AN APPLE A DAY KEEPS THE ISP AT BAY: THE NEED FOR GREATER BROADBAND ACCESS AND ITS IMPACT ON TELEHEALTH

GAVIN P. HUNTER*

INTRODUCTION

A small town in rural Michigan may be unassuming to most. However, for the residents of Scio Township and Washtenaw County, Jared Mauch has provided a lifeline. In 2002, Mauch moved to the rural township where he has worked from home for about two decades.¹ While many neighbors were stuck with dial-up connectivity, Mauch was provided with a home internet connection via his employer.¹ Nevertheless, the bandwidth could not keep up with his tech job.²

When Mauch sought a higher internet speed, "Comcast wanted to charge him an up-front fee of \$50,000 to expand service to his home." Left with few remaining options, Mauch decided on a revolutionary approach. He created his own internet service provider ("ISP"). Mauch created the company in 2017 and received permits to begin work in 2019. He officially began business in August 2020, just as the world entered the fifth month of the COVID-19 pandemic. Mauch began assisting his neighbors in hooking up to the high-speed fiber lines, and his business has grown to seventy-one customers.

Federal funding is also helping Mauch expand his service. In 2021, Washtenaw County received \$15 million in federal funding from a COVID-19 relief package. Mauch was granted \$2.6 million in funding to expand his fiber internet service. As a result of this funding, it is expected that Mauch will be able to provide internet to 600 more homes. However, the process is not as easy as

- 1. *Id*.
- 2. Id.
- 3. *Id*.
- 4. *Id*.
- 5. *Id*.

- 7. Bowman, supra note 1.
- 8. *Id.*; see also First Household Connected As Part of Board's Historic Broadband Infrastructure Investment, Washtenaw Cnty., Mich. (June 21, 2022), https://www.washtenaw.org/CivicAlerts.aspx?AID=2180 [https://perma.cc/465R-NXKS].
 - 9. Bowman, supra note 1.
 - 10. Id.

^{*} J.D.; Health Law Graduate Certificate, 2022 Indiana University Robert H. McKinney School of Law; B.B.A., 2019 Grand Valley State University.

^{1.} Emma Bowman, Fed Up with Poor Broadband Access, He Started His Own Fiber Internet Service Provider, NAT'L PUB. RADIO (Aug. 23, 2022, 5:11 AM), https://www.npr.org/2022/08/22/1118734792/michigan-man-isp-fiber-internet [https://perma.cc/843M-DDUX].

^{6.} *Id.*; *see* Kathy Katella, *Our Pandemic Year—A COVID-19 Timeline*, YALE MED. (Mar. 9, 2021), https://www.yalemedicine.org/news/covid-timeline [https://perma.cc/NPY8-2Z3Q].

it sounds. Mauch has already laid fourteen miles of cable across the county, and it takes approximately half a mile of cable to provide internet to a single house in the rural community.¹¹

Like the rural communities of Washtenaw County, broadband internet access remains an overwhelming concern across the United States. This "digital divide," where rural communities have unequal access to broadband internet, has emerged and only been further exacerbated by the COVID-19 pandemic. While the "digital divide" has affected almost every aspect of American life during the pandemic and post-pandemic world, an industry where it could have a truly devastating effect is healthcare services via telehealth. ¹² In fact, McClain Bryant Macklin, the director of policy and strategic initiatives at the Health Forward Foundation, has characterized broadband as "the super-social determinant of health because it has a direct impact on all of the other social determinants of health." ¹³

Moreover, the "digital divide" is impacting the equity of social determinants of health. In the United States, over fourteen million urban homes and four million rural homes have no broadband internet. In urban counties, seventy-five percent of those without broadband internet are people of color. For individuals in lower socio-economic classes, telehealth can offer numerous benefits such as alleviating unreliable transportation issues, seeing specialists that operate from long geographic distances, and even protecting those who are immunocompromised. Access to telehealth through broadband internet could be one of the first steps toward bridging the gap of health inequality in the United States.

This Article explores the intersection between broadband internet access and its impact on telehealth services and the social determinants of health. It first discusses broadband internet access and telehealth generally to provide readers with background information. Second, it discusses current legal approaches that have been taken to increase access to broadband internet and telehealth. Third, it analyzes case studies in access to broadband internet and the impact is has on individuals. Finally, this Article provides an analysis section offering potential policy solutions.

^{11.} Id.

^{12.} See Craig Settles, Broadband is the Achilles' Heel of Telehealth, HEALTHCARE IT NEWS (Nov. 18, 2021, 5:16 PM), https://www.healthcareitnews.com/blog/broadband-achilles-heel-telehealth [https://perma.cc/Q2UK-8NU8]; Victoria Bailey, Limited Broadband Poses a Significant Barrier to Telehealth Access, MHEALTH INTEL. (Aug. 6, 2021), https://mhealthintelligence.com/news/limited-broadband-poses-a-significant-barrier-to-telehealth-access [https://perma.cc/VR9W-THWG].

^{13.} Settles, *supra* note 12.

^{14.} *Id*.

^{15.} Id.

