digital connectivity, and wellness tools via apps.

OUR PARTNERS

The donors and/or partners below have contributed donations to our nonprofit or worked with us on a donation drive which have helped enable our success and bring TeleHealth access to our patients. We appreciate their support.

Listing of a name here does not indicate a legal or binding partnership.



EDUCATION

Some seniors don't know how to use their devices or set them up, so we provide printed out guides and free virtual tech support via email and one call helps educate seniors and reduce stress around appointments and calling friends/family.

LET'S CHAT!



PREVENTION



Older and low-income patients tend to be more vulnerable and have more complicated medical needs. By giving patients the opportunity to access care, we can prevent possible complications and unnecessary hospitalizations!

The Center for Excellence for Telehealth and Aging

A dedicated resource to help healthcare leaders to advance telehealth for older adults



AGE-INCLUSIVE TELEHEALTH

The center has identified three principles vital for age-inclusive telehealth programs:

Age inclusive for older adults. | the needs, value

- **Equitable and accessible:** All people should have equal access to the same level of high-quality care regardless of age, ability, socioeconomic status, access to technology or health and technology literacy.
- **Person-centered:** Older adults should be at the center of decision-making – accounting for their care preferences, goals, wishes, abilities, support system and health conditions.
- **Integrated and coordinated:** Health systems should facilitate access to the information and support necessary to provide quality care to older adults, including cooperation and communication between and within systems and stakeholders.

telehealth to meet the needs of those who love and

Future for digital health equity and inclusion

Can a company that prioritizes 'profits', adapt to the special needs of vulnerable populations in a fair and equitable way?

--

Can these mega companies 'scale' in a way that better addresses accessibility?



Guidance on Nondiscrimination in Telehealth: Federal Protections to **Ensure Accessibility** to People with Disabilities and Limited English Proficient Persons

Telehealth is an increasingly important way of delivering health care. Many health care providers and patients have turned to telehealth during the COVID-19 public health emergency to reduce community spread of the virus, and it is now a more accepted way to provide and receive health care services. The U.S. Department of Health and Human Services (HHS) and the U.S. Department of Justice (DOJ) are committed to ensuring that health care providers who use telehealth, including telehealth that is available 24/7, do so in a nondiscriminatory manner.

With this guidance, the HHS Office for Civil Rights (OCR) and DOJ's Civil Rights Division (CRT) explain how various federal laws require making telehealth accessible by people with disabilities and limited English proficient persons. These laws include Section 504 of the Rehabilitation Act of 1973 (Section 504),¹ the Americans with Disabilities Act (ADA),² Title VI of the Civil Rights Act of 1964 (Title VI),³ and Section 1557 of the Patient Protection and Affordable Care Act (Section 1557),⁴ (collectively, "federal civil rights laws"). Section 1557 regulations specifically provide that covered health programs or activities provided by covered entities through electronic or information technology must be accessible to individuals with disabilities unless doing so would result in undue financial and administrative burdens or fundamental alteration of the health program.⁵

Practical tips on how to improve access to telehealth: <https://telehealth.hhs.gov/providers/health-equity-in-telehealth/improving-access-to-telehealth#telehealth-for-people-with-disabilities>

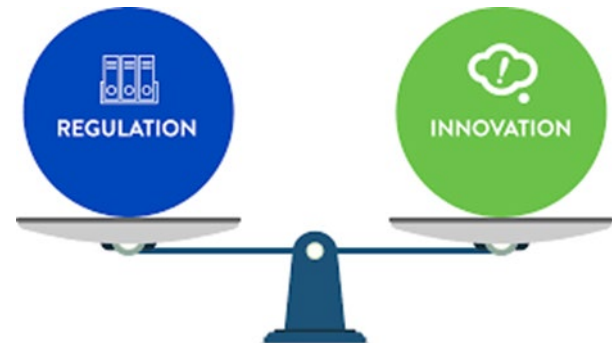
Guidance Source: <https://www.hhs.gov/civil-rights/for-individuals/disability/guidance-on-nondiscrimination-in-telehealth/index.html>

A person who is blind or has limited vision may find that the web-based platform their doctor uses for telehealth appointments does not support **screen reader software**.

