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Disability and telehealth since the COVID-19 pandemic

Barriers, opportunities, and policy implications

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Introduction

Following years of gradual adoption, the onset of the COVID-19 pandemic caused telehealth use to skyrocket for all populations, including those with disabilities. This expedited expansion of telehealth was a necessary shift during the public health emergency (PHE) as clinics, health systems, and providers pivoted to reduce unnecessary in-person contact and to preserve clinical care capacity.[1]

Approximately one in four Americans have a disability, and Americans with disabilities can benefit from telehealth use as much as, if not more than, the general population.

Over a 12-month period, adults with disabilities are six times more likely to have ten or more physician visits and five times more likely to be admitted to a hospital compared to people without disabilities (Kennedy et al., 2017). Recent research indicates that a shift to telehealth can lead to declines in emergency department visits as well as benefits from home health attendant services that can be delivered virtually.

Because the use of telehealth can greatly benefit people with disabilities and improve access to the care they need, people with disabilities are a critical population to consider as telehealth policies are crafted. But telehealth is not well structured for individuals with disabilities (CDC, 2020).

[1] While telehealth use has declined somewhat since the first year of the pandemic, the use of telehealth services is still much higher than pre-COVID levels: in mid-2021, 38 times higher than pre-COVID, compared to 78 times higher than pre-COVID in April, 2020 (Cordina, 2022).

This brief describes barriers to and opportunities for telehealth[2] for people with disabilities, as well as potential national and state policies to make telehealth more accessible, functional, and supportive beyond the COVID-19 pandemic.

People with disabilities face significant telehealth barriers

The digital divide

First used in the mid-1990s, the "digital divide" refers to the inequities between those with computer and internet access and those without, including educational, economic, and social inequities (Merriam-Webster). Policymakers made significant efforts to improve broadband access and affordability during the pandemic to address the digital divide.

- The Federal Communications Commission established an Emergency Broadband Benefit that provided monthly discounts of up to $50/month for broadband service to low-income Americans (FCC, 2021b). The program had over 9 million enrolled households as of December 31, 2021 (USAC, 2022).
- On December 31, 2021, the Infrastructure Investment and Jobs Act replaced the Emergency Broadband Benefit with the Affordable Connectivity Program. The maximum monthly benefit changed from $50 to $30 per month (USAC, 2022). Households will qualify for the Affordable Connectivity Program if they are receiving WIC benefits or have an income at or below 200% of the Federal Poverty Guidelines.

However, these policies may not be enough to overcome the digital divide for individuals with disabilities.

According to a survey by the Pew Research Center, people with disabilities are 20 percentage points less likely to own a computer, smartphone, or tablet compared to people without disabilities (Anderson & Perrin, 2017). Plus, 26 percent of people with disabilities lived at or below the poverty line in 2019, compared to just 11 percent of people without disabilities.

People with disabilities also had median full-year work earnings $8,000 lower than those not disabled (Rehabilitation Research and Training Center on Disability Statistics and Demographics, 2020). Thus, high-speed internet connections and advanced devices may be disproportionately unaffordable for people with disabilities.

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[2] While many health activities fall under the auspices of telehealth, this brief primarily uses the term "telehealth" to refer to two-way synchronous communication between patients and their health providers, with a preference for audio-video communication.

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There are also racial disparities within the disabled population. For example, approximately 40 percent of African Americans with disabilities live below the poverty line, compared to 26 percent of non-Hispanic whites with disabilities (Goodman et al., 2019).

Additionally, from March to April 2020, the number of employed people with disabilities fell by 20 percent, compared to 14 percent for nondisabled adults (Rahn & Shimanek, 2021). Trends from previous economic recessions indicate that the rate of job recovery for people with disabilities will be slower than those without (Rahn & Shimanek, 2021), which may widen existing income gaps and heighten affordability concerns for services such as broadband.

Supporting Caregivers

Telehealth technology has been used to support caregivers in a variety of ways such as education, consultation, therapy services, skill building, and social support. A 2015 literature review reported that 95 percent of studies found that using digital health technologies were associated with significant improvements in caregiver outcomes, including improving psychological outcomes, knowledge, coping, communication, and satisfaction (Chi & Demiris).

Finally, the digital divide extends beyond affordability of technology to its utilization. High-speed internet is inaccessible in many rural communities due to lack of infrastructure, and low internet speed can limit simultaneous device usage or usability of platforms (Annaswamy et al., 2020; Lai & Widmar, 2021). This may greatly impact the population with disabilities as rates of disability are higher in rural areas in the U.S. compared to urban areas, even when controlling for age and racial distributions (Reichert, 2019).

