RECONNECTING THE PATIENT: WHY TELEHEALTH POLICY SOLUTIONS MUST CONSIDER THE DEEPENING DIGITAL DIVIDE

DR. LAURA C. HOFFMAN[*]

I. INTRODUCTION

One of the critical lessons already gleaned from Covid-19 is the immense role technology can play in all aspects of our lives for everything from food shopping to healthcare access. But when technology becomes a larger part of our everyday lives, it begets a question: does everyone have access to the necessary technology? Devices such as iPads, smartphones, and laptops can come with a hefty price tag. Access to high-speed internet can also impose a challenge due to cost as well as availability in a given location, a barrier for many living in rural and urban areas. Aside from affordability, there are several other reasons that particular populations may not be able to access technology. These include people generally not feeling comfortable using these devices, such as the elderly, people who find them too complicated, or the technology itself may not be designed in a way that accommodates specific needs, such as individuals with different disabilities or non-English speakers. For those with children, many of these issues impact the family as a unit. Because of this, specific groups of people may have less or limited access to things like food delivery and healthcare – what we consider basic necessities – when technology has become a replacement or alternative for providing these goods and services.

There is concern that moving forward, already existing disparities, particularly those involving healthcare, will worsen due to the "digital divide"-

* Dr. Laura C. Hoffman is a Visiting Professor of Law and Acting Director for the Center for Health Law and Policy at Cleveland-Marshall College of Law. Prior to this, Dr. Hoffman served as a Senior Research Fellow with the Solomon Center for Health Law and Policy at Yale Law School where she contributed to the development of projects and events involving palliative care policy, elder law, brain injury, and disability law. Additionally, she worked as an Assistant Professor of Law/Faculty Researcher for Seton Hall University School of Law's Center for Health and Pharmaceutical Law and Policy where her work focused on research projects aimed at making policy changes to improve healthcare access for children and people with disabilities. Previously, Dr. Hoffman worked for Data Federal Corporation as a contract Attorney Advisor for the U.S. Department of Health and Human Services Office of Medicare Hearings and Appeals in the Cleveland, Ohio field office. She drafted appellate decisions for Administrative Law Judges involving legal disputes over Medicare payments. Dr. Hoffman earned her S.J.D. in Health Law and Policy from Loyola University Chicago School of Law in 2012. Additionally, she holds a LL.M. in Child and Family Law also from Loyola and a second LL.M. in Law and Government from American University Washington College of Law with a concentration in Civil and Constitutional Rights. Dr. Hoffman earned her J.D. from Ave Maria School of Law in 2007. Graduating cum laude and a distinguished graduate of the Class of 2004, she earned a B.A. in Political Science from the University of Notre Dame. This Article is dedicated in gratitude and loving memory of Dr. Hoffman's mother, Janet R. Hoffman.

the separation between those with access to technology and those without as described above. As our society continues to evolve beyond the Covid-19 pandemic, much focus will center on how the landscape of providing healthcare can and should change as telehealth has become a prominent part of the healthcare story in the United States.

Since the Covid-19 pandemic began in the U.S. in March 2020, the way in which healthcare has been delivered has drastically changed. Even though telehealth was used prior to the pandemic, its use as a delivery method for medical care spiked tremendously as a result of the pandemic based on the need to help curb the spread of Covid-19 and ensure people's well-being by reducing in-person contact as much as possible. But there has been lower utilization of telehealth as the pandemic has progressed. "National survey data from the Census Bureau show a gradual decline in telehealth utilization among adults and children between April and October 2021."[1] Additionally, on the provider side, it is still estimated that only 13% to 17% of healthcare delivery across specialties has involved the use of telehealth.[2] Researchers are currently trying to digest the use of telehealth as a means to deliver healthcare, clinicians are trying to learn how best to incorporate telehealth into their healthcare practice, and policymakers are attempting to determine what this means for the future regulatory implications of telehealth as the end of the pandemic approaches. Thus, there will be a "new norm" for healthcare as well post-pandemic and the verdict is still out on how the use of telehealth clinically will be incorporated and how it will be regulated from a policy standpoint. While the use of telehealth has declined since the peak of the pandemic, its use is here to stay and many of the questions of how it needs to be regulated must be explored and answered.[3] Among them, how to ensure policy solutions are mindful of these issues involving the digital divide's impact on various populations, which goes far beyond simply ensuring an adequate infrastructure.[4]

While much of telehealth focuses on providing access to healthcare by means of both audio and visual delivery, this is not possible for many individuals in thinking back to the concept of the "digital divide". Telehealth has already been criticized by some because it can, and potentially will, feed into this digital divide as those who can afford access to the necessary technologies including iPads,

---

1. Madjid Karimi et al., *National Survey Trends in Telehealth Use in 2021: Disparities in Utilization and Audio vs. Video Services*, DEP'T HEALTH & HUM. SERVS. ASSISTANT SEC. PLANNING & EVAL. 1, 10 (Feb. 2022), https://aspe.hhs.gov/sites/default/files/documents/4e1853c0b 4885112b2994680a58af9ed/telehealth-hps-ib.pdf [https://perma.cc/DZ2F-A3L3].

2. Oleg Bestsennyy et al., *Telehealth: A Quarter-Trillion-Dollar Post-COVID-19 Reality?*, MCKINSEY & CO. (July 9, 2021), https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality [https://perma.cc/P2YR-SLLU].

3. *Id.*

4. David Velasquez & Ateev Mehrotra, *Ensuring the Growth of Telehealth During COVID-19 Does Not Exacerbate Disparities in Care*, HEALTHAFFAIRS (May 8, 2020), https://www. healthaffairs.org/do/10.1377/hblog20200505.591306/full/ [https://perma.cc/726F-69HR].

smartphones, and broadband internet, will also have greater access to healthcare through telehealth if it is more fully implemented into the norm of healthcare delivery. However, what research has already shown, and what needs to be further explored, is the audio-only option that was used by many to provide telehealth during the pandemic as well as the populations that were reached. This Article hypothesizes that telehealth can and will thrive if telephone or audio-only access continues to some degree to be offered to provide healthcare for the populations who critics are quick to say cannot benefit from telehealth. While the audio-only modality of telehealth is not appropriate clinically for every healthcare situation or each individual's needs, there are still many who may otherwise benefit from its availability. Further, in addition to the audio-only telehealth modality option, efforts can and must be made to explore creating alternative places and spaces to offer both audio/visual telehealth options to these same populations. Education to enable individuals to learn how to use technology appropriately will also be a critical component. Finally, designers of these technologies for telehealth must make sure inclusion for all is at the forefront of design. In order to implement these mechanisms, policy solutions may come to bear on this to ensure equality. Telehealth is not merely as good as the technology that brings it to us but as versatile as the methods by which we enable people to have access and the regulatory framework to likewise allow for its cohesion as demonstrated by issues like how we define telehealth (i.e., if expanded to include audio-only modality) and whether or not reimbursement is offered.

This Article will attempt to untangle the complicated web of providing telehealth to those populations it is potentially capable of further alienating from access to healthcare including: 1) race/minority populations, 2) aging adults, 3) individuals with disabilities, 4) non-English speakers, 5) individuals living in rural areas, 6) socioeconomic class, and 7) children, in order to advance the argument that telehealth can be successful in providing healthcare access to these populations. Rather than suggesting that telehealth simply "cannot work" for these populations, instead consideration can and must meet these individuals through technology, access, and policy developments. First, this Article will explain how telehealth is defined and how the definition has and can continue to influence policy development. Next this Article will explore the issues surrounding the "digital divide" and how this relates to telehealth use. Then this Article will discuss how access to technology impacts particular populations. This Article will then consider legislation and policy developments both at the federal and state level that have emerged thus far that could help overcome challenges of accessibility, affordability, and useability. Finally, this Article will offer policy recommendations for ensuring that the delivery of telehealth can be accessible to those populations with potentially less access to technology to ensure telehealth's successful availability and use for these populations can continue beyond Covid-19.

Inevitably, the purpose of this Article is to demonstrate that the future is still bright for the use of telehealth as seen initially in the audio-only option in the telephone call now that can allow a gap to be bridged for those populations that may not have the same access to technology in a variety of ways. Another hope

is to encourage the creation of other available options where these populations can also use both audio/visual options for telehealth as it is known that the audio-only option may not cater to every health situation clinically and the needs of various members of these populations. As telehealth is seen from this author's perspective as supplemental to the in-person delivery of healthcare, there is no argument here that telehealth should ever replace in-person care or that telehealth, even in its best forms using both audio/visual components, can ultimately act to substitute in-person medical care completely. However, the expansion of options of telehealth from a regulatory standpoint as well as finding creative ways to make technology available and otherwise accessible for populations most at risk of not benefiting with the known gap of lack of access to technology can allow for telehealth to thrive for these populations and improve their access to healthcare rather than potentially worsen existing healthcare disparities. How is telehealth regulated beyond Covid-19 and what does that mean for populations at greater risk for healthcare disparities? What role does accessibility play in formulating successful policy solutions involving telehealth? These are the questions this Article ultimately hopes to provide insight to.

II. UNDERSTANDING TELEHEALTH GENERALLY

A. Introduction

Long before the Covid-19 pandemic, telehealth has been used as a means of delivering healthcare at a distance via the use of technology.[5] As a result of the pandemic, medical school education is now including training in telemedicine appointments.[6] Even how much will be spent on telehealth as an industry is unknown given the impact of Covid-19.[7] However, in order to more fully understand the impact of the explosion of telehealth since Covid-19[8], it is critical

---

5. *See* WORLD HEALTH ORG., TELEMEDICINE: OPPORTUNITIES AND DEVELOPMENTS IN MEMBER STATES (2009).

6. Jamie Ducharme, *How U.S. Medical Schools are Training a Post-Pandemic Generation of Doctors*, TIME, https://time.com/5914062/medical-schools-coronavirus-pandemic/ [https://perma.cc/6YG7-2VGV] (last updated Jan. 7, 2021).

7. Kim Harvey Looney & Molly August Huffman, *That was Then and This is Now—How the COVID-19 Crisis Changed Telehealth Services: Are the Changes Here to Stay?*, AM. HEALTH L. ASS'N (Sept. 1, 2020), https://www.americanhealthlaw.org/content-library/connections-magazine/article/55a5ad47-302e-41f4-8e83-c1c1813c48a4/that-was-then-and-this-is-now-how-the-covid-19-cri?utm_term=&utm_medium=ppc&utm_campaign=Awareness&utm_source=adwords&hsa_cam=1932380778&hsa_src=g&hsa_mt=b&hsa_ver=3&hsa_net=adwords&hsa_tgt=dsa-747633339513&hsa_acc=5596653348&hsa_grp=72466149978&hsa_kw=&hsa_ad=352494516217&gclid=Cj0KCQiAhZT9BRDmARIsAN2E-J152bXaUobX1u4r_5fifWJCtP4PnBYCC9_Cd5VVB9e17NrgGbPXTNMaAoZsEALw_wcB [https://perma.cc/LAW9-FLUX].

8. Gabriela Weigel et al., *Opportunities and Barriers for Telemedicine in the U.S. During the COVID-19 Emergency and Beyond*, KAISER FAM. FOUND. (May 11, 2020), https://www.kff.org/

to know some general background of telehealth leading to this pivotal moment in time that will have a lasting impact on healthcare delivery.