^{16.} See id.; Stephanie Watson, *Telehealth: The Advantages and Disadvantages*, HARV. HEALTH PUBL'G (Oct. 12, 2020), https://www.health.harvard.edu/staying-healthy/telehealth-the-advantages-and-disadvantages [https://perma.cc/RD7E-9U2L].

I. BACKGROUND

A. Telehealth Explained

Telehealth, sometimes referred to as telemedicine, allows individuals to meet with healthcare providers without an in-person visit.¹⁷ Telehealth uses digital information and communication technology to connect patients and their providers.¹⁸ For example, this could include a patient consulting with their primary care provider over telephone or video-conferencing applications, refilling a prescription through a secure web connection, or remote monitoring of health information like blood glucose levels or blood pressure levels through mobile apps.¹⁹

Telehealth is primarily used to describe a broader range of patient care such as clinical health care, patient and professional health-related education, public health related measures, and health care administration.²⁰ On the other hand, telemedicine is typically used to describe a narrower scope of only remote clinical services.²¹ Patients can receive a variety of routine and specialized care through telehealth services.²²

However, many barriers remain to receiving telehealth services. For example, an analysis of the 2018 American Community Survey found that twenty-six percent of Medicare beneficiaries were without any high-speed digital access through either a computer or smartphone.²³ This is defined as "unreadiness" for telehealth visits by the geriatrics division at the University of California, San Francisco.²⁴ Moreover, "[u]nreadiness [is] more common in patients who [are] older, unmarried, men, Black or Hispanic, live[] in rural areas, and who [have] less education, lower income and worse self-reported health."²⁵ These

^{17.} See What Is Telehealth?, HEALTH RES. & SERVS. ADMIN. (June 29, 2022), https://telehealth.hhs.gov/patients/understanding-telehealth/[https://perma.cc/3GC5-Q2VG].

^{18.} See Mayo Clinic Staff, *Telehealth: Technology Meets Health Care*, MAYO CLINIC (June 18, 2022), https://www.mayoclinic.org/healthy-lifestyle/consumer-health/in-depth/telehealth/art-20044878 [https://perma.cc/2U6G-6NV6].

^{19.} See id.

^{20.} Frequently Asked Questions, HEALTHIT.GOV, https://www.healthit.gov/faq/whattelehealth-how-telehealth-different-telemedicine [https://perma.cc/97P8-XFMD] (last visited Dec. 31, 2022).

^{21.} *Id*.

^{22.} What Is Telehealth?, supra note 17.

^{23.} Caroline Picher et al., *Governors Lead on Expanding Access to Affordable Broadband For Telehealth Services*, NAT'L GOVERNORS ASS'N (Jun. 25, 2021), https://www.nga.org/news/commentary/governors-lead-on-expanding-access-to-affordable-broadband-for-telehealth-services/[https://perma.cc/L5Q7-JC2J].

^{24.} Andis Robeznieks, *Why So Many Patients Still Can't Connect to Doctors via Telehealth*, Am. MED. ASS'N (Aug. 7, 2020), https://www.ama-assn.org/practice-management/digital/why-so-many-patients-still-can-t-connect-doctors-telehealth [https://perma.cc/BPZ3-YWVF].

^{25.} Id.

discrepancies in access paint a picture that it is not just elderly patients who cannot connect with doctors and that the inequity in access to telehealth services is deeply ingrained for many demographics.

B. The COVID-19 Pandemic

The COVID-19 pandemic changed the way health care was delivered for almost every American. As a result of the virus spreading through close contact and the stay-at-home orders, many individuals had a difficult time seeking care by a traditional visit to a physician's office.²⁶ The CDC has rightly pointed out how dangerous avoiding or delaying care can be to an individual's health.²⁷ Specifically, the CDC has indicated that the delay or avoidance of medical care can lead to an increase in morbidity and mortality risks associated with treatable and preventable health conditions.²⁸ This likely further contributed to excess deaths related to COVID-19.²⁹

The protection of patients and mitigating the spread of COVID was of vital importance during the most lethal days of the pandemic. A logical solution for many providers in the wake of disruptions to the health care system was to pivot from providing in-person care to providing telehealth care. The shift to telehealth helped maintain critical access to care while keeping both providers and patients safe from exposure to COVID that might have occurred during an in-person visit. The Centers for Medicare and Medicaid Services ("CMS") helped to facilitate this change through reimbursement for services provided when the patient and provider are in different locations but are interacting synchronously in real-time through mediums such as telephone, secure messaging, or video chat. It

While telehealth provided a lifeline to providers in being able to still see their patients, it was not without challenges.³² Providers had to rapidly shift to

^{26.} See Coronavirus Disease (COVID-19): How Is It Transmitted?, WORLD HEALTH ORG. (Dec. 23, 2021), https://www.who.int/news-room/questions-and-answers/item/coronavirus-disease-covid-19-how-is-it-transmitted [https://perma.cc/2GXW-JCFB]; see also Mark É. Czeisler et al., Delayed or Avoidance of Medical Care Because of COVID-19-Related Concerns—United States, June 2020, CTRS. FOR DISEASE CONTROL (Sept. 11, 2020), https://www.cdc.gov/mmwr/volumes/69/wr/mm6936a4.htm [https://perma.cc/758D-2MN8].