A person who is deaf and communicates with a **sign language interpreter** may find that the video conferencing program their provider uses does not allow an interpreter to join the appointment from a separate location.

A limited English proficient (LEP) person may need **instructions in a language other than English** about how to set up a telehealth appointment.

We talk about medical innovation, and we talk about regulation, but we don't spend nearly enough time talking about **regulatory innovation**.



Summary – Key Takeaways

Utilization of
digital health

Maintain and expand on user satisfaction levels with digital health to increase preference to use.

Framework for
digital health equity

Consider the Digital Health Equity Framework in public and private efforts to improve digital health inclusion.

Applying framework
to digital inclusion

Bolster legislative, industry, and community efforts that aim to achieve digital health equity.

Upcoming Events

October 24, 2023

**4th Annual Arizona Telemedicine Policy Summit
Phoenix, Arizona (Hybrid event)**

To register:

<https://telemedicine.arizona.edu/training/2023-arizona-telehealth-policy-summit/phoenix-virtual/2023-10-24>

Upcoming Events

TELEHEALTH & THE FUTURE OF PROFESSIONAL REGULATION

WEDNESDAY, OCTOBER 11, 2023

12:00 pm Arizona Time

12:00 pm PDT ~ 1:00 pm MDT ~ 2:00 pm CDT ~ 3:00 PM EDT

Join us to learn how medical boards' regulation of medical professionals may change in light of the growth of telehealth and the interstate practice of medicine.

OUTCOME OBJECTIVES

- Gain familiarity with efforts to modify professional licensure regimes in ways that would facilitate interstate telehealth practice.
- Increase understanding of the Uniform Telehealth Act and its potential regulatory implications.
- Expand awareness of post-pandemic trends in state telehealth regulation.
- Recognize regulatory challenges associated with interstate telehealth practice.

CONTINUING MEDICAL EDUCATION

Accreditation Statement

PRESENTER



Kristen M. Madison, JD, PhD
Professor of Law and Health Sciences
Northeastern University School of Law

Kristin Madison is a Professor of Law and Health Sciences at Northeastern University. She has written extensively on health care quality regulation as well as on how health care regulators generate, use, and facilitate others' use of data. In journals such as JAMA and Health Affairs, she has published articles related to employers' use of health incentives. After serving as the reporter for the committee that drafted the Uniform Telehealth Act, she is now working on the several articles on telehealth and related issues, including professional licensure.

REGISTRATION

www.telemedicine.arizona.edu

IMPACT OF STATE MEDICAL LICENSING ON COLLEGE STUDENT MENTAL HEALTH

TUESDAY, DECEMBER 5, 2023

12:00 pm Arizona Time

11:00 am PST ~ 12:00 pm MST ~ 1:00 pm CDT ~ 2:00 PM EDT

Join us to learn about the latest research on state medical licensure requirements and it's association with the lack of continuity of mental healthcare for college students.

OUTCOME OBJECTIVES

- Describe the context of youth mental health crisis.
- Identify the barriers related to state medical licensing, licensing exemptions, and telehealth registries.
- Discuss outcome of "secret shopper study" assessing psychiatrists' awareness of exemptions and willingness to see students across state lines.

CONTINUING MEDICAL EDUCATION

Accreditation Statement

PRESENTER



Rachel Conrad, MD
Psychiatrist and Faculty, Harvard
Medical School Center for Bioethics

Dr. Rachel Conrad is child and adolescent psychiatrist and is faculty at the Harvard Medical School Center for Bioethics. She is a fellow in the Eisenhower Fellowship USA Justice program. She has more than twenty academic publications related to youth mental health and medical ethics. Dr. Conrad has received numerous awards and speaks at local, regional, and national conferences.

FACILITATOR



Tara Sklar, JD, MPH
Faculty Director of Health Law, Arizona Law
Associate Director of Telehealth Law & Policy,
Arizona Telemedicine Program

REGISTRATION

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THE UNIVERSITY OF ARIZONA
JAMES E. ROGERS COLLEGE OF LAW

Health Law

Thank you

trsklar@arizona.edu

<https://telemedicine.arizona.edu/>

<https://southwesttrc.org/>

<https://law.arizona.edu/health>