B. Definition

1. What Is "Telehealth"?

Defining "telehealth" and related terms is not an easy task given the use of these terms from both a consumer and regulatory perspective.[9] The Center for Connected Health Policy ("CCHP") defines telehealth as follows: "Telehealth is a collection of means or methods for enhancing health care, public health and health education delivery and support using telecommunications technologies. Telehealth encompasses a broad variety of technologies and tactics to deliver virtual medical, health, and education services. Telehealth is not a specific service, but a collection of means to enhance care and education delivery."[10] CCHP indicates the term "telehealth" is now more commonly used than "telemedicine" in policy as it describes "the wide range of diagnosis and management, education, and other related fields of health care."[11]

Federal agencies have also engaged in defining these terms. A frequently used definition of "telehealth" comes from the Health Resources and Services Administration ("HRSA") of the Federal Office of Rural Health Policy which defines telehealth as follows:

> Telehealth is defined as the use of electronic information and telecommunication technologies to support long-distance clinical health care, patient and professional health-related education, public health, and health administration. Technologies include video conferencing, the internet, store-and-forward imaging, streaming media, and terrestrial and wireless communications.[12]

In March 2020, the Centers for Medicare and Medicaid Services ("CMS") advised Medicare health providers "[t]elehealth, telemedicine, and related terms generally refer to the exchange of medical information from one site to another through electronic communication to improve a patient's health."[13] CMS defines

---

womens-health-policy/issue-brief/opportunities-and-barriers-for-telemedicine-in-the-u-s-during-the-covid-19-emergency-and-beyond/ [https://perma.cc/YH2M-47SV].

9. Matthew D. Byrne, *Telehealth and the Covid-19 Pandemic*, 35 J. PERIANESTHESIA NURSING 548, 551 (2020).

10. *What is Telehealth?*, CTR. CONNECTED HEALTH POL'Y, https://www.cchpca.org/about/about-telehealth [https://perma.cc/9F6L-93ZU] (last visited Mar. 9, 2022).

11. *Id.*

12. *What is Telehealth?*, HEALTH RES. & SERV. ADMIN., https://www.hrsa.gov/rural-health/telehealth [https://perma.cc/QHJ9-34U4] (last updated Sept. 2021).

13. *Medicare Telemedicine Healthcare Provider Fact Sheet*, CTRS. MEDICARE & MEDICAID SERVS. (Mar. 17, 2020), https://www.cms.gov/newsroom/fact-sheets/medicare-telemedicine-health-care-provider-fact-sheet [https://perma.cc/YN85-D7CV].

telemedicine for Medicaid: "[T]elemedicine seeks to improve a patient's health by permitting two-way, real time interactive communication between the patient, and the physician or practitioner at the distant site. This electronic communication means the use of interactive telecommunications equipment that includes, at a minimum, audio and video equipment."[14] The definition of "telemedicine" used for Medicaid was taken from Medicare's definition of "telehealth" as Medicare does not provide a particular service for "telemedicine," further demonstrating the complexity of understanding these terms and their distinctions.[15]

2. Telemedicine vs. Telehealth: The Interchangeability of the Terms

Telemedicine is generally understood as providing healthcare services at a distance between a patient and medical professional involving the use of technologies to communicate and deliver clinical services which can include evaluation, diagnosis, and treatment.[16] The World Health Organization ("WHO") has recognized the nature of telemedicine as an "open and constantly evolving science" that allows changeability for the concept's definition to accommodate both technological developments and healthcare needs.[17]

Frequently, the terms "telemedicine" and "telehealth" are distinguished with the latter referring more broadly to cover the use of various technologies to deliver medical, health, and education services in addition to clinical services rather than the narrower understanding of "telemedicine" which generally refers to remote delivery of clinical services.[18] Despite these specific distinctions, "telemedicine" and "telehealth" are often used synonymously or interchangeably.[19]

3. Impact of Definition on Public Policy

The definition of telemedicine can have a significant impact on policy

---

14. *Telemedicine*, MEDICAID, https://www.medicaid.gov/medicaid/benefits/telemedicine/index.html [https://perma.cc/F9GJ-6N3Z] (last visited Feb. 13, 2022).

15. *Id.*

16. *See* WORLD HEALTH ORG., *supra* note 5.

17. *See id.*

18. *What is Telehealth?*, *supra* note 12.

19. The WHO has used the terms telemedicine and telehealth interchangeably in its own report on telemedicine. *See* WORLD HEALTH ORG., *supra* note 5, at 9. The Centers for Disease Control and Prevention ("CDC") has acknowledged that telemedicine and telehealth can be used interchangeably. *See Telehealth and Telemedicine: A Research Anthology of Law and Policy Resources*, CTRS. DISEASE CONTROL & PREVENTION, https://www.cdc.gov/phlp/publications/topic/anthologies/anthologies-telehealth.html [https://perma.cc/7VGC-TH9N] (last updated July 31, 2019). The Kaiser Family Foundation ("KFF") defines telemedicine/telehealth generally as "the remote provision of health care services using technology to exchange information for the diagnosis, treatment and prevention of disease" and acknowledges that the terms are used interchangeably. *See* Weigel et al., *supra* note 8.

development.[20] Despite a myriad of definitions, what is clear at this point is that every state in the U.S. as well as the District of Columbia ("D.C.") have crafted definitions for "telemedicine," "telehealth," or a combination of these terms.[21] For the purposes of consistency, this Article will use "telehealth" and will apply the term interchangeably to both "telemedicine" and "telehealth."

a. General barriers to telehealth pre-pandemic

A number of barriers already existed in access to telehealth pre-pandemic.[22] Among the most prevalent barriers that existed before the pandemic have included:
- Reimbursement
- Licensure
- Rural broadband gaps
- Existing healthcare disparities
- Online prescribing[23]
- Privacy regarding patients' health information

In addition to these barriers, the way healthcare is administered between federal and state government has played a central role in shaping policy development.

b. Federal vs. state administration of telehealth[24]

A major contribution to the difficulties in removing barriers to implementation of telehealth prior to Covid-19 has been the disjointed system of federal and state telehealth administration and policy.[25] There has not been a uniform federal telehealth policy.[26] Additionally, there have been inconsistencies in the federal approach to telehealth.[27] Medicare has seen the most activity on the federal level in terms of telehealth but it has been far from ensuring accessibility to telehealth even before the pandemic.[28]

The current structure of regulation of health insurance markets has already

---

20. Nicol Turner Lee et al., *Removing Regulatory Barriers to Telehealth Before and After COVID-19*, BROOKINGS INST. (May 6, 2020), https://www.brookings.edu/research/removing-regulatory-barriers-to-telehealth-before-and-after-covid-19/ [https://perma.cc/6Q6V-ZYA3].

21. *See State Telehealth Laws and Medicaid Program Policies*, CTR. CONNECTED HEALTH POL'Y 1 (Fall 2021), https://www.cchpca.org/2021/10/Fall2021_ExecutiveSummary_FINAL.pdf [https://perma.cc/CD4E-32D4].

22. Lee et al., *supra* note 20.

23. *See* Laura C. Hoffman, *Shedding Light on Telemedicine & Online Prescribing: The Need to Balance Access to Health Care and Quality of Care*, 46 AM. J. LAW & MED. 237 (2020).

24. *Id.*

25. *Id.*

26. *Telehealth Policy 101*, CTR. CONNECTED HEALTH POL'Y, https://www.cchpca.org/telehealth-policy/national-policy [https://perma.cc/DJ47-4DXB] (last visited Apr. 23, 2022).

27. Lee et al., *supra* note 20.

28. *Id.*

played a role in the difficulties in telehealth policy. The federal government administers a number of healthcare programs that includes healthcare services for groups such as employees, the military, veterans, the elderly, and disabled individuals, representing only 15% of the population.[29] However, there are distinctions in federal rules for telehealth such as Medicare and the regulations in place at the state level further contributing to the complexity between different levels of government with different rules.[30] The majority of health insurance purchased in the U.S. is regulated on the state level, making the state influence significant.[31] States are also potentially much better suited for responding to people's needs in the insurance market than the federal government.[32] Additionally, the state creates another layer of variation in telehealth policy.[33] "No two states are alike in how telehealth is defined and regulated."[34] This could, in actuality, result in only increasing health inequity if these differences are vast: "Similarly, if neighboring states do not have comparable medical licensing, telehealth malpractice, or online prescribing regulations, patients may have inequitable access regardless of their insurance coverage."[35] Even prior to Covid-19, state law varied significantly regarding telehealth.[36]

III. EXPLORING DISPARITIES

Among the barriers that already existed before the pandemic, access to technology and what will be described as the "digital divide" as well as existing healthcare disparities went hand-in-hand, impacting relatively the same populations.[37] The existence of the "digital divide" has been recognized globally.[38] Covid-19 saw the expansion of telehealth use with many physicians using telehealth for the first time, thus requiring patients to have access to technology when in-person visits were no longer an option.[39] There is concern that if telehealth continues to aggressively be pursued and implemented as a

---

29. *Id.*

30. *Id.*

31. *Id.*

32. *Id.*

33. *Id.*

34. *State Telehealth Laws and Medicaid Program Policies*, *supra* note 21, at 3.

35. *See* Elaine C. Khoong, *Policy Considerations to Ensure Telemedicine Equity*, HEALTH AFF. (May 2022), https://www.healthaffairs.org/doi/10.1377/hlthaff.2022.00300 [https://perma. cc/G82H-SD8V].

36. Sydne Enlund, *Increasing Access to Health Care Through Telehealth*, NAT'L CONF. STATE LEG. (May 30, 2019), https://www.ncsl.org/research/health/increasing-access-to-health-care-through-telehealth.aspx [https://perma.cc/6Q94-WH9L]; *see also* Lee et al., *supra* note 20.

37. Lee et al., *supra* note 20.

38. Anita Makri, *Bridging the Digital Divide in Health Care*, 1 LANCET DIGITAL HEALTH E204, E204-E205 (2019).

39. *Telehealth Impact: Physician Survey Analysis*, MITRE CORP., https://c19hcc.org/ telehealth/physician-survey-analysis/ [https://perma.cc/SNN6-CKBB] (last updated Nov. 16, 2020).

regular and more permanent method of providing healthcare, the groups with already existing healthcare disparities will only see these disparities exacerbated further. Below, these existing disparities will be explored, as well as what current research has suggested in the potential furthering of these disparities in light of telehealth use.

A. Digital Divide and the Potential to Exacerbate Existing Health Disparities[40]

1. What Is the "Digital Divide"?

"The digital divide is one of the most pressing issues in telehealth."[41] The "digital divide" is generally understood as the inability to access telehealth as a means of providing healthcare which occurs through the combination of three primary points of accessibility: 1) individuals lacking access to technology, 2) a lack of digital literacy, and 3) the unreliability of internet coverage.[42] It is known that certain populations of individuals are more likely to be impacted by the "digital divide" which includes the elderly, people of color, and individuals who fall into the category of low socioeconomic class.[43] The digital divide existed before the pandemic.[44] Perhaps even more critical is that those falling into the digital divide are also those who have already been experiencing health disparities creating the potential for a double impact on these particular populations in healthcare access as telehealth becomes a more permanent part of healthcare

---

40. Velasquez & Mehrotra, *supra* note 4.

41. Anuja Vaidya, *Understanding Key Telehealth Disparities & Patient-Facing Barriers*, Xtelligent Healthcare Media (May 6, 2022), https://mhealthintelligence.com/features/ understanding-key-telehealth-disparities-patient-facing-barriers [https://perma.cc/G6LU-LKGP].