^{27.} See id.

^{28.} Id.

^{29.} Id.

^{30.} See Ji E. Chang et al., Rapid Transition to Telehealth and the Digital Divide: Implications for Primary Care Access and Equity in a Post-COVID Era, 99 THE MILBANK Q. 340 (2021).

^{31.} Final Policy, Payment, and Quality Provisions Changes to the Medicare Physician Fee Schedule for Calendar Year 2021, CTRS. FOR MEDICARE & MEDICAID SERVS. (Dec. 1, 2020), https://www.cms.gov/newsroom/fact-sheets/final-policy-payment-and-quality-provisions-changes-medicare-physician-fee-schedule-calendar-year-1 [https://perma.cc/X8MB-P5YF].

^{32.} See generally Judith Ann Barberio & Melinda L. Jenkins, *Transitioning to Telehealth: Today's Guidelines for Future Sustainability*, 17 J. NURSE PRACS. 795 (2021).

providing care in a new way while facing new barriers and new considerations for structure, process, and outcomes.³³

C. Discrepancies in Rural Healthcare

Although telehealth usage has expanded following the beginning of the COVID-19 pandemic, rural telehealth usage has increased at staggering rate. According to the U.S. Census Bureau, in 2017 approximately sixty million people, or about 20% of the U.S. population lives in rural America.³⁴ While urban areas make up only 3% of the land in the United States, over 80% of the population lives there.³⁵ Conversely, 97% of the United States land mass is considered to be rural.³⁶ This is a staggering amount of land for only one-fifth of the U.S. population. When one considers the low population density of rural areas, one can begin to see why telehealth has such a great impact on the people living there.

In the United States, there are 6,093 total hospitals.³⁷ Within that number, 5,139 are community hospitals.³⁸ And, of these 5,139 community hospitals, only 1,796 are in rural areas.³⁹ Between 2015 and 2019, 59% of the decline in the number of community hospitals were rural hospitals.⁴⁰ Approximately 35% of all community hospitals in the United States are expected to care for sixty million people.⁴¹ Moreover, 47% of these community hospitals have twenty-five or fewer staffed beds available at their disposal.⁴² Additionally, a 2018 survey conducted by the Pew Research Center found that, on average, rural Americans live 10.5 miles from the nearest hospital, and that when taking into account local traffic

^{33.} *Id.; see also* Shilpa N. Gajarawala & Jessica N. Pelkowski, *Telehealth Benefits and Barriers*, 17 J. FOR NURSE PRACS. 218, 218-221 (2020).

^{34.} America Counts Staff, *One in Five Americans Live in Rural Areas*, U.S. CENSUS BUREAU (Aug. 9, 2017), https://www.census.gov/library/stories/2017/08/rural-america.html [https://perma.cc/U86L-TEXK].

^{35.} *Id*.

^{36.} *Id*.

^{37.} Fast Facts on U.S. Hospitals, 2022, Am. Hosp. Ass'n (Jan. 2022), https://www.aha.org/statistics/fast-facts-us-hospitals [https://perma.cc/RVH2-YZ4B].

^{38.} *Id.* "Community hospitals are defined as all nonfederal, short-term general, and other special hospitals. Other special hospitals include obstetrics and gynecology; eye, ear, nose, and throat; long term acute-care; rehabilitation; orthopedic; and other individually described specialty services. Community hospitals include academic medical centers or other teaching hospitals if they are nonfederal short-term hospitals. Excluded are hospitals not accessible by the general public, such as prison hospitals or college infirmaries." *Id.*

^{39.} *Id*.

^{40.} Fast Facts: U.S. Rural Hospitals Infographic, AM. HOSP. ASS'N, https://www.aha.org/infographics/2021-05-24-fast-facts-us-rural-hospitals-infographic [https://perma.cc/A4HH-TUKJ] (last visited Jan. 4, 2023).

^{41.} See supra text accompanying notes 39-40.

^{42.} Fast Facts: U.S. Rural Hospitals Infographic, supra note 40.

patterns it takes seventeen minutes for rural Americans to reach the nearest hospital.⁴³ This is in stark contrast to the an average distance of 4.4 miles and a 10.4 minute car trip for Americans that live in urban areas.⁴⁴ While this may not seem to be a staggering difference, the survey also noted that there is strong variation based on the type of community in which an individual lives. For example, for rural Americans with the longest travel times, the average drive takes thirty-four minutes to reach a hospital.⁴⁵ When comparing this to the rural Americans with the shortest travelling times, the average drive is about six minutes to reach a hospital.⁴⁶ This is a twenty-nine-minute difference, and it is only dealing with average driving times, meaning for rural individuals, it could take even longer than thirty-four minutes to reach a hospital.