Accessibility and design challenges

Even when access to suitable devices and bandwidth are available to people with disabilities, there can be gaps in digital literacy, or knowledge of how to use technology platforms and devices. People with intellectual and developmental disabilities (I/DD), those who are cognitively impaired, or older adults may need additional assistance navigating the use of virtual technologies.

Video communication platforms are often inaccessible to those who are deaf, hard of hearing, deafblind, blind, or intellectually or developmentally disabled (Valdez et al., 2021). Of particular concern, assistive technologies may encounter compatibility issues with inaccessible websites (Hoffman, 2021). And health systems and providers may not be fully competent in setting up or operating accessible digital systems, such as interpreting services for patients who are deaf (Miller, 2017).

As such, some scholars recommend that health systems integrate accommodations, such as interpretation and closed captioning, into standard clinical workflows and provide training to both providers and patients on relevant technology (Valdez et al., 2021). For some individuals, physical access to two-way video conferencing for health care may depend on whether a caregiver can physically assist with using the technology.

Telehealth limitations

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Some research has shown that clinical care via telehealth is as good or better than in-person care for improving patient outcomes, including some chronic conditions and behavioral health counseling (Totten et al., 2020). However, telehealth research specific to people with disabling conditions is sparse and not all necessary care can be provided via telehealth.

Physical examinations completed via telehealth can require multiple camera angles, which may be difficult to navigate for a person with a physically disabling condition (Young & Edwards, 2020). In their study regarding patients with multiple sclerosis, Xiang & Bernard (2021) report there are challenges to performing a complete neurologic examination via telehealth. Further, poor video quality and disconnections decrease clinical care quality (Valdez et al., 2021).

Annaswamy and colleagues (2020) point out that many ancillary services such as laboratory testing and diagnostic tests are still administered in-person, which may cause logistical challenges or limit the accessibility of telehealth. A meta-analysis prior to the pandemic found fear of interference with their provider relationship was a barrier to telehealth uptake for chronic illness management patients (Palacholla et al., 2020). Privacy is also a factor for consideration of telehealth clinical care, particularly for patients living in higher density households or in group settings (Nouri et al., 2020).

Spotlight: Telebehavioral Health

The expansion of telehealth has also dramatically impacted behavioral health service delivery, referred to here as telebehavioral health. According to a study by Cree and colleagues (2020), people with disabilities experience frequent mental distress nearly five times as often as those without disabilities. People with disabilities may have comorbid mental health conditions or may need other behavioral health services to support them with communication, coping skills, or life skills.

Benefits of telebehavioral health include:

- facilitating providers' ability to observe clients' home environment, allowing insight into dynamics of clients' home lives.
- enabling clients to feel more comfortable in their home environments.
- lessening the concern around the stigma of being seen at a mental health treatment provider, particularly for individuals who live in small communities.

Sources: Cree, 2020; Chaiuzzi et al., 2020

Telehealth opportunities

Access

Telehealth holds tremendous potential for increasing health service access. During the PHE, health service provision via telehealth has been a crucial tool for safely providing health care services, particularly for those who are immunocompromised or otherwise vulnerable to communicable diseases. Telehealth can also:

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- lessen the need for coordinating transportation to health care appointments for people with disabilities, especially for those living in rural areas or areas with provider shortages (Valdez et al., 2021; Christensen & Bezyak, 2020);
- increase access to specialist providers, especially psychiatrists and other behavioral health providers, in places where such providers are in staggeringly short supply (RAND Corporation, 2020); and
- lessen the need for coordinating caregiver support to get to appointments, shorten appointment wait-times, and lessen the potential of negative experiences in public spaces (Valdez et al., 2021; Kichloo et al., 2020).

Costs

Telehealth has also been shown, in some studies, to help health systems reduce costs (Henry, 2020).

- By improving the continuity of care, telehealth can reduce the likelihood of institutional or crisis care and may also lower the likelihood of high-cost care resulting from previously unmet care needs (Quinn et al., 2020; Kichloo et al., 2020).
- One study explored by Forducey and colleagues (2012) found that older stroke patients with moderate deficits in self-care or functional ability were able to achieve clinically meaningful outcomes with a significantly lower number of physical and occupational therapy visits when delivered via telehealth than in-person home care visits, suggesting this modality may be cost effective.