42. *Id.*

43. *Id.*; *see also* Ellerie Weber et al., *Characteristics of Telehealth Users in NYC for COVID-Related Care During the Coronavirus Pandemic*, 27 J. Am. Med. Informatics Ass'n 1949 (2020) (citing Hyunwoo Yoon et al., *Older Adults' Internet Use for Health Information: Digital Divide by Race/Ethnicity and Socioeconomic Status*, 39 J. Applied Gerontology 105 (2020)); Emily A. Vogels, *Digital Divide Persists Even as Lower-Income Americans Make Gains in Tech Adoption*, Pew Rsch. Ctr. (June 22, 2021), https://pewrsr.ch/2vK1HIo [https://perma.cc/RE6J-NSRD]; Andrew Perrin & Erica Turner, *Smartphones Help Blacks, Hispanics Bridge Some—But Not All—Digital Gaps with Whites*, Pew Rsch. Ctr. (Aug. 20, 2019), https://policycommons.net/ artifacts/616650/smartphones-help-blacks-hispanics-bridge-some/1597318/ [https://perma.cc/MW4H-S3WZ].

44. *See Bridging the Digital Divide for Consumers: How Health Plans Address the Social Determinants of Health and Promote Access to Telehealth*, Am. Health Ins. Plans 1 (Nov. 2020), https://www.ahip.org/wp-content/uploads/202011-AHIP_IB-DigitalDivide.pdf [https://perma.cc/BPE3-V7H7] ("Research conducted prior to the pandemic revealed that older Americans, rural communities, vulnerable populations, racial and ethnic minorities, and those with lower socioeconomic status are disadvantaged by this 'digital divide' and may be unable to take full advantage of telehealth opportunities.").

delivery.[45]

Despite this understanding above of the digital divide, from a policy standpoint, those issues suggest that even more significant problems are at play that can and should be recognized as part of the digital divide.[46] Up until this point, most policy recommendations have also only critically addressed one major aspect of this – trying to ensure broadband availability and improving infrastructure.[47] However, there is much more to the digital divide that needs to be addressed for certain populations not to be left behind as described below.

a. Absence of access to technology

The first area that contributes to the digital divide is access to technology. Prior to the pandemic, a lack of access to the internet was identified as a significant issue.[48] Research indicates the severity of this absence of technology:

> Although 80 percent of all U.S. households have access to the internet, data from the Health Information National Trends Survey suggest that significant disparities in internet access exist by age, sex, race, ethnicity, income, and education. Likewise, as noted in AHRQ's 2018 National Healthcare Quality and Disparities Report, while some of the observed disparities have declined over the past two decades, many persist, especially for poor and uninsured populations in all priority areas.[49]

A population that is particularly impacted by an absence of technology is the elderly in terms of both computer ownership and internet access availability at home.[50] Other groups significantly impacted include children of minority groups[51] and veterans who have received telehealth in rural areas but still face accessibility

---

45. Shelly Smith & Sarah Raskin, *Achieving Health Equity: Examining Telehealth in Response to a Pandemic*, 17 J. NURSE PRACTITIONERS 214, 214 (2020).

46. Nicol Turner Lee, *Can We Better Define What We Mean by Closing the Digital Divide?*, HILL (Dec. 18, 2021), https://thehill.com/opinion/technology/586396-can-we-better-define-what-we-mean-by-closing-the-digital-divide [https://perma.cc/T5AN-GEGV] ("The severity of the digital divide goes beyond the usual analogy of a three-legged stool — broadband availability, affordability, and digital literacy. Policymakers must acknowledge that efforts to close the digital divide should also address poverty, geographic, and social isolation.").

47. Bhaskar Chakravorti, *How to Close the Digital Divide in the U.S.*, HARV. BUS. REV. (July 20, 2021), https://hbr.org/2021/07/how-to-close-the-digital-divide-in-the-u-s [https://perma.cc/37WX-2KWS].

48. *Telediagnosis for Acute Care: Implications for the Quality and Safety of Diagnosis*, AGENCY HEALTHCARE RSCH. & QUALITY, https://www.ahrq.gov/patient-safety/reports/issue-briefs/teledx-5.html [https://perma.cc/3F22-5MJF] (last updated Aug. 2020).

49. *Id.*

50. *See* Camille Ryan & Jamie M. Lewis, *Computer and Internet Use in the United States: 2015*, U.S. CENSUS BUREAU 1 (Sept. 2017), https://www.census.gov/content/dam/Census/library/publications/2017/acs/acs-37.pdf [https://perma.cc/5SWA-GV43].

51. Velasquez & Mehrotra, *supra* note 4.

challenges.[52] Additionally, non-English speakers may face challenges to accessing telehealth due to a combination of lack of access to technology and language barriers such as the lack of translating services.[53]

b. Digital literacy

Having access to technology is not simply enough to ensure access to healthcare through telehealth. Another contribution to the digital divide is digital literacy or how to actually use the technology in order to access telehealth services. Digital literacy is particularly challenging for the elderly population which was evident prior to the pandemic:

> For 2018, we estimated that of all older adults in the United States, 13 million (38%) were not ready for video visits, predominantly owing to inexperience with technology. Assuming individuals in the role of social supports knew how to set up a video visit, the estimated number of older adults who were still unready was 10.8 million (32%) Telephone visits may reach more patients. Nonetheless, an estimated 20% of older patients were unready for telephone visits because of difficulty hearing, difficulty communicating, or dementia.[54]

It has also been observed that those who are lacking digital literacy are more likely to be members of minority groups and/or of low socio-economic class.[55] Additionally, ensuring individuals have access to technology does not equate them possessing digital literacy to use the necessary technology which has been demonstrated for both the elderly and African American populations.[56] Those with limited English will also be less likely to use the technologies involved in telehealth even if they are available to them.[57] Further, the complexities of the video calls for non-English or limited English speakers will result in reliance on

---

52. Lauren Korshak & Donna L. Washington, *Telehealth Disparities Fact Sheet*, U.S. DEP'T VETERAN AFF. 1, 1-2 (Nov. 2017), https://www.va.gov/HEALTHEQUITY/docs/Telehealth_Fact_Sheet.pdf [https://perma.cc/NCV9-34W5].

53. Nicole Wetsman, *Telehealth Wasn't Designed for Non-English Speakers*, VERGE (June 4, 2020, 10:00 AM), https://www.theverge.com/21277936/telehealth-english-systems-disparities-interpreters-online-doctor-appointments [https://perma.cc/E8LT-LAM6].

54. Kenneth Lam et al., *Assessing Telemedicine Unreadiness Among Older Adults in the United States During the COVID-19 Pandemic*, 180 JAMA INTERNAL MED. 1389, 1389-1391 (2020).

55. *See* Saida Mamedova & Emily Pawlowski, *A Description of U.S. Adults Who are Not Digitally Literate*, STATS BRIEF 1 (May 2018), https://nces.ed.gov/pubs2018/2018161.pdf [https://perma.cc/ZBJ9-99PN].

56. *See* Daniel M. Walker et al., *Exploring the Digital Divide: Age and Race Disparities in Use of an Inpatient Portal*, 26 TELEMEDICINE & E-HEALTH 603 (2020).

57. Wetsman, *supra* note 53. *See also* Sarah Nouri et al., *Addressing Equity in Telemedicine for Chronic Disease Management During the Covid-19 Pandemic*, N.E. J. MED. CATALYST (May 4, 2020), https://catalyst.nejm.org/doi/full/10.1056/CAT.20.0123 [https://perma.cc/85MM-BWJP].

telehealth in the form of telephone calls (audio-only) which may provide less information than physicians can obtain through observation on video calls.[58] Those who are non-English speakers have been less likely to use internet portals for healthcare prior to the pandemic further substantiating concerns that this population will be particularly vulnerable to the implementation of telehealth moving forward if there is not significant consideration to how to accommodate this population.[59] There have been notable challenges in places like California:

> In California, nearly 44% of the population speaks a language other than English at home, and Spanish-speaking physicians are the most under-represented in the physician workforce. Medical interpreter use will need to be systematically incorporated into telehealth technology to ensure language-concordance is addressed.[60]

Efforts to ameliorate these issues such as in-person outreach and education sessions for these populations may be essential to ensure not being left behind if telehealth becomes an integral part of healthcare delivery post-pandemic, but will be problematic to implement until the U.S. is far beyond the pandemic when locations are experiencing less restrictions. Even then, there is the fear factor of getting the technology but not knowing how to use it and knowing where to turn in order to acquire the assistance, education, and training necessary to use the technology.[61]

c. Reliable internet coverage

The availability of and access to internet service is not merely enough to ensure telehealth access. The reliability of internet service also plays a critical role in ensuring access. The exact extent of lack of broadband internet access in the U.S. is unsettled to some degree but generally known to be substantial.[62] A lack of broadband access has been linked to underutilization of telehealth for those living in rural areas, "In fully rural counties, greater broadband access was associated with greater telemedicine use: counties with low broadband

---

58. Nouri et al., *supra* note 57.

59. *See* Alejandra Casillas et al., *A Digital Language Divide? The Relationship Between Internet Medication Refills and Medication Adherence Among Limited English Proficient (LEP) Patients*, 5 J. RACIAL & ETHNIC HEALTH DISPARITIES 1373 (2018).

60. *See* Yohualli Balderas-Medina Anaya et al., *Telehealth & COVID-19: Policy Considerations to Improve Access to Care*, UCLA LATINO POL'Y & POL. INITIATIVE 1, https:// latino.ucla.edu/wp-content/uploads/2020/05/Telehealth-COVID-19-Report.pdf [https://perma.cc/6LFE-FN22] (last visited Mar. 13, 2022).

61. Judith Graham, *Calming Computer Jitters: Help for Seniors Who Aren't Tech-Savvy*, KAISER FAM. FOUND. (June 24, 2021), https://khn.org/news/article/calming-computer-jitters-help-for-seniors-who-arent-tech-savvy/ [https://perma.cc/E6RN-6K8W].

62. Sophia Campbell et al., *The Benefits and Costs of Broadband Expansion*, BROOKINGS INST.,   https://www.brookings.edu/blog/up-front/2021/08/18/the-benefits-and-costs-of-broadband-expansion/ [https://perma.cc/A8QQ-VGWT] (last updated Nov. 9, 2021).

availability had 34% fewer visits per capita compared with counties with high broadband availability (13.4 per 1000 vs 20.4, P = .004)."[63] The broadband coverage rates in 2018 demonstrate the prevalence of this challenge, "FCC filings show that 24 million Americans still don't have access to broadband Internet at home in 2018. Millions more can only get slow, unreliable DSL service. Many of the 'dark spots' are in states with large swaths of rural, economically disadvantaged areas."[64] In 2019, access to broadband still remained significantly difficult for Americans living in rural areas compared to those in both urban and suburban areas.[65] The FCC's most recent estimate regarding lack of broadband access is at approximately 19 million – with 14.5 million coming from those living in rural areas.[66] However, there is additional research in 2020 to suggest even current FCC numbers are inaccurate and that it is likely double this amount are without broadband access.[67] This is due to a difference in methodology in calculating these numbers which the group BroadbandNow Research performed by address.[68] In 2021, it was estimated that 45% of those living in rural areas lacked broadband access by research performed by the Bipartisan Policy Center.[69] While much attention has been focused on broadband internet access for rural areas, urban areas have been facing similar struggles.[70] The pandemic has only contributed to the importance of broadband access due to the use of telehealth. A study released in March 2022 indicated that more individuals who were African

---

63. *See* Andrew D. Wilcock et al., *Association Between Broadband Internet Availability and Telemedicine Use*, 179 JAMA INTERNAL MED. 1580 (2019).