These discrepancies between urban and rural access to health care only lead to a greater divide between the individuals living in these communities. The means it takes to reach the health care facilities can lead to differences in health outcomes. For example, the CDC states that Americans living in rural areas are more likely to die from "potentially preventable" illnesses.⁴⁷ These treatable illnesses include heart disease, cancer, unintentional injuries, chronic lower respiratory disease, and stroke.⁴⁸

II. LEGAL APPROACHES TO TELEHEALTH DEMAND

Legal approaches and policy solutions in recent years have not been relegated to a single level of government. In fact, both the federal and state governments have been active in enacting measures to increase access to telehealth services during the pandemic.

A. Telehealth Waivers During the Pandemic

During the Coronavirus pandemic, CMS issued temporary measures to create greater access to telehealth for those enrolled in Medicare and Medicaid.⁴⁹ These measures were largely aimed at increasing the ability of providers to meet patient needs through flexibility in care options.⁵⁰ For example, CMS waived the

^{43.} Onyi Lam et al., *How Far Americans Live from the Closest Hospital Differs by Community Type*, PEW RSCH. CTR. (Dec. 12, 2018), https://www.pewresearch.org/fact-tank/2018/12/12/how-far-americans-live-from-the-closest-hospital-differs-by-community-type/ [https://perma.cc/RP7Y-ZL78].

^{44.} Id.

^{45.} Id.

^{46.} Id.

^{47.} *See* Press Release, Ctrs. for Disease Control, Rural Americans at Higher Risk of Death from Five Leading Causes, (Jan. 12, 2017, 1:00 PM), https://www.cdc.gov/media/releases/2017/p0112-rural-death-risk.html [https://perma.cc/KS8S-79CG].

^{48.} Id.

^{49.} Picher et al., supra note 23.

^{50.} See id.; COVID-19 Emergency Declaration Blanket Waivers for Health Care Providers, CTRS. FOR MEDICARE & MEDICAID SERVS. 1-2, 5 (Oct. 13, 2022), https://www.cms.gov/files/

requirement that telehealth services be provided only with the use of video technology.⁵¹ This flexibility allowed providers to conduct telehealth appointments with patients using audio-only telehealth means, like a phone call.⁵² Additionally, this flexibility was extended to allow practitioners to use different meeting apps, such as Microsoft Teams, Zoom, and Skype when meeting with patients.⁵³ Additionally, CMS also enlarged the types of practitioners that may bill for telehealth services to all those who are eligible to bill Medicare for their professional services.⁵⁴

B. Federal Responses

In the wake of the boom in demand for telehealth following the beginning of the pandemic, the Biden administration has responded through initiatives to expand telehealth access. One of these initiatives has arrived in the form of distance learning and telemedicine grants provided by the U.S. Department of Agriculture ("USDA") Rural Development.⁵⁵ The program is specifically aimed at assisting rural communities "use advanced telecommunications technology to connect to each other - and to world - overcoming the effects of remoteness and low population density."⁵⁶ Additionally, the USDA emphasized that the program is aimed at helping "rural residents tap into enormous the enormous potential of the internet for education and health care; two of the most crucial keys to successful rural economic and community development."⁵⁷

Moreover, the 2020 Coronavirus Aid, Relief, and Economic Security ("CARES") Act and the Coronavirus Response & Relief Supplemental Appropriations Act ("CRRSAA") have provided \$450 million to the Federal Communications Commission ("FCC") to assist telehealth providers in connecting with patients.⁵⁸ According to the National Governors Association, the first round of federal funding supported telehealth connections at more than 500

document/covid-19-emergency-declaration-waivers.pdf [https://perma.cc/XA5Y-VETS] [hereinafter CMS COVID-19 Blanket Waivers].

- 51. CMS COVID-19 Blanket Waivers, supra note 50, at 1-2.
- 52. Id.
- 53. Notification of Enforcement Discretion for Telehealth Remote Communications During the COVID-19 Nationwide Public Health Emergency, U.S. DEP'T HEALTH & HUM. SERVS. (Jan. 20, 2021), https://www.hhs.gov/hipaa/for-professionals/special-topics/emergency-preparedness/notification-enforcement-discretion-telehealth/index.html [https://perma.cc/9UBX-MDUS].
 - 54. CMS COVID-19 Blanket Waivers, supra note 50, at 1.
- 55. Distance Learning & Telemedicine Grants, U.S. DEP'T AGRIC. RURAL DEV., https://www.rd.usda.gov/programs-services/telecommunications-programs/distance-learning-telemedicine-grants [https://perma.cc/U7LU-A2YF] (last visited Jan. 5, 2023).
 - 56. Id.
 - 57. Id.
 - 58. Picher et al., supra note 23.

health care facilities in the United States.⁵⁹ The FCC's Rural Health Care Program has also supported broadband service and facilities providing telehealth services with \$612 million in funding for the year 2021.⁶⁰

C. State Responses

State governments have also attempted to close the digital divide regarding telehealth services. As highlighted by the National Governors Association, state governors have enhanced telehealth services through numerous strategies, including the creation of grant programs to increase telehealth access through new infrastructure, increasing the eligibility of providers who are permitted to practice telehealth, and relaxing restrictions on prescribing practices and other treatment via telehealth.⁶¹ As of mid 2021, the National Governors Association noted eight states who have taken a new approach to increasing broadband internet access and telehealth services.⁶²

Additionally, in August 2020, four governors of western states have committed to working collaboratively with each other to improve telehealth.⁶³ This collaboration between states is invaluable to create greater equity regarding access to telehealth services and broadband internet access. It also ensures that each state can create robust policy solutions and use each other as a model to find which policies have been successful in the states of their region. Furthermore, as states are applying and utilizing federal grant money to increase access to telehealth services, the policy decisions will likely have a beneficial "spill over" effect on other states.