However, more research is needed to assess the financial impact of telehealth across multiple sources of insurance coverage and multiple chronic conditions.

Promoting independence

Telehealth can support independence and empower self-management for people with disabilities (Christensen & Bezyak, 2020; Forducey et al., 2012). Self-management is critical for effective long-term care for chronic disabilities, with research documenting improved coping skills and quality of life for those with chronic illnesses who engage in self-care management (Forducey, et al., 2012).

Providers' acceptance of telehealth for treatment can also support independent living, instead of nursing homes or other institutions (Friedman, 2021). The potential for telehealth to support independence and self-management should be fostered by all stakeholders to expand self-determination options available and offered to people with disabilities.[3]

[3] To encourage more providers to use telehealth, we can provide administrative and technical support, integration into clinical workflows, ease of use, and improvements in patient outcomes or patient monitoring to prevent negative outcomes (Palacholla et al., 2019).

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Policy implications

Rapid changes in the telehealth landscape and the continuation of telehealth service delivery during the pandemic have strong policy implications for the health care field moving forward. However, the needs of people with disabilities must be factored into policy, regulations, and guidance, as well as provider workflows and operations. Without engaging people with disabilities, the current health disparities that exist for people with disabilities, especially those with marginalized intersectional identities such as LGBTQ+ and Black, Indigenous, and people of color (BIPOC) with disabilities, are likely to be exacerbated.

The following section explores national and state policy changes that occurred during the COVID-19 PHE, supportive changes that have been made, and future policy options to make telehealth more inclusive of people with disabilities.

Telehealth policy changes during the PHE

During the PHE, U.S. federal agencies and state governments have made temporary modifications to telehealth regulations under their authority.

- The Drug Enforcement Administration loosened telehealth prescribing requirements for schedule II through V controlled substances for the duration of the PHE, including removing the requirement that practitioners perform an in-person medical evaluation prior to prescribing controlled substances via telehealth (Baney et al., 2021).
- The U.S. Centers for Medicare and Medicaid Services (CMS) added 163 services reimbursable by Medicare when delivered via telehealth (CMS, 2021) and began to allow all providers eligible to bill Medicare to bill for telehealth services, including providers in Federally Qualified Health Centers (FQHCs) and Rural Health Centers (RHCs) that previously could not furnish services via telehealth (HHS, 2021). CMS also approved Medicaid Disaster Relief State Plan Amendments and other waivers, such as Section 1115 waivers, Section 1135 waivers, and 1915c Appendix K waivers requested by states to allow Medicaid flexibilities during the PHE (KFF, 2021b).
- For telehealth, states have temporarily expanded modalities, service coverage, and provider participation, and have changed payment rates and methodologies (Schubel & Wagner, 2020). State Medicaid authorities have also made changes to enhance access for individuals, such as using less restrictive eligibility criteria, temporarily expanding coverage for out-of-state residents, and allowing for self-attestation for non-financial eligibility factors (Schubel & Wagner, 2020).
- Some states have also expanded presumptive eligibility, which allows providers to screen for Medicaid eligibility and temporarily enroll those who appear eligible. States such as California, Iowa, and Massachusetts are allowing hospitals to conduct presumptive eligibility screenings for new eligibility categories, including people with disabilities and seniors (Schubel & Wagner, 2020).
- Other states used gubernatorial or departmental executive action to require private health insurance companies to extend telehealth coverage, such as expanding modalities for telehealth delivery, requiring reimbursement parity, and requiring coverage for an extended set of telehealth services (Tolbert et al., 2021).

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- And many private insurers took independent steps to incentivize telehealth visits, but some returned to charging patients' a cost-sharing fee for non-COVID-19 telehealth visits in the Fall of 2020 (Mathews & Whelan, 2020).

Table 1 summarizes changes made by Medicare, Medicaid, and private insurers across various realms of telehealth during the PHE.