64. *See* Tyler Cooper, *US States with the Worst and Best Internet Coverage 2018*, BROADBANDNOW (Aug. 14, 2018), https://broadbandnow.com/report/us-states-internet-coverage-speed-2018/ [https://perma.cc/R8DM-TY2S].

65. Andrew Perrin, *Digital Gap Between Rural and Nonrural America Persists*, PEW RSCH. CTR. (June 3, 2019), https://www.benton.org/headlines/digital-gap-between-rural-and-nonrural-america-persists-0 [https://perma.cc/6TLA-GTQP].

66. *Eighth Broadband Progress Report*, FED. COMMC'NS COMM'N, https://www.fcc.gov /reports-research/reports/broadband-progress-reports/eighth-broadband-progress-report#:~:text=Notwithstanding%20this%20progress%2C%20the%20Report,lack%20access%20to%20this%20service [https://perma.cc/SDN2-8LNF] (last visited May 10, 2022).

67. John Busby et al., *FCC Reports Broadband Unavailable to 21.3 Million Americans, BroadbandNow Study Indicates 42 Million Do Not Have Access*, BROADBANDNOW RSCH. (Oct. 21, 2021), https://broadbandnow.com/research/fcc-underestimates-unserved-by-50-percent [https:// perma.cc/7P4Z-UFTN].

68. Linda Poon, *There are Far More Americans Without Broadband Access Than Previously Thought*, BLOOMBERG (Feb. 19, 2020, 3:09 PM), https://www.bloomberg.com/news/articles/2020-02-19/where-the-u-s-underestimates-the-digital-divide [https://perma.cc/K8CD-3CUM].

69. Jazmyne Sutton, *Telehealth Visit Use Among U.S. Adults*, BIPARTISAN POL'Y CTR. (Aug. 2021), https://bipartisanpolicy.org/download/?file=/wp-content/uploads/2021/08/SSRS-Telehealth-Report_confidential_FINAL_08.02.21-1.pdf [https://perma.cc/PH6C-L68S].

70. Juan Pablo Garnham, *Millions of Texans Still Don't Have Broadband Access. Some Lawmakers are Trying to Change That*, TEX. TRIBUNE (Mar. 8, 2021, 11:00 AM), https://www. texastribune.org/2021/03/08/internet-broadband-texas/ [https://perma.cc/SAF5-MQN7].

American or non-Hispanic white that died from Covid-19 lacked internet access thus also limiting access to telehealth.[71] Lack of internet was also shown to contribute to Covid-19 mortality rates in urban areas.[72] "Broadband access has been increasingly named as an explicit social determinant of health during the COVID-19 pandemic."[73]

B. Early Evidence of Disparities in Healthcare Access from Use of Telehealth During COVID-19 and Looking Beyond

The immediate question that emerges is whether an expansion of telehealth in the delivery of healthcare would exacerbate existing healthcare disparities for groups already discussed. Initial research thirty days after telehealth expansion during the Covid-19 public health emergency revealed a number of disparities based on gender, age, race, geographic location, and type of payer.[74] However, it is important to note that this study had its limitations and recommended future research was necessary.[75] Another study evaluated telehealth use for primary and specialty care in a large academic hospital system during the pandemic finding "older age, Asian race, non-English language as the patient's preferred language, and Medicaid were independently associated with fewer completed telemedicine visits . . . ."[76] This initial research suggested the policy implications, especially for reimbursement policy, must consider these disparities moving forward.[77] Additional research has further demonstrated disparities directly or suggested their potential with telehealth expansion.

1. Race/Minority Populations[78]

Among the groups with recognized health disparities that may be further

---

71. Qinyun Lin et al., *Assessment of Structural Barriers and Racial Group Disparities of COVID-19 Mortality with Spatial Analysis*, 5 JAMA NETWORK OPEN 1, 9 (2022). "In addition, most concentrated longitudinal-impact counties with large Black or African American (244 of 347 [70.3%]) and non-Hispanic White (21 of 33 [63.6%]) populations compared with other counties had higher percentages of households without access to the internet." *Id.*

72. *Id.*

73. Smith & Raskin, *supra* note 45 (citing Natalie C. Benda et al., *Broadband Internet Access is a Social Determinant of Health!*, 110 AM. J. PUB. HEALTH 1123 (2020)).

74. *See* Robert P. Pierce & James J. Stevermer, *Disparities in Use of Telehealth at the Onset of the COVID-19 Public Health Emergency*, J. TELEMEDICINE & TELECARE 1 (2020).

75. *See id.*

76. *See* Lauren A. Eberly et al., *Patient Characteristics Associated with Telemedicine Access for Primary and Specialty Ambulatory Care During the COVID-19 Pandemic*, 3 JAMA NETWORK OPEN 1 (2020).

77. *See id.*

78. Craig Konnoth et al., *How Telehealth Could Improve — or Worsen — Racial Disparities*, HARV. L. PETRIE-FLOM CTR. (Oct. 8, 2020), https://blog.petrieflom.law.harvard.edu/2020/10/08/telehealth-racial-disparities-covid19/ [https://perma.cc/WL2E-P4QA].

impacted by telehealth expansion are those based on race or minority populations. Although research between race and telehealth use was conflicting prior to the pandemic, the initial 30-day review found that there was a notable health disparity for Blacks and telehealth use in the initial expansion of telehealth during COVID-19.[79]   Further research has substantiated the relationship between race/ethnicity and limited telehealth use since the pandemic. A study that examined data from the peak of the pandemic in New York City demonstrated that both Blacks and Latinos saw greater use of both Emergency Department ("ED") visits and in-person healthcare visits rather than use of telehealth for healthcare compared to whites.[80] Another study examining cancer care for both Blacks and Hispanics during the pandemic in New York City at its height also recognized the decreased use of telehealth for these populations.[81]   Another complication created by COVID-19 has been the fact that many in these populations depend on community health centers ("CHCs") for access to healthcare where it has been shown there have been fewer weekly visits and where a majority of CHCs used telehealth to provide healthcare during the pandemic, suggesting that this could contribute to intensifying already existing healthcare disparities.[82]   Recent research published in the *Journal of Racial Ethnic Health Disparities* identified the lack of access to digital health information for older individuals of racial and ethnic groups—an example of the direct impact of this divide.[83]

2. Aging Adults

Another population deserving attention in telehealth is the elderly population (defined as those age 65 and older).[84] Early polling by KFF during the pandemic in April found that although the elderly population was utilizing telehealth, there are still numerous barriers in terms of technology access and use.[85] KFF stated:

---

79.   *See* Pierce & Stevermer, *supra* note 74.

80.   *See* Weber et al., *supra* note 43.

81.   John DeRosier, *Substantial Racial Disparities Observed in Use of Telehealth by Patients with Cancer*, HEALIO (Oct. 12, 2020), https://www.healio.com/news/hematology-oncology /20201012/substantial-racial-disparities-observed-in-use-of-telehealth-by-patients-with-cancer [https://perma.cc/CX7P-4LVF].

82.   June-Ho Kim et al., *How the Rapid Shift to Telehealth Leaves Many Community Health Centers Behind During the COVID-19 Pandemic*, HEALTHAFFAIRS (June 2, 2020), https://www. healthaffairs.org/do/10.1377/hblog20200529.449762/full/ [https://perma.cc/GL9J-AHT6].

83.   *See* Ruth M. Tappen et al., *Digital Health Information Disparities in Older Adults: A Mixed Methods Study*, 9 J. RACIAL & ETHNIC HEALTH DISPARITIES 82 (2022).

84.   Andis Robeznieks, *Why So Many Patients Still Can't Connect to Doctors via Telehealth*, AMA (Aug. 7, 2020), https://www.ama-assn.org/practice-management/digital/why-so-many-patients-still-can-t-connect-doctors-telehealth [https://perma.cc/T3MW-R2YP].

85.   Juliette Cubanski, *Possibilities and Limits of Telehealth for Older Adults During the COVID-19 Emergency*, KAISER FAM. FOUND. (Apr. 13, 2020), https://www.kff.org/policy-watch/ possibilities-and-limits-of-telehealth-for-older-adults-during-the-covid-19-emergency/

While it might not be too surprising that a relatively small share of people ages 65 and older say they've used an internet-connected device for video communication with a health care provider in recent weeks, this finding might put some realistic bounds on expectations for use of telehealth by people with Medicare during the COVID-19 emergency. At the same time, we might expect this share to increase somewhat as more patients learn about the option to seek medical care from their providers via telehealth. Family members might also be encouraging their older relatives to use telehealth in order to safely receive care they may need from their own homes.[86]

Despite the interest in the elderly population in using technology for healthcare, this group used telehealth less frequently in the early stage of the pandemic compared to younger populations.[87] Because of this, age is considered a significant factor in telehealth utilization.[88]

3. Disability

Another group where there is concern for telehealth expansion is people with disabilities.[89] "While telemedicine improves access and reduces barriers to healthcare access for many, several barriers and challenges remain for persons with disabilities, and novel challenges have been exposed during the COVID-19 pandemic—many of which may persist long-term."[90] A number of disparities impact healthcare access for people with disabilities that have existed prior to the pandemic.[91] While telehealth became a primary means of healthcare during the pandemic due to the need to limit in-person contact, people with disabilities who had challenges in using technology could not easily take the option of in-person visits as they could during a normal time outside of a public health emergency.[92] Because telehealth is expected to remain an integral part of healthcare moving forward as an alternative, the previous issues encountered for people with disabilities in healthcare access must be revisited in light of this conversion of healthcare delivery through the use of technology.[93] While there are benefits to telehealth for people with disabilities including "lower transportation costs, improved medication reconciliation communication, less exposure to

---

[https://perma.cc/6CZ2-79XA].

86. *Id.*

87. Dena H. Jaffe et al., *Health Inequalities in the Use of Telehealth in the United States in the Lens of COVID-19*, 23 POP. HEALTH MGMT. 368, 371 (2020).

88. *Id.*

89. *See* Thiru M. Annaswamy et al., *Telemedicine Barriers and Challenges for Persons with Disabilities: COVID-19 and Beyond*, 13 DISABILITY & HEALTH J. 1 (2020).

90. *See id.*

91. *See id.*

92. *See id.*

93. *See id.*

communicable diseases especially during a pandemic, and decreased need for paid personal assistance services", it is critical to consider the challenges this transition to technology-based medical care could pose in further implementation as the pandemic nears an end.[94] The significance of exploring the challenges for people with disabilities in telehealth access and developing strategies is critical as it can embrace intersectionality for other populations already discussed that are also embedded into the disabled population.[95] One current major barrier for telehealth access for people with disabilities is the design of telehealth technologies whether those are provided through websites or apps having accessibility issues preventing people with disabilities from being able to utilize these technologies.[96] A push and movement for "inclusive innovation", described as the involvement of people with disabilities in the design of technologies, is emerging and which will be essential in ultimately ensuring the ability of this population to use technology.[97] "Achieving inclusive innovation in telehealth, means changing the practice of medicine."[98] Implementation of telehealth in terms of internet service as well as the ability of people with disabilities to use the telehealth technologies have also been raised as issues of concern for telehealth expansion.[99] Despite the existence of both federal anti-discrimination law and federal healthcare protections for people with disabilities, there is concern that the lack of knowledge about these protections as well as the continued lack of guidance by the U.S. Department of Justice by failing to provide website accessibility regulations that would impact telehealth suggest major policy concerns for telehealth access for people with disabilities moving forward if left unaddressed.[100] In March 2022, the U.S. Department of Justice released the long overdue website accessibility guidelines for websites in the hopes of preventing this inaccessibility.[101] The ADA was written in the 1990s, a time when the internet was just developing and technology was not a prominent part of every day life that it is now.[102] However, the much anticipated guidance by the Department of Justice on website accessibility has already received criticism for its lack of force:

---

94. *See id.*

95. *See* Rupa S. Valdez et al., *Ensuring Full Participation of People with Disabilities in an Era of Telehealth*, 28 J. AM. MED. INFORMATICS ASS'N 389(2021).