III. CASE STUDIES IN BROADBAND AND TELEHEALTH ACCESS

A. New York Price Ceiling Regulation

An approach taken by New York involved creating an "affordable pricing scheme" to increase access to broadband internet. ⁶⁴ This created a price ceiling for broadband internet. While the legislation was unsuccessful due to preemption, the legislation and the subsequent litigation surrounding it offer an interesting case study in an attempt by a state to increase access to broadband internet.

1. Background.—In April 2021, New York passed legislation aimed at lowering the cost of broadband internet services for low-income consumers. ⁶⁵ The legislation was a part of New York's state budget and included numerous

^{59.} Id.

^{60.} Id.

^{61.} *Id*.

^{62.} *Id.* The states include Arizona, Colorado, Connecticut, Iowa, Missouri, Montana, South Dakota, and Utah. *Id.*

^{63.} *Id.* This group included Colorado Governor Jared Polis, Nevada Governor Steve Sisolak, Oregon Governor Kate Brown, and Washington Governor Jay Inslee. *Id.*

^{64.} See 2021 N.Y. Assembly Bill A3006C, pt. NN.

^{65.} Id.

amendments to implement state education, labor, housing, and family assistance for the 2021-2022 fiscal year.⁶⁶ The budget bill amended New York's general business law by adding section 399-zzzzz, appropriately titled the Affordable Broadband Act ("ABA") or Broadband Service for Low-Income Consumers.⁶⁷

Section 399-zzzzz(2) stated that:

"[e]very person, business, corporation, or their agents . . . shall, no later than sixty days after the effective date of this section, offer high speed broadband service to low-income consumers whose household: (a) is eligible for free or reduced-priced lunch through the National School Lunch Program; or (b) is eligible for, or receiving the supplemental nutrition assistance program benefits; or (c) is eligible for, or receiving Medicaid benefits; or (d) is eligible for, or enrolled in senior citizen rent increase exemption; or (e) is eligible for, or enrolled in disability in disability rent increase exemption; or (f) is a recipient of an affordability benefit from a utility."

Additionally, the act created a price-ceiling, requiring that the broadband services provided shall cost no more than \$15 per month. ⁶⁹ The act also required that providers allow low-income individuals to purchase standalone or bundled cable and phone services separately. ⁷⁰ Additionally, New York attempted to protect smaller broadband service providers, stating that sections 2 and 3 would "not apply to any broadband service provider providing service to no more than twenty thousand households, if the public service commission determines that compliance with such requirements would result in unreasonable or unsustainable financial impacts on the broadband service provider." ⁷¹

Shortly after the act was signed into law by Governor Andrew Cuomo,⁷² it was challenged in court by several trade associations, whose members provide broadband internet services.⁷³ The trade associations sought a preliminary injunction against New York State Attorney General Letitia James barring her from enforcing the provisions of the act.⁷⁴

2. The Court's Analysis—In the case, the court did a preliminary injunction analysis, examining the trade associations' likelihood of success on their arguments that the ABA was preempted under both conflict preemption and field

^{66.} Id. § 1.

^{67.} *Id.*; see also N.Y. GEN. BUS. LAW § 399-zzzzz (McKinney 2023); N.Y. State Telecomms. Ass'n v. James, 544 F. Supp. 3d 269, 273 (E.D.N.Y. 2021).

^{68.} N.Y. GEN. BUS. LAW § 399-ZZZZZ(2).

^{69.} Id. § 399-zzzzz(3).

^{70.} Id.

^{71.} Id. § 399-zzzzz(5).

^{72.} See Assembly Bill A3006C, N.Y. STATE SENATE, https://www.nysenate.gov/legislation/bills/2021/A3006 [https://perma.cc/M47R-6KDP] (last visited Jan. 6, 2023).

^{73.} See N.Y. State Telecomms. Ass'n v. James, 544 F. Supp. 3d 269, 273 (E.D.N.Y. 2021).