Table 1

Telehealth policy changes during the PHE by payer source

Telehealth Policy Area	Medicare[1,2]	Medicaid[3-7]	Private Insurers[8, 9]
Location	No geographic restrictions for patients or providers	At least 25 states + DC are allowing patients to receive telehealth services at home, rather than at certain types of facilities	In 2020, 4 additional states (49 states total) no longer restrict reimbursement of telehealth by patient location for private insurers
Modality	Audio-only calls allowed for some services	38 states are allowing reimbursement for some services provided via phone; 22 states reimburse for remote patient monitoring	35 states (+1 for behavioral health services only) required private insurers to cover telehealth for expanded delivery modalities
Eligible Providers	All providers eligible to bill Medicare, including providers at FQHCs and RHCs, can bill telehealth	Some states now allow psychologists, PTs, OTs, and nutritionists; Some states allow all eligible providers to bill for telehealth services within their scope of practice	Subject to state laws and provider scopes of practice.
Eligible Services	162 services added during the PHE	50 states + DC expanded reimbursement for an expanded set of services during the PHE	18 states required private insurers to cover telehealth for an expanded set of services during the PHE
Non-medical Services	New occupational, physical, and speech therapy telehealth services can be reimbursed. Wheelchair management training and assistive technology assessments have also been added. See footnote #2 for complete	*Home and community-based services (HCBS):* 48 states + DC are allowed eligibility assessments via telehealth, and 43 states + DC are allowing service delivery via telehealth *PT, OT, and speech therapy:* covered by 32	Varies by insurer and benefits package.

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	list of Medicare telehealth services.	states when delivered via telehealth	
Licensing	Providers can offer telehealth services outside their state of licensure	50 states + DC introduced telehealth licensure flexibility	Subject to state licensure laws and regulations.
Cost-Sharing	Providers can waive or reduce cost-sharing for patients	20 states issued guidance to waive or lower telehealth copayments	15 states (+1 expired) required private insurers to waive or reduce cost-sharing for some or all telehealth services

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2. For the comprehensive list of telehealth services covered by Medicare for calendar year 2021, please visit https://www.cms.gov/Medicare/Medicare-General-Information/Telehealth/Telehealth-Codes
3. Though they must follow federal regulations and must seek federal approval for changes, states have a large degree of flexibility over their Medicaid programs. See the Center for Connected Health Policy for a comprehensive overview of telehealth changes made to every state's Medicaid program.
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What is still needed

Medicare and Medicaid program changes

Many of the policy changes and flexibilities outlined above are contingent on the PHE declaration, which was renewed for 90 days on July 15, 2022 (Office of the Assistant Secretary for Preparedness and Response, 2022) until mid-October, 2022. Some telehealth policy changes will expire with the PHE, and others will expire at the end of the year in which the PHE ends.

Many changes to Medicare and Medicaid would benefit the substantial populations of people with disabilities if made permanent beyond the expiration of the PHE. In a March 2021 report to Congress, the Medicare Payment Advisory Commission (MedPAC) recommended that policymakers temporarily extend (for one to two years)

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Medicare telehealth policy changes beyond the PHE to gather more evidence of cost and quality impacts to the program before making permanent changes (MedPAC, 2021).

Over 20 bills have been introduced to Congress regarding various conditions or requirements that attempt to provide stability and continuity of telehealth after the PHE (Badida & McDermott, 2021).

Senator Tim Scott (SC-R) and a bipartisan coalition introduced the Telehealth Modernization Act (S.368, H.R. 1332) to the U.S. Senate in February 2021.

The Telehealth Modernization Act would amend title XVIII of the Social Security Act to eliminate telehealth "originating site" requirements and geographic restrictions for Medicare. In addition to supporting health care access for those with disabilities and those in rural areas, the Telehealth Modernization Act would allow FQHCs and RHCs to continue delivering telehealth services after the PHE expires. The legislation would also allow the Secretary of Health and Human Services to allow all eligible Medicare practitioners to bill for telehealth (Telehealth Modernization Act, 2021).

The American Hospital Association and the American Telemedicine Association have expressed support for the Telehealth Modernization Act, which is more expansive than other bills proposed thus far, such as the CONNECT Act and the Protecting Access to Post-COVID-19 Telehealth Act of 2021 (Nickels, 2021; American Telemedicine Association, 2021; Badida & McDermott, 2021). As of the end of 2021, the Telehealth Modernization Act was with the Senate Committee on Finance.

Additional legislation introduced in 2022 includes the Telehealth Treatment and Technology Act (H.R. 7097) and the Telehealth Extension and Evaluation Act, the latter of which allows CMS "to extend Medicare payments for a variety of telehealth services, and commission a study on the impact of the pandemic telehealth flexibilities" (Manatt, 2022).

As of February 2022, 19 states have laws requiring private insurers to implement permanent payment parity for telehealth (Manatt, 2022). To make Medicaid program changes brought on by the PHE permanent, states must submit a new State Plan Amendment (SPA). CMS interviewed states regarding new Medicaid telehealth practices, and most viewed these changes positively (CMS, 2020). Extending audio-only telehealth eligibility and the use of telehealth in home and community-based services (HCBS) were most often mentioned as services under consideration for continuation (CMS, 2020).