96. *See id.*

97. *See* Kimberly Noel & Brooke Ellison, *Inclusive Innovation in Telehealth*, 3 NPJ DIGITAL MED. 1 (2020).

98. *See id.*

99. *See* Valdez et al., *supra* note 95.

100. *See id.*

101. *Guidance on Web Accessibility and the ADA*, AM. DISABILITY ACT, https://beta.ada.gov/web-guidance/ [https://perma.cc/Z22J-43GE] (last visited May 10, 2022).

102. Steven Aquino, *Department of Justice Announces New Web Accessibility Guidelines*, FORBES (Mar. 21, 2022, 12:22 PM), https://www.forbes.com/sites/stevenaquino/2022/03/21/department-of-justice-announces-new-web-accessibility-guidelines/?sh=5eab6e7c4bb4 [https://perma.cc/YS76-AXSN].

Targeted businesses, which have aggregately paid out millions of dollars in extortive settlement payments, were eagerly waiting for the U.S. Department of Justice (DOJ) – as the agency charged with issuing regulations to carry out the force and effect of ADA – to use its regulatory authority to provide clarity as to what series of steps can be taken to certify a website's accessibility. To their chagrin, on March 18, 2022, the DOJ effectively abstained and, instead of regulating, issued a nonbinding sub-regulatory statement called Web Accessibility Guidance Under the Americans With Disabilities Act, which purports to describe how businesses can ensure that their websites are accessible. Unfortunately, it does no such thing. The DOJ's ineffective course makes it all the more important for Congress to step in to curb predatory website accessibility lawsuits.[103]

Thus, it seems that the issues involving website accessibility are likely far from over. Additionally, privacy concerns may also be more severe for people with disabilities requiring the reexamination of U.S. privacy law to ensure appropriate measures are taken to protect the health information of people with disabilities.[104]

4. Non-English Speakers

Non-English speakers represent another group of important consideration with concerns in telehealth expansion. Several of the barriers have already been discussed including access to technology as well as the useability of the technology. There is evidence that these barriers have already impacted non-English speakers during the pandemic in accessing healthcare resulting in canceling of appointments because it was not understood these were converted to telephone appointments due to communication difficulties.[105]

5. Rural

Those living in rural areas have been known to experience health disparities.[106] "Rural communities face lower access to healthcare, health services, and health insurance compared with urban settings."[107] For many healthcare providers in rural areas, the Covid-19 pandemic, which required the

---

103. Martin Krezalek, *DOJ's Failure to Provide Effective Guidance on Website Accessibility Requirements Under the ADA Leaves Congress as the Only Option to Address the Problem of Abusive Lawsuits*, JDSUPRA (Apr. 29, 2022), https://www.jdsupra.com/legalnews/doj-s-failure-to-provide-effective-8306925/ [https://perma.cc/6D9R-XCLP].

104. *See* Valdez et al., *supra* note 95.

105. Wetsman, *supra* note 53.

106. *See* Kelly A. Hirko et al., *Telehealth in Response to the COVID-19 Pandemic: Implications for Rural Health Disparities*, 27 J. AM. MED. INFORMATICS ASS'N 1816 (2020).

107. *See id.*

limitation of in-person visits, resulted in the transformation of healthcare delivery through the use of telehealth for the first time as seen in Michigan.[108] The primary concern raised during the pandemic regarding this transition for rural populations did exist prior to the pandemic—access to broadband internet.[109]Areas with low broadband internet access "also have a higher prevalence of obesity, diabetes, and chronic diseases," indicating that this group may have the most significant healthcare needs.[110] Thus, continued telehealth expansion holds significant promise for this population but must address the potentially significant barrier created by lack of broadband access that could otherwise play a role in exacerbating existing healthcare disparities.[111]

6. Socioeconomic Class

Individuals with low income or a lower socioeconomic class were less likely to use telehealth prior to the pandemic. Even a study in which state telehealth policies were changed to expand the ability to use telehealth indicated those individuals who were low income were still not any more likely to use telehealth.[112] Looking at the pandemic and beyond, there is significant concern that health care providers in low-income communities will be so financially hurt by the pandemic to result in closures.[113] Telehealth is not envisioned as a solution to this dilemma either, given the access to technology challenges previously described for minority groups.[114] As far as telehealth and healthcare, policies generally must account for these realities.

7. Children

Another area where there has been substantial growth in telehealth use through the course of the pandemic has involved children in pediatrics.[115] While the use was significantly low in pediatric primary care before the pandemic (approximately 15% as of 2016), the pandemic saw the level of telehealth use skyrocket in pediatrics due to the waiver of many CMS regulations. For example, shortly after CMS waivers went into effect in March 2020, there was a 154%

---

108. *See id.*

109. *See id.*

110. *See* Hirko et al., *supra* note 106.

111. *See id.*

112. *See* Jeongyoung Park et al., *Are State Telehealth Policies Associated with the Use of Telehealth Services Among Underserved Populations?*, 37 HEALTH AFF. 2060 (2018).

113. Shivani A. Shah et al., *Supporting Health Care Delivery in Low-Income Areas During COVID-19*, HEALTHAFFAIRS (July 17, 2020), https://www.healthaffairs.org/do/10.1377/hblog202 00715.332672/full/ [https://perma.cc/BJ5R-VUQF].

114. *Id.*

115. *See* Alison Curfman et al., *Pediatric Telehealth in the COVID-19 Pandemic Era and Beyond*, 148 PEDIATRICS 1 (2021).

increase in telehealth visits compared with the same time frame in 2019.[116] However, there is still variability among research suggesting the need to standardize evaluations of telehealth use.[117]

While there are potential benefits for pediatric telehealth use, there are also several possible drawbacks:

> There has been cautious optimism that telehealth may reduce inequities in access to pediatric care, especially for children in low-income families and children whose families have limited access to transportation or difficulties taking time off from work to access in-person health care. At the same time, there are concerns that telehealth may exacerbate disparities in utilization due to existing disparities in access to technology or knowledge/information about telehealth by race/ethnicity, rural location, and family income.[118]

Similar to other groups already discussed, there is concern that if not done appropriately, telehealth will increase health equity for children based on a number of factors:

> For instance, lack of access to Internet, smartphones, or other technology should not prevent children from accessing their medical system. High-quality interpretation and adaptive technology should also be available for families with limited English proficiency and hearing or vision impairment.[119]

Research conducted on Alabama children's healthcare program demonstrated that children in both rural and lower income families were less likely to utilize telehealth.[120] Further, the study demonstrated the potential for lower use of telehealth by Black and Hispanic children compared to white children.[121] The variation in availability of telehealth to children and families could result in only certain populations benefiting from telehealth use and pushing those already marginalized further entrenched into existing healthcare disparities.

IV. CURRENT LEGISLATIVE EFFORTS TO COMBAT THE DIGITAL DIVIDE IN TELEHEALTH ACCESS

There are several notable ways we are already beginning to see legislation and policy efforts at both the federal and state levels attempt to bridge the gap of the digital divide that if otherwise unavailable, may only result in more severe healthcare disparities for these populations by depriving them access to telehealth

---

116. *See id.*

117. *See id.*

118. *See* Bisakha Sen et al., *Disparities in Telehealth Utilization in a Population of Publicly Insured Children During the COVID-19 Pandemic,* 25 PUB. HEALTH MGMT. 178 (2022).

119. *See* Curfman et al., *supra* note 115.

120. *See* Sen et al., *supra* note 118.

121. *See id.*

as a healthcare delivery option. Some of these changes have been only temporary as a result of the pandemic while others have become permanent. While this does not intend to provide an exhaustive overview of these efforts, it is designed to provide insight as to some of the overall policy considerations beyond the pandemic.

A. Telehealth Modality: Expanding Coverage for Audio-Only Telehealth

Prior to the pandemic, audio-only telehealth was not embraced as an accepted modality of telehealth, however, this drastically changed due to accessibility issues and the ability to have continued access to patients during the pandemic rather than without.[122] Although there are several benefits to having a telehealth encounter that is both audio and visual, there are challenges to providing video visits:

> Although research shows that video visits offer some additional benefits compared with telephone visits. They require more complex setup, video-enabled devices, and broadband internet access, which may present barriers for older adults, lower income households, and those with limited English proficiency. In addition to these factors, patients with lower incomes may be more likely to use audio-only services because they are at work during appointments or lack privacy at home.[123]

While it may not ultimately become a permanent option in all places, there is support for even the temporary availability of the audio-only modality of telehealth until the more significant issues involving the digital divide have been remedied: "As policy makers deliberate on the future of infrastructure and health care, they should consider how pressing needs are addressed in the immediate term. The telephone, a cheap and accessible tool, already exists to provide access to some forms of health care. Audio-only telehealth can and should serve as a bridge until two-way synchronous telehealth is affordable and accessible for all patients."[124] As we will see below, additional research involving Federally Qualified Health Centers ("FQHCs") further suggests the importance of offering the availability of audio-only telehealth at least on a temporary basis unless and until the other issues contributing to the digital divide can be resolved. Further, a 2021 Issue Brief by the U.S. Department of Health and Human Services ("HHS") indicated that certain populations were less likely to use video visits.[125]

---

122. Quinn Hirsch et al., *Beyond Broadband: Equity, Access, and the Benefits of Audio-Only Telehealth*, HEALTH AFFAIRS (Sept. 20, 2021), https://www.healthaffairs.org/do/10.1377/forefront. 20210916.819969/full/ [https://perma.cc/9CB9-BRXH].

123. *See* Karimi et al., *supra* note 1.

124. Hirsch et al., *supra* note 122.

125. *See* Karimi et al., *supra* note 1. "Conversely, groups with lower odds of using video-enabled telehealth services were respondents who selfidentified as Latino, Black, or Asian American / Pacific Islander; men; those with lower education and income, and those living in the Midwest." *Id.* at 8.

1. Federal Efforts

a. Medicare

As the pandemic began, CMS responded by altering many provisions under Medicare to allow for much more expansive healthcare access which included telehealth. In March 2020, this allowed telehealth to be covered where it previously had not been such as expanding the originating site requirement (i.e., that the telehealth encounter would have to take place from a particular location) to include the ability to conduct the telehealth encounter from the patient's home as a site covered by Medicare.[126] This also included allowing coverage for far more telehealth services overall under Medicare: "CMS also added 135 allowable services, more than doubling the number of services that beneficiaries could receive via telehealth."[127]   In addition to these major changes, audio-only telehealth was also allowed and provided coverage which had previously not been in the realization that the availability of this modality of telehealth could benefit many Medicare beneficiaries:

> The Trump Administration has also removed other barriers that may limit beneficiary access to telehealth services. Usually, interactive audio-video technology is required for telehealth visits. This can be a challenge for beneficiaries; often, they either don't have access to the technology or choose not to use it even if offered by their practitioner.[128]

In the area of behavioral health, services were also expanded through Medicare to ensure greater availability of the audio-only modality.[129] Research has already demonstrated that the expansion of these provisions under telehealth resulted in significant utilization of telehealth for Medicare beneficiaries during the pandemic than was observed prior.[130] Decisions are starting to be made in

---

126.   Seema Verma, *Early Impact of CMS Expansion of Medicare Telehealth During COVID-19*, HEALTHAFFAIRS (July 15, 2020), https://www.healthaffairs.org/do/10.1377/hblog20200715.454789/full/ [https://perma.cc/5HQE-Y3GX].