^{74.} Id.

preemption.⁷⁵ First, the court started with the doctrine of conflict preemption.⁷⁶ Conflict preemption is what one traditionally thinks of when it comes to preemption. Namely, that legislation enacted by a state "conflicts with federal law by standing as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress."⁷⁷ The court discussed that deference must be given to the police powers of the States, and they are not to be superseded "unless that was the clear and manifest purpose of Congress."⁷⁸ However, the court noted that "if 'a local government regulates in an area "where there has been a history of significant federal presence," a purported exercise of historical police powers is not afforded deference."⁷⁹ The court further noted that just because it is a federal regulation, instead of an act of Congress preempting the local law, the federal regulation has no less preemptive effect than a federal statute.⁸⁰

Under the Federal Communications Act, the Federal Communications Commission ("FCC") classifies broadband "as either a Title I 'information service' or a Title II 'telecommunications service.'" "Title II [telecommunications services] entails common carrier status,' whereas Title I information services do not." Being classified as a common carrier means "any person engaged as a common carrier for hire, in interstate or foreign communication by wire or radio or interstate or foreign radio transmission of energy." Since 2018, the FCC "has classified broadband internet as a Title I information service." The "information service" classification "prevents the FCC from imposing common carrier obligations on providers," like rate regulations.

The court rejected the Attorney General's argument that the FCC disclaimed its authority to regulate broadband. Specifically, the court reasoned that although the FCC decided to regulate broadband as a Title I "information service" instead of under Title II, it was not a complete abdication of the FCC's jurisdiction. Just because Title I "information services" do not have common carrier obligations like those under Title II, it does not give the States jurisdiction

^{75.} Id. at 275, 279-89.

^{76.} See id. at 279.

^{77.} Id.

^{78.} Id. (quoting Altria Grp., Inc. v. Good, 555 U.S. 70, 77 (2008)).

^{79.} *Id.* (quoting N.Y. SMSA Ltd. P'ship v. Town of Clarkstown, 612 F.3d 97, 104 (2d Cir. 2010)).

^{80.} Id. (citing SPGGC, LLC v. Blumenthal, 505 F.3d 183, 188 (2nd Cir. 2007)).

^{81.} *Id*.

^{82.} *Id.* at 280 (internal citations omitted) (quoting Mozilla Corp. v. Fed. Trade Comm'n, 940 F.3d 1, 17 (D.C. Cir. 2019)).

^{83. 47} U.S.C. § 153(11).

^{84.} N.Y. State Telecomms. Ass'n, 544 F. Supp. 3d at 280.

^{85.} Id.; see id. at 281.

^{86.} Id. at 280-81.

^{87.} Id. at 281.

over broadband service providers.⁸⁸ The court rejected the Attorney General's argument that the ABA was not a common carrier rate regulation, but instead an "accessible pricing scheme."⁸⁹ In the end, the court held that the trade associations demonstrated a likelihood of success on the argument that the ABA conflicts with the FCC's policy decision not to impose common carrier rate regulations on broadband internet providers.⁹⁰

Second, the court then analyzed whether there was likelihood of success that the ABA was preempted under the doctrine of "field preemption." Field preemption, as opposed to conflict preemption, "reflects a congressional decision to foreclose any state regulation in the area,' irrespective of whether state law is consistent or inconsistent with 'federal standards'" Here, the court stated that the ABA is not a "purely intrastate affordable-pricing scheme" because it covers providers with "the capability to transmit data to and receive data from *all or substantially all internet endpoints*." Although the court refused to "hold that all broadband internet services are categorically *inter*state," it did hold that the ABA "clearly wanders beyond the *intra*state communications line, with no provisions reasonably inferable as limiting . . . its reach."

The court then went on to articulate that Congress has set aside interstate communications as an area in which a uniform federal law governs "standards of service" and "extent of liability." The court also quoted a description from the Supreme Court that divided communications services into "two hemispheres—one comprised of interstate service, over which the FCC would have plenary authority, and the other made up of intrastate service, over which the States would retain exclusive jurisdiction." The court reasoned it would be ridiculous to claim that the FCC has plenary jurisdiction if it loses, and the States gain, the right to make rules regarding certain interstate communications services when the FCC chooses to regulate a service under a different title of the Federal Communications Act. Therefore, because of its close ties to interstate communications, the court also found there was a likelihood of success on the merits of field preemption. The court found the other preliminary injunction elements met and enjoined the enforcement of the ABA.

```
88. Id.
```

^{89.} Id. at 280, 282.

^{90.} Id. at 282-83.

^{91.} Id. at 283.

^{92.} *Id.* at 283 (quoting Oneok, Inc. v. Learjet, Inc., 575 U.S. 373, 377 (2015)).

^{93.} Id. at 284-85 (citing N.Y. GEN. BUS. LAW § 399-zzzzz(1) (McKinney 2022)).

^{94.} Id. at 285.

^{95.} *Id.* at 287 (quoting Ivy Broad. Co. v. Am. Tel. & Tel. Co., 391 F.2d 486, 490-91 (2d Cir. 1968)).

^{96.} Id. (quoting La. Pub. Serv. Comm'n v. Fed. Commc'n Comm'n, 476 U.S. 355, 357 (1986)).

^{97.} Id.

^{98.} Id.

^{99.} Id. at 289.