According to a recent article by the National Academy for State Health Policy (NASHP), many states have received at least partial approval on their plans, pending some additional questions from CMS (NASHP, 2021). State plans have included opportunities to:

- expand telehealth infrastructure,
- focus on populations with developmental disabilities and complex support needs,
- purchase telehealth technology, and
- incorporate telehealth as a permanent service delivery method (NASHP, 2021).

Federal anti-discrimination guidance

Titles II and III of the Americans with Disabilities Act (ADA) require effective communication of medical providers to patients and companions by furnishing American Sign Language (ASL) interpreters or accessible written, audio, or digital materials and prohibits discrimination in places of "public accommodation" (Powers et al., 2017; Brown & Quackenboss, 2021). However, the extent to which the ADA applies to telehealth and

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telehealth technology companies is contested and has led to several legal disputes (Powers et al., 2017). Additionally, the lack of federal action or guidance to clarify legislative intent of the ADA regarding telehealth has left courts to ensure full participation of people with disabilities, with case law largely signaling courts' interpretation of the ADA's requirements (Powers et al., 2017; Brown & Quackenboss, 2021). Official federal guidelines explicitly prohibiting digital discrimination as covered by the ADA, as well as improved oversight and enforcement mechanisms, would support clarity and consistency regarding anti-discrimination rules in the realm of telemedicine.

Targeted infrastructure investments

Several Congressional bills, government agencies, and states have dedicated funding to broadband and telehealth-specific infrastructure, including funds allocated by the Coronavirus Aid, Relief, and Economic Security (CARES) Act. For example, with appropriations from the CARES Act, the U.S. Department of Agriculture and the FCC are investing $42 million and $200 million respectively in the improvement of telemedicine infrastructure (Siwicki, 2021; FCC, 2021a).

In addition to funds from the American Rescue Plan, the Broadband Reform and Investment to Drive Growth in the Economy (BRIDGE) Act of 2021, introduced in June 2021, would distribute $40 billion to states, tribal governments, and U.S. territories for investments in broadband infrastructure and affordability assistance (Zakrzewski, 2021). Investments of this kind can support access to telehealth, especially through improved broadband infrastructure, but efficacy will be dependent upon equitable distribution of funds. Additionally, while individuals can benefit indirectly, these investments tend to support government entities or service providers.

Medicare and Medicaid pay for some assistive technology devices for beneficiaries, but accessibility and compatibility issues remain. States, whether via health program administration or otherwise, could fund specific infrastructure and devices to close the digital divide for people with disabilities. In fact, the National Governors Association names narrowing the digital divide as a priority for the future of state telehealth policy, including addressing the disproportionate impact on and unique considerations for people with disabilities (Block & Ruane, 2020).

In July 2021, Governor Gavin Newsom signed California SB156 into law, investing $6 billion into the state's broadband infrastructure to extend access to as many households as possible (Committee on Budget and Fiscal Review, 2021). Similar to federal investments, the efficacy of the funds depends on their equitable distribution and whether individuals know about and can afford newly available broadband.

Taking stock after the PHE

There remains much debate in the field on the best path forward for telehealth. Concerns have been raised that telehealth promotes overuse of low-value care and fraud, with some opposing payment parity for telehealth services (Mehrotra et al., 2020). However, as COVID-19 becomes endemic, there is a natural inflection point for the future of telehealth: will telehealth continue to deepen the digital divide and health disparities for people with disabilities, or will the U.S. innovate and improve policies that support inclusion?

Noel & Ellison (2020) introduced the term "inclusive innovation," referring to technological advancement in telehealth in which people with disabilities and caregivers are viewed as strategic partners. The valuable insights from people with lived experience will generate a better design and user experience for all. Such advancements require testing new modes of care delivery, wherein comprehensive engagement of people with disabilities is essential.

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As national and state policies are developed and implemented for access to telehealth technology, inclusion of people with disabilities in the design, as well as consideration of their unique needs, will enable these and future technological innovations to be more accessible and effective for this population. In addition, policymakers, providers, and other stakeholders should be mindful to make telehealth optional, not obligatory, as the COVID-19 pandemic becomes endemic (Siegel & Volk, 2021). Telehealth is a powerful tool which national and state leaders should support with a focus on equity so that people with disabilities are not further segregated from access to the future benefits of health care.

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