127. *Id.*

128. *Id.*

129. *Id.* ("Soon after, CMS went even further to eliminate these barriers by paying for certain telephone evaluation and management visits and behavioral health services and paying practitioners at the same rate as similar in-person services.").

130. *Id.* ("With wide-ranging telemedicine flexibilities, there has been a surge in the number of beneficiaries getting telemedicine services. Before the public health emergency, approximately 13,000 beneficiaries in fee-for-service ("FFS") Medicare received telemedicine in a week. In the last week of April, nearly 1.7 million beneficiaries received telehealth services. In total, over 9 million beneficiaries have received a telehealth service during the public health emergency, mid-March through mid-June. Specifically, data points presented in this section of the post are from internal CMS analysis of Medicare FFS claims data from March 17 through June 13, 2020 (using data processed through June 19, 2020). Telemedicine services include services on the Medicare telehealth list including audio-only visits, as well as virtual check-ins and e-visits.").

thinking about the flexibilities that have been created under Medicare as there is consideration in terms of whether these changes should stay temporary or permanent after the pandemic with the most recent Fee Schedule for 2022 continuing to make audio-only telehealth available involving behavioral health services.[131] Further, the Consolidated Appropriations Act for Fiscal Year 2022[132] ("2022 CAA") was signed into law by President Biden on March 16, 2022 to provide a variety of Medicare flexibilities involving telehealth for 151 days past the end of the public health crisis including: easing geographic restrictions and continue to allow original site to be in the patient's home, expansion of eligible practitioners, particular mental health services, coverage and payment for most audio-only services as well as expanding funding for rural areas.[133] The American Hospital Association ("AHA") has stressed the significance of these changes yet advocates for the necessity of more permanent changes for telehealth beyond the pandemic.[134]

b. Medicaid

Medicaid largely followed the lead of Medicare in expanding telehealth to include the audio-only option.[135] "State Medicaid programs, many of which did not cover audio-only telehealth prior to the pandemic, followed suit in expanding

---

131. *Revisions to Payment Policies Under the Medicare Physician Fee Schedule Quality Payment Program and Other Revisions to Part B for CY 2022 (CMS-1751-F)*, CTRS. MEDICARE & MEDICAID SERVS. (Nov. 19, 2021), https://www.cms.gov/medicaremedicare-fee-service-paymentphysicianfeeschedpfs-federal-regulation-notices/cms-1751-f [https://perma.cc/HA7Y-XM X5]; *see also Calendar Year (CY) 2022 Medicare Physician Fee Schedule Final Rule*, CTRS. MEDICARE & MEDICAID SERVS. (Nov. 2, 2021), https://www.cms.gov/newsroom/fact-sheets/ calendar-year-cy-2022-medicare-physician-fee-schedule-final-rule [https://perma.cc/7ZCD-8XZB].

132. Consolidated Appropriations Act of 2022, H.R. 2471, 117th Cong. (2021).

133. Joelle M. Wilson & Laura Little, *Congress Grants Five Month Extension for Telehealth Flexibilities*, NAT'L L. REV. (Mar. 17, 2022), https://www.natlawreview.com/article/congress-grants-five-month-extension-telehealth-flexibilities#:~:text=2471%2C%20the%20Consolidated% 20Appropriations%20Act,Emergency%20(%E2%80%9CPHE%E2%80%9D) [https://perma.cc/5TJP-Y2V5].

134. Rick Pollack, *Extending Telehealth Flexibility to Safeguard Access to Virtual Care*, AM. HOSPITAL ASS'N (Mar. 18, 2022, 11:25 AM), https://www.aha.org/news/perspective/2022-03-18-extending-telehealth-flexibility-safeguard-access-virtual-care#.YjixbIx4g8g.twitter [https://perma.cc/7KMP-C45E]. "While we were are grateful for these actions, making these waivers permanent is essential so we can protect access to vital telehealth services in every community. We also will continue to advocate that critical access hospitals have the flexibility to continue providing telehealth care for patients and communities, especially behavioral health services." *Id*.

135. Edward Kornreich & Daniel Weinstein, *Hold the Phone: Audio-Only Telehealth Expanding in New York and Other States, but National Policies May Lag*, JD SUPRA (May 13, 2021), https://www.jdsupra.com/legalnews/hold-the-phone-audio-only-telehealth-9422897/ [https:// perma.cc/9FUM-UTRQ].

coverage to include varying degrees of audio-only telehealth services."[136] This has continued as research has demonstrated the continued expansion across the states in Medicaid programs allowing coverage for audio-only telehealth as a modality:

> Audio-only reimbursement, saw the biggest jump, with 22 Medicaid programs reimbursing the modality (up from 15 in Spring 2021). This is likely a result of policies during the pandemic either being made permanent or being extended multiple years into the future, although often on a more limited basis than what was allowed during the COVID-19 public health emergency (PHE).[137]

It is arguable that Medicaid may continue, as it has, to take direction from what further and permanent changes CMS may implement regarding audio-only telehealth for Medicare. In its most recent Spring 2022 analysis of state Medicaid policy, CCHP identified the following with regard to states adopting policies in their Medicaid programs for audio-only modality of telehealth: "Twenty-nine states and DC Medicaid programs reimburse for audio-only telephone in some capacity; however, often with limitations. For example, Michigan only reimburses for it when used for provider-to-provider electronic consultations."[138] Unlike Medicare where administration of policy is at the federal level, much of Medicaid policy is developed at the state-level which is part of the flexibility of the program even with federal oversight as this demonstrates.[139] Likewise, this also means that healthcare coverage for services, including audio-only telehealth, can vary substantially across state lines.

c. Possible federal legislation?

As indicated in a previous section, there is currently no federal or national policy regarding telehealth. However, various federal proposals have been made that have considered the possibility of telehealth expansion to include the audio-only modality in some form. The Ensuring Parity in MA and PACE for Audio-Only Telehealth Act of 2021 was designed to allow for audio-only telehealth diagnosis under certain Medicare plans.[140] Another bill that has been introduced is the Creating Opportunities Now for Necessary and Effective Care Technologies ("CONNECT") for Health Act of 2021 is another proposal for

---

136. *Id.*

137. *See State Telehealth Laws and Medicaid Program Policies*, *supra* note 21.

138. *Id.* at 4.

139. *See* Samantha Artiga et al., *Current Flexibility in Medicaid: An Overview of Federal Standards and State Options*, KAISER FAM. FOUND. (Jan. 2017), https://files.kff.org/attachment/Issue-Brief-Current-Flexibility-in-Medicaid-An-Overview-of-Federal-Standards-and-State-Options [https://perma.cc/NS6C-J8JY].

140. Ensuring Parity in MA and PACE for Audio-Only Telehealth Act of 2021, S. 150, 117th Cong. (2021).

expanding telehealth regarding Medicare.[141] The Permanency for Audio-Only Telehealth Act is a federal bill which specifically includes focus on providing coverage for audio-only telehealth services under Medicare.[142] The Protecting Rural Telehealth Access Act aims to focus particularly on those in rural areas as well as telehealth access to FQHCs.[143] The Telehealth Modernization Act also attempts to potentially rectify issues involving Medicare to provide greater flexibility for telehealth services.[144]

The proposed legislation above has been in response to an understanding that CMS will not inevitably permanently expand all the changes it has made to ease telehealth restrictions during the pandemic and suggested the need for congressional action to make certain changes more permanent (for example, beyond what was provided by the Congress with the 2022 CAA). Whether or not any federal legislation passes regarding these issues will likely be dependent on the permanency of any changes particular to the audio-only telehealth modality involving Medicare and Medicaid. At this point, the fact that there is movement towards trying to make the audio-only modality of telehealth a more permanent reality in some respect suggests that there is potential value in its continued use beyond the pandemic as an option for healthcare delivery.

2. Legislation at the State Level

State laws on telehealth can and will differ substantially.[145] Since 2020, even during the height of the pandemic, states began to initiate and even adopt legislative changes that would impact the availability of audio-only telehealth as a modality which was first seen in the State of New York.[146] While New York had previously excluded audio-only telehealth in its definition of "telehealth," this was changed to include "audio-only" in terms of modality and allow for coverage.[147] The impact of Covid-19 saw a greater implementation of making

---

141. Creating Opportunities Now for Necessary and Effective Care Technologies (CONNECT) for Health Act of 2021, H.R. 2903, 117th Cong. (2021). *See also* Brian Schatz et al., *CONNECT for Health Act of 2021*, U.S. SEN. BRIAN SCHATZ HI, https://www.schatz.senate.gov/ imo/media/doc/CONNECT%20for%20Health%20Act%20of%202021_Summary.pdf [https://perma.cc/K63U-RU87] (last visited Mar. 13, 2022); Gina L. Bertolini et al., *Connect for Health Act of 2021 Reintroduced*, Nat'l L. Rev. (June 22, 2021), https://www.natlawreview. com/article/connect-health-act-2021-reintroduced [https://perma.cc/8F8U-C59M].

142. Permanency for Audio-Only Telehealth Act, H.R. 3447, 117th Cong. (2021).

143. Protecting Rural Telehealth Access Act, S. 1988, 117th Cong. (2021).

144. Victoria Bailey, *GOP, Independent Senators Co-Sponsor Medicare Telehealth Access Bill*, XTELLIGENT HEALTHCARE MEDIA (Jan. 28, 2022), https://mhealthintelligence.com/news/gop-independent-senators-co-sponsor-medicare-telehealth-access-bill [https://perma.cc/4PJU-B52H].

145. *See State Telehealth Laws and Medicaid Program Policies*, *supra* note 21 ("Telehealth policy trends continue to vary from state-to-state, with no two states alike in how telehealth is defined, reimbursed or regulated.").

146. S.B. 8416, 2019-2020 Gen. Assemb. (N.Y. 2020).

147. *Id.*

audio-only telehealth available at the state level:

> The addition of telephone was one of the most common COVID-19 temporary telehealth policy expansions, and twenty-two states are now reimbursing the modality permanently, although some only through specific audio-only or CTBS codes that include audio-only service delivery.[148]

In December 2021, the state of Washington had regulations finalized through the Office of the Insurance Commissioner to implement its audio-only law passed in May 2021 that required, among other things, reimbursement parity between audio-only telehealth and in-person visits ensuring equal rate of payment for audio-only telehealth encounters.[149] Massachusetts has also seen a substantial change in its definition of "telehealth" to include the audio-only modality passed in January 2021.[150] While Florida had been a state to prohibit the audio-only telehealth modality,[151] it is now actively considering new legislation that would allow for its coverage as of January 2022.[152] However, some states, such as Mississippi, are pursuing bills that do continue to require both an audio-visual component for telehealth highlighting that telehealth access, especially involving the audio-only option, will potentially differ by location.[153]

B. Addressing Lack of Broadband Access

It has become apparent, particularly during the pandemic, that one of the bigger problems in providing access to telehealth has to do with broadband internet access.[154] Because of this, greater attention is focusing on how legislation and policy can be used to expand access. However, despite the efforts being made as explored briefly below, the reality exists that infrastructure for

---

148. *See State Telehealth Laws and Medicaid Program Policies*, *supra* note 21.