B. Holland, Michigan

While the ABA and state regulation of broadband internet service providers pricing schemes have been called into question, the situation is not completely hopeless. In August 2022, voters in the city of Holland, Michigan approved a ballot proposal that created a citywide high-speed internet network. The ballot proposed internet access across the city of Holland, which would be maintained through public funds. Holland is funding the proposal through a bond of \$30 million to be repaid through local taxes over the next twenty-five years. According to Pete Hoffswell, superintendent of broadband services for the Holland Board of Public Works, a taxpayer with a home valued at \$200,000 would pay approximately \$112 in annual taxes for the project. 103

Moreover, Holland is allowing private broadband service providers to take advantage of the new infrastructure provided by the city.¹⁰⁴ This will allow private internet service providers to provide services alongside the city, therefore ensuring that all individuals in Holland remain connected, regardless of if they choose the public or the private option.¹⁰⁵ City officials estimated "that about 51% of eligible customers in Holland will sign up for the municipal internet service network," which equates to 19,000 potential customers.¹⁰⁶ The cost for opting into the municipal internet service would include an \$820 home connection fee; the monthly cost would be \$42 for a one gigabit plan, which would cover the cost of connection, operations, maintenance, and the internet itself.¹⁰⁷ Holland is also offering payment plans to residents to help offset the initial cost of connection.¹⁰⁸

Holland previously installed a fiber optics network for its downtown district as a pilot program in 2018.¹⁰⁹ The pilot program was "offered to all businesses, retailers, residents and restaurants" in the downtown district, and according to city officials, the program proved a success.¹¹⁰ Although the infrastructure will take about two years to install across the city, it is expected that the first phase of internet services will be up in the summer of 2024.¹¹¹ While this two-year installation period may seem a ways away, Holland's success with the pilot program and now the citywide internet services offer a glimmer of hope for other

^{100.} Melissa Frick, *Holland Voters Approve Citywide High-Speed Internet Proposal*, MLive (Aug. 3, 2022, 1:23 A.M.), https://www.mlive.com/news/grand-rapids/2022/08/holland-voters-approve-citywide-high-speed-internet-proposal.html [https://perma.cc/PZ38-BLDF].

^{101.} Id.

^{102.} Id.

^{103.} *Id*.

^{104.} See id.

^{105.} Id.

^{106.} Id.

^{107.} Id.

^{108.} Id.

^{109.} Id.

^{110.} *Id*.

^{111.} *Id*.

municipalities aspiring to increase internet access.

IV. ANALYSIS AND POTENTIAL SOLUTIONS

A. FCC Designating Broadband as a Public Utility

Perhaps the first solution one might think of in order to increase access to broadband services would be for the FCC to change its designation from a Title I "information service" to a Title II "telecommunication service." This would allow the FCC to impose common carrier obligations on broadband service providers, most notably rate regulations. Imposing rate regulations would allow individuals to receive lower prices for broadband services and greatly reduce a barrier to accessing broadband internet. Moreover, the FCC, through its rulemaking authority, would likely be able to impose the affordable pricing scheme sought in the ABA. The FCC would be able to ensure access to broadband internet for those that may not be able to afford such services without assistance.

Additionally, the affordability would have an astounding effect on assuring that not only those of a lower socioeconomic class have access to the internet, but also those that live in rural areas. According to the FCC, 22.3% of Americans living in rural areas and 27.7% of Americans living in tribal lands lack broadband coverage, compared to only 1.5% of Americans living in urban areas. As discussed previously, while the USDA has begun to invest in broadband expansion for rural areas, this expansion would be exponentially greater if the FCC designated broadband services as a Title II "telecommunications service" and imposed common carrier obligations. 116

B. The Implications of Using Price-Ceilings on Broadband Services

Perhaps one of the strongest counterarguments against imposing a common carrier rate regulation, or an "accessible pricing scheme" is that it would lead to increased demand and a lower supply. This argument fails for numerous reasons, the first being that broadband internet has been found to be an inelastic good, meaning individuals would likely continue to pay, no matter the cost. A study published in the Journal of Applied Economics suggests that demand for internet is price-inelastic.¹¹⁷ A price-inelastic demand means that when there is an increase

^{112.} See N.Y. State Telecomms. Ass'n v. James, 544 F. Supp. 3d 269, 279-80 (E.D.N.Y. 2021).

^{113.} Id. at 280, 282.

^{114.} See N.Y. GEN. BUS. LAW § 399-zzzzz(2), (3) (McKinney 2022).

^{115.} FED. COMMC'NS COMM'N, 2020 BROADBAND DEPLOYMENT REPORT 18 (Apr. 24, 2020), available at https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2020-broadband-deployment-report [https://perma.cc/W7VB-L2P7].

^{116.} See Distance Learning & Telemedicine Grants, supra note 55.

^{117.} See Rajeev K. Goel et al., Demand Elasticities for Internet Services, 38 APPLIED ECON. 975 (2006).

in the cost of a good or service, the reduction in quantity demanded is small.¹¹⁸ This is in contrast to a price-elastic good, where there is a larger reduction in the quantity demanded if there is a price increase.¹¹⁹ One would expect then that in an unfettered market, there would be little change in the quantity demanded for broadband internet services based on a change in price.