149. Anuja Vaidya, *Washington State Solidifies Audio-Only Telehealth Regulations*, XTELLIGENT HEALTHCARE MEDIA (Dec. 2, 2021), https://mhealthintelligence.com/news/washington-state-solidifies-audio-only-telehealth-regulations [https://perma.cc/8WFZ-FLZB].

150. Nathaniel M. Lacktman, *New Massachusetts Telehealth Law Signed: Top 3 Changes*, FOLEY (Jan. 19, 2021), https://www.foley.com/en/insights/publications/2021/01/massachusetts-telehealth-law-signed-top-3-changes [https://perma.cc/R7Q4-FTSY].

151. FLA. STAT. § 456.47 (2021).

152. Victoria Bailey, *Florida Senate Passes Bill Allowing Audio-Only Telehealth Use*, XTELLIGENT HEALTHCARE MEDIA (Jan. 31, 2022), https://mhealthintelligence.com/news/florida-senate-passes-bill-allowing-audio-only-telehealth-use [https://perma.cc/4XU9-E3AT].

153. S.B. 2738, 2022 Reg. Sess. (Miss. 2022). *See also* Maria Andrade et al., *Executive Summary: Tracking Telehealth Changes State-by-State in Response to COVID-19 – April 2022 #2*, JDSUPRA (Apr. 25, 2022), https://www.jdsupra.com/legalnews/executive-summary-tracking-telehealth-6557454/ [https://perma.cc/H7CZ-6Z5S].

154. Katie Palmer, *As Internet Access Limits Telehealth's Reach, Insurers are Starting to Cover the Bill,* STAT (Feb. 3, 2022), https://www.statnews.com/2022/02/03/telehealth-visits-health-insurance-internet/ [https://perma.cc/A8CK-5Z9D].

implementing effective broadband across the country will necessitate both funding and time therefore, requiring that there must be other options in the meantime making options like audio-only telehealth an attractive option, even if only temporarily.[155]

1. Federal

The issue of broadband access is now viewed as a pressing need by the federal government as a result of the pandemic and given the amount of individuals across the U.S. lacking access to broadband internet even when difficult to fully assess as described earlier.[156] Most recently, the Infrastructure Investment and Jobs Act ("Infrastructure Act") promises an infusion of millions of dollars from the federal government into states in order to provide greater access to broadband internet by requiring internet providers to offer broadband access to individuals with lower income.[157] A similar tactic was tried at the state level with state legislation in the State of New York but received resistance to the point of judicial order restricting the ability to implement the law.[158] Despite this massive plan for implementation, this will take time and is not an overnight fix to the challenge of the digital divide in access to broadband internet.

The federal government has also attempted to provide broadband access through programming run by the Federal Communications Commission ("FCC") known as the Emergency Broadband Benefit ("EBE").[159] However, as of December 31, 2021, this was transitioned to different programming known as the Affordable Community Program ("ACP").[160] The increased funding for ACP was provided through the Infrastructure Act.[161] Generally, the ACP is designed to

---

155. *Id.*

156. Campbell et al., *supra* note 62 ("There is some disagreement as to the extent of underserved areas across the U.S. In its 2020 Broadband Deployment Report, the FCC found that 18.3 million Americans still lack access to broadband internet. However, the FCC's Census block-level broadband deployment map relies on self-reported data from Internet service providers, and considers a Census block 'covered' if as few as only one or two residences in the block are served. Independent research by groups such as Broadband Now suggests the more accurate number is closer to 42 million Americans.").

157. James K. Willcox, *Infrastructure Law Includes $65 Billion for Improving Internet Access*, CONSUMER REP., https://www.consumerreports.org/internet/infrastructure-bill-includes-65-billion-for-internet-access-a6861027212/ [https://perma.cc/P2H2-5TP6] (last updated Nov. 15, 2021).

158. Connor Perrett, *A Federal Judge Has Blocked a New York Law Requiring Internet Service Providers Offer $15 Broadband to Low-Income Residents*, BUS. INSIDER AFR. (June 12, 2021, 6:22 PM), https://www.businessinsider.com/judge-blocks-new-york-law-requiring-affordable-broadband-2021-6 [https://perma.cc/JU66-AYV5].

159. *Emergency Broadband Benefit*, FED. COMMC'N COMM'N, https://www.fcc.gov/broadband benefit [https://perma.cc/9CK2-7LC2] (last updated Mar. 15, 2022).

160. *Affordable Connectivity Program*, FED. COMMC'N COMM'N, https://www.fcc.gov/affordable-connectivity-program [https://perma.cc/8J4Z-J8CH] (last updated Mar. 25, 2022).

161. *Id.*

provide broadband internet at a discounted rate to those otherwise unable to afford it.[162] The final rules to implement the ACP were adopted by the FCC on February 14, 2022.[163]

Eligibility requirements must be met in order to qualify for the program[164] based on income level ("A household is eligible for the Affordable Connectivity Program if the household income is at or below 200% of the Federal Poverty Guidelines") or an individual in the household receives a form of the designated public benefits.[165] The extent of what benefits are available to those who qualify for the ACP are as provided:

> The benefit provides a discount of up to $30 per month toward internet service for eligible households and up to $75 per month for households on qualifying Tribal lands. Eligible households can also receive a one-time discount of up to $100 to purchase a laptop, desktop computer, or tablet from participating providers if they contribute more than $10 and less than $50 toward the purchase price. The Affordable Connectivity Program is limited to one monthly service discount and one device discount per household.[166]

The impact of the ACP, however, will take as long as 10 years.[167] In May 2022, the White House announced plans to jointly work with numerous internet providers to now cap the cost for broadband internet under the ACP with the goal of providing this access to approximately 48 million qualifying households.[168] In the meantime, states may be left filling in the gaps as many have been actively seeking legislative solutions to increasing broadband access as discussed below.

2. State

At the state level, there has been a lot of legislative activity surrounding increasing access to broadband internet.[169] The National Conference of State Legislatures ("NCSL") has monitored the extent of pending state legislation involving broadband internet which has dramatically increased in 2021: In the

---

162. *Id.*

163. Affordable Connectivity Program; Emergency Broadband Benefit Program, 87 Fed. Reg. 8346 (Feb. 14, 2022).

164. *Affordable Connectivity Program*, *supra* note 160.

165. *Id.*

166. *Id.*

167. Campbell et al., *supra* note 62.

168. Ayana Archie, *The Biden Administration is Capping the Cost of Internet for Low-Income Americans*, NAT'L PUB. RADIO (May 9, 2022, 5:01 AM), https://www.npr.org/2022/05/09/1097535349/biden-administration-internet-wifi-low-income-medicaid-snap-verizon-comcast [https://perma.cc/KL7F-V36P].

169. Heather Morton, *Broadband 2021 Legislation*, NAT'L CONF. ST. LEGISLATIONS (Jan. 7, 2022), https://www.ncsl.org/research/telecommunications-and-information-technology/broadband-2021-legislation.aspx [https://perma.cc/D3LX-YQ9T].

2021 legislative session, 48 states, the District of Columbia and Puerto Rico had pending legislation addressing broadband in issue areas such as educational institutions and schools, dig once, funding, governance authorities and commissions, infrastructure, municipal-run broadband networks, rural and underserved communities, smart communities and taxes.[170]

Of these areas of pending legislation, the majority of bills involve rural and underserved populations (288).[171] Further, there have been many states with pending legislation regarding infrastructure (188).[172] Aside from this, there have been successes at the state level in either passing legislation or resolution.[173] Specifically, a number of states have taken actual legislative actions:

> Forty jurisdictions enacted legislation or adopted resolutions: Alabama, Arizona, Arkansas, Colorado, California, Connecticut, Florida, Hawaii, Idaho, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, South Dakota, Texas, Utah, Vermont, Virginia, Washington, West Virginia and Wyoming.[174]

Despite these advances, broadband internet access continues to be a major factor in securing telehealth services.

C. Digital Literacy

A related issue to broadband internet access is digital literacy, although this extends more broadly to the use not only of the internet but of technology more generally, including the use of devices. In many ways as equally as important as having the necessary technology, digital literacy has not yet received as significant attention when it has come to legislative solutions. At the federal level, a new bill introduced in January 2022 known as the Digital Literacy and Equity Commission Act was in response to the Infrastructure Law aiming to evaluate digital literacy in the U.S. including the creation of a Digital Literacy Commission.[175] An overview of the bill is described as follows:

> The Digital Literacy and Equity Commission would be chaired by the Secretary of Education and the Chair of the Federal Communications Commission. This legislation would require the Commission to submit a report to Congress that contains recommendations on how to improve and maintain the digital and information literacy of individuals in the United States. In particular, this Commission would be tasked with

---

170. *Id.*

171. *Id.*

172. *Id.*

173. *Id.*

174. *Id.*

175. H.R. 6373, 117th Cong., 1st Sess. (2022).

addressing low-income and disadvantaged areas. The final report will include strategies to improve digital literacy through early education and community outreach.[176]

The state level has also been slow in legislative progress on the digital literacy issue. According to the NCSL 2021 review, only twelve states had pending legislation regarding digital literacy.[177] One example of this pending legislation is found in the state of Massachusetts in SB 678, An Act Relative to Telehealth and Digital Equity for Patients.[178] The Massachusetts Medical Society explained the benefit of this legislation in terms of digital literacy as follows:

> The centerpiece of this legislation directs the Health Policy Commission (HPC) to establish two pilot programs – a Digital Bridge Pilot Program and a Digital Health Navigator Tech Literacy Pilot Program—to support expanded access to telehealth technologies and technological literacy for patients. The Digital Bridge program aims to increase access to telehealth services through investments in telecommunications services, broadband and internet connectivity services, and digital technology. The Tech Literacy program directs HPC to engage with community health workers and other professionals who can act as telehealth navigators for underserved and elderly populations who may need greater assistance in accessing telehealth services. Another important equitable measure contained in this legislation requires insurers to cover interpreter services for patients with limited English proficiency and for those who are deaf or hard of hearing. With increased utilization of telehealth comes the opportunity to reduce racial, socio-economic, and other inequities in access to care and health outcomes, but only if we are intentional about building policies that identify and address barriers to accessing care via telehealth for communities that have historically faced traditional barriers to in-person care.[179]

Having the technology but a lack of individuals' knowledge in terms of how to actually utilize the technology will not improve access to telehealth, particularly among populations with existing healthcare disparities.

---

176. Press Release, U.S. Rep. Brenda Lawrence, U.S. Rep. Lawrence Introduces New Legislation to Increase Digital Literacy (Jan. 12, 2022), https://lawrence.house.gov/media-center/press-releases/us-rep-lawrence-introduces-new-legislation-increase-digital-literacy [https://perma.cc/446G-ZL4P].

177. Morton, *supra* note 169.

178. S.B. 678, 162nd Gen. Assemb. (Mass. 2021).

179. *See Testimony in Support of H.1101/S/678, An Act Relative to Telehealth and Digital Equity for Patients Before the Joint Committee on Financial Services*, MASS. MED. SOC'Y (July 1, 2021), https://www.massmed.org/Advocacy/State-Advocacy/State-Testimony/Testimony-in-Support-of-H-1101-and-S-678,-Ac-Act-Relative-to-Telehealth-and-Digital-Equity-for-Patients-Before-the-Joint-Committee-on-Financial-Services-(PDF)/ [https://perma.cc/Y4A5-ZY35].

D. Addressing the Distinct Needs of Various Groups

Another area that there has been some legislative movement has been legislation that has been designed to address some of the unique needs of various groups including non-English speakers and individuals with disabilities. For example, Massachusetts proposed a bill that would have enabled non-English speakers to have access to translation services and those who are deaf or hard-of-hearing through reimbursement in SB 678, An Act Relative to Telehealth and Digital Equity for Patients.[180] Another example of this has been seen in a bill in New Jersey specific to needs of individuals with disabilities with A5255 which is designed to provide telehealth access by requiring communication features to serve various disabilities.[181] Such legislation is not only critical to ensuring equal access to telehealth but inevitably, healthcare equity.

In a broader legislative effort, a bill called the Health Equity and Accountability Act has been reintroduced at the federal level to address healthcare inequity to include these groups and others in a number of ways that extends to access to telehealth.[182]

V. RECOMMENDATIONS FOR POLICY SOLUTIONS TO ADDRESS THE DIGITAL DIVIDE GOING FORWARD

Given the exploration of the impact of the digital divide and its potential to further alienate particular populations from access to telehealth, policymakers must be mindful of the importance of crafting policy solutions that attempt to bridge this divide that will only widen existing healthcare disparities if left unaddressed as telehealth becomes a more regular option in healthcare delivery in the U.S. The following recommendations are intended to help bridge this divide.

A. Allowing Coverage for Various Modalities of Telehealth

Telehealth policy must consider the availability, usefulness, and efficacy of different telehealth modalities (i.e., audio-only). For example, while there was initially ambivalence to the use of the audio-only telehealth modality, research has already shown that this modality was a lifeline for many vulnerable populations discussed in this article, particularly, those who are lacking access to various technologies including broadband internet or devices such as Smartphones. Even if coverage for audio-only should be limited (i.e., only allowing a particular number of audio-only telehealth encounters in a given period of time) to avoid concerns of fraud and abuse or simply overutilization that would drive up healthcare costs and possibly also result in harm to patient care by overreliance, it has even been suggested the option at least be made temporarily at a minimum to allow for audio-only telehealth (i.e., FQHCs). This

---

180. Mass. S.B. 678.

181. A.B. 5255, 219th Legislature (N.J. 2021).

182. H.R. 7585, 117th Cong. (2022).

would be the favorable option based on current research until further research can otherwise ascertain the extent to which the modality is beneficial or problematic to instruct the extent of its use more permanently. Telehealth research generally is still being conducted to inform policy resulting largely in policy solutions with greater flexibility to respond to these research developments. However, access must consider the current reality of the situations of different populations' needs, especially those lacking technology options. Because audio-only telehealth is available does not mean it is appropriate in all medication situations nor will it be an option for every patient, but it will, in the least, help many who can use it in the current gap of technology access as it did during the pandemic. It also may continue to be useful beyond this gap permanently for various medically appropriate situations as determined by continued research and for those patients who could still benefit from its availability where other technology is not useful for or desirable by the patient.

B. Affordability of Technology

While it is known that affordability has been, and will continue to be, an issue going forward, and even more so due to the financial impact of the pandemic, there needs to be greater attention from a policymaking standpoint as to making affordability a key consideration. Although there have been substantial efforts to limit or decrease the cost of broadband internet access, this is only a part of the puzzle. If assistance programs are only "temporary", they will not solve the problem long-term when the funding expires. Aside from the broadband internet access, there has been minimal attention to affordability regarding the other technologies including Smartphones, iPads, and laptops from a policy standpoint. The biggest attempt to provide assistance here by the federal government has been the ACP program but the one-time benefit of $100 towards a technology device that will merely make a dent in such expenses. "For example, on average, the cost of a new laptop is between $600-$750."[183] This does not even take into account the possibility that at some point, the device may need repair after manufacturer warranty has expired. In order to fully engage in the traditional telehealth modality involving both audio and visual components, the technology involved would include both the broadband internet as well as the actual device to be utilized. The majority of those who cannot afford broadband internet are also likely unable to afford the devices needed in order to use the audio-visual telehealth modality. If that modality is the primary telehealth offered and these devices also continue to be unaffordable to particular populations, there will continue to be the growth of the digital divide. Another option would be having certain government offices (i.e., those serving this populations' health departments) having rental programs for devices for nominal fees and/or providing the technology at places that would be easily accessible to these populations such as libraries and community centers where healthcare can and

---

183. *How Much Should You Spend on a Laptop in 2022?*, LEAGUEFEED (Dec. 12, 2021), https://leaguefeed.net/how-much-should-you-spend-on-laptop/ [https://perma.cc/Y53K-RARB].

will also be viewed as a central part of life. Thus, affordability must be at the forefront of policy solutions to prevent deepening the digital divide.

C. Accessibility in Usability: Education & Design

As previously discussed, having the technology to be able to access telehealth is not in itself sufficient. There are two additional significant issues that relate to the technology that must be addressed: 1) digital literacy—the capability to actually know how to use the technology and education if the person or persons lack this, and 2) design—that the technology is created in such ways as to accommodate the distinct needs of different populations rather than a one-size-fits-all approach. Policy solutions must appropriately address both areas. Education may include having training available in public places (i.e., libraries, senior centers, community centers) where individuals can be trained in how to use the technologies to access telehealth and ensuring people know where to get this training. Additionally, if the technologies themselves are not designed and tailored to the various needs of the populations discussed, these will remain inaccessible to these groups only contributing to the digital divide. Policy solutions must either offer incentives for ensuring that design takes into account the needs of various populations (i.e., such as non-English speakers or those with cognitive disabilities) or otherwise promote ensuring that design takes into account these groups.

D. Further Research to Inform Policymaking

It is known that the expansive use of telehealth remains in its infancy. Data is just starting to be collected and more fully explored in terms of the use of telehealth that occurred at its peak during the pandemic. Even some of the data that has been collected is insufficient, for example, in distinguishing video visits from audio-only telehealth encounter:

> The postpandemic literature must also be interpreted with caution. Many studies fail to distinguish audio-only from video-enabled telemedicine encounters, leaving unanswered a key equity question regarding the appropriateness and value of audio-only encounters.[184]

Further, data particular to the clinical appropriateness of the use of telehealth continues to be lacking (in other words, when it is medically appropriate to be using telehealth).[185] Equity must also consider more than just the individual: "Many studies have explored only patient-level barriers or factors associated with telemedicine use. However, equity is affected by barriers at the family, community, or health care delivery level."[186]

---

184. *See* Khoong, *supra* note 35.

185. Andis Robeznieks, *Can 10 Months of Data Show How to Optimize Use of Telehealth?*, AMA (Feb. 12, 2021), https://www.ama-assn.org/practice-management/digital/can-10-months-data-show-how-optimize-use-telehealth [https://perma.cc/77NA-7X9Y].

186. *See* Khoong, *supra* note 35.

Cost has been a frequent point of discussion in terms of telehealth moving forward. However, this is another area that lacks adequate research that will and should continue to inform future policymaking. One attempt to begin to bridge this gap is seen in H.R.1406 - COVID–19 Emergency Telehealth Impact Reporting Act of 2021 to examine impact of telehealth use involving Medicare.[187]

E. A Holistic Approach to Telehealth—and Its Policy

Generally, up to this point, telehealth has often been viewed or observed in vary narrow terms that has not fully captured the extent of the issues. As Meg Barron, AMA's Vice President of Digital Health Innovations stated: "Mostly, people have been looking at telehealth from the perspective of financial outcomes, rather than looking at it holistically and from the perspective of other value streams such as health equity, patient access, physician and patient experience, and—most importantly—clinical outcomes, Barron said."[188] Until telehealth's impact is more fully explored from all of these different angles, policy solutions will fall short, particularly, in effectively ensuring that the populations discussed in this Article will not be left behind. Additionally, thinking about telehealth in terms of person-centered care means that different telehealth encounters will work better or worse for different individuals and different clinical situations: "A patient-centered perspective recognizes that the value of telemedicine varies for each patient and each clinical concerns."[189]

This impact of the digital divide has not been acknowledged to its fullest extent domestically, but globally the UN, which has put forth a platform for addressing the digital divide, that emphasizes four areas: access, affordability, skills, and awareness/relevance of online content.[190] U.S. policy solutions would similarly benefit from exploring and embracing, as appropriate, these same key areas of focus moving forward.

VI. CONCLUSION

The digital divide was magnified by the occurrence of the Covid-19 pandemic and the instantaneous reliance on digital access in order to receive a number of basic necessities, including healthcare, through the massive overnight transformation of providing healthcare delivery through telehealth that occurred throughout the U.S. The use of telehealth to supplement, and not replace, regular delivery of healthcare is considered revolutionary which likewise means that the policy response must match to this dramatic alteration of the healthcare delivery landscape--and also be revolutionary.

---

187. COVID–19 Emergency Telehealth Impact Reporting Act of 2021, H.R. 1406, 117th Cong. (2021).

188. Robeznieks, *supra* note 185.

189. *See* Khoong, *supra* note 35.

190. *Leveraging Digital Technologies for Social Inclusion*, UNITED NATIONS DEP'T ECON. & SOC. AFF. (Feb. 18, 2021), https://www.un.org/development/desa/dspd/2021/02/digital-technologies-for-social-inclusion/ [https://perma.cc/E78N-PQE7].

But what exactly is "revolutionary" when it comes to these policy solutions? Often, policy solutions create one-size-fits-all approaches that only accommodate a particular group. If we truly believe that everyone SHOULD have ACCESS to healthcare in all its delivery forms, then our approach to the use of telehealth and the policies regulating it cannot continue the traditional route of only considering the haves and not the have nots or those with particular needs that are "different." The entire point of technology is "connection" but if that connection is only accessible by a particular group, we are again choosing to essentially promote healthcare access for some but not all, particularly not those whose needs are different from this select, and arguably, elite group who have technologies, know how to use them, and have no specific needs that would prevent them from utilizing the technologies. That cannot be neither our goal of healthcare generally, nor of telehealth as a means of healthcare delivery specifically. Ultimately, we are also making a value judgment through all of this about whose healthcare matters in this transition to healthcare delivered by technology and our response. It should not be only those who have access to technology without challenge and thus, the availability of telehealth, whose healthcare matters.

Telehealth, when used appropriately, can be of tremendous value to healthcare delivery and even more so, for these various groups—the elderly, minority groups, those in low socioeconomic status, those in rural areas, the disabled, non-English speakers, and children—but ONLY when the digital divide is tackled appropriately with unique policy solutions that truly address the issues involved—not just select issues. Technology is ultimately meant to provide connection, but if these groups remain essentially disconnected, the digital divide will deepen. Reconnecting the patient requires crafting policy solutions that truly and adequately bridge that divide rather than cherry picking a particular issue that only solves part of the problem. Telehealth can and should thrive for ALL creating greater access to healthcare – let's revolutionize the policy solutions that fully address the digital divide to do so. Instead of the digital divide, we must become the "digital provide" – providing access in all respects that allows every person the fullest access to healthcare also through technology and the implementation of policies and regulations that ensure this connection while maintaining the appropriate clinical delivery of healthcare.