However, new research from Dr. George S. Ford, the Chief Economist of the Phoenix Center for Advanced Legal and Economic Public Policy Studies, shows that due to the relative price-inelasticity of demand for broadband internet services, that price-based policies will do little to expand adoption of broadband services. Dr. Ford advocates that expanding availability will have a greater effect on adoption of broadband services by underserved areas than price regulations like those that could be implemented by the FCC under common carrier rate regulations. Specifically, he suggests that subsidies would be a smarter policy decision for expanding broadband access. Using a consumer surplus analysis, Dr. Ford found that if 85% of unserved homes subscribed to newly-available broadband access, the consumer surplus would be approximately \$9.6 billion annually and \$90 billion in value over 10 years. In contrast, the effects of a 10% price cut from the average \$60 cost of broadband service would have the benefit of only \$214 million, well below the \$9.6 billion consumer surplus benefit.

C. Local Control in Broadband Access

Although it may not be as bold as sweeping national legislation, local municipalities providing broadband internet services for their residents may be the quickest way to increase access. As discussed previously, the city of Holland has seen success through its initial pilot program and confidence in its initial expectations of the municipal internet service provider. Additionally, other cities like Chattanooga, Tennessee and Fort Collins, Colorado have also created municipal internet providers hoping to expand access at a local level. 126

^{118.} See Elasticity of Demand, IOWA STATE UNIV. EXTENSION & OUTREACH, Nov. 2020, at 1, https://www.extension.iastate.edu/agdm/wholefarm/pdf/c5-207.pdf [https://perma.cc/8KDN-DWS61.

^{119.} Id.

^{120.} See George S. Ford, Assessing Broadband Policy Options: Empirical Evidence on Two Relationships of Primary Interest, PHX. CTR. FOR ADVANCED LEGAL & ECON. PUB. POL'Y STUD., July 28, 2021, https://www.phoenix-center.org/perspectives/Perspective21-04Final.pdf [https://perma.cc/2WRR-S24B].

^{121.} Id. at 1-7.

^{122.} See id.

^{123.} *Id.* at 6-7. This data assumes that 15% of homes are presently underserved by broadband access. *Id.*

^{124.} Id. at 7.

^{125.} See discussion supra Section III.B.; Frick, supra note 100.

^{126.} See Chris Teale, Municipal Broadband Internet: The Next Public Utility?, SMART CITIES

Moreover, municipal broadband providers would be the creators of a new service provider altogether. It would allow municipalities to provide services to their citizens without dealing with the fallout of trying to increase access through an affordable cost scheme similar to that in New York. 127 Furthermore, municipal broadband services would help to create new infrastructure, which is critical to increasing access. As discussed previously, one of the ultimate problems Jared Mauch ran into when creating his own internet service provider was the cost of laying the cables necessary to connect a home to broadband internet. 128 The installation of the necessary broadband infrastructure would likely be one of the greatest barriers to increasing access, particularly in rural or remote areas. The creation of municipal broadband services would assist in installing this infrastructure and make it easier for residents whose homes may not have had the potential for broadband internet access in the past. Additionally, as can be seen from the Holland, Michigan proposal, it would also allow private broadband providers to take advantage of the infrastructure and provide broadband to individuals who choose not to receive their internet through the municipal service.129

Finally, the idea of local municipalities providing broadband internet services to their residents evokes in it a feeling of pride. Using Holland, Michigan as an example, the municipal broadband service was created as a ballot proposal in a local election. Allowing individuals to choose whether or not they wish to experiment with a public broadband program brings with it the core democratic ideals that emanate throughout the United States. Indeed, the creation of a municipal broadband service would, in many ways, allow a town, city, village, or settlement to become a "laboratory" of democracy. 131

D. Limiting the Reach of Broadband for Only Telehealth Purposes

Finally, another solution may exist for expanding access to broadband internet by limiting the scope in which the services are provided. Particularly with regard to telehealth, this may be a solution that would greatly increase access while also providing individuals with greater access to healthcare. As discussed in *New York State Telecommunication Ass'n*, the court specifically stated that the ABA "clearly wanders beyond the *intra*state communications line, with no

DIVE (Mar. 5, 2019), https://www.smartcitiesdive.com/news/municipal-broadband-internet-public-utility/549461/ [https://perma.cc/9CNF-FB8H].

- 127. See discussion supra Section III.A.
- 128. Bowman, supra note 1; see discussion supra INTRODUCTION.
- 129. See Frick, supra note 100.
- 130. *Id*.

131. See New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting) ("To stay experimentation in things social and economic is a grave responsibility. Denial of the right to experiment may be fraught with serious consequences to the nation. It is one of the happy incidents of the federal system that a single courageous state may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.").

provisions reasonably inferable as limiting . . . its reach."¹³² Therefore, the creation of an affordable pricing scheme with a limited reach, like that in the ABA, may seem to be valid and survive field preemption.

While the court seems to be discussing limiting the reach of legislation like the ABA in regard to intrastate regulation only, another solution appears—providing access to broadband internet specifically to be used for telehealth services. The creation of limits on the use of broadband internet may still be tricky. However, when considering how to increase access to broadband and healthcare, one should at least consider all options at hand. Limits such as these would also be tricky to enforce, though, due to large metropolitan areas, or on the other hand, rural communities.

While a state may pass legislation like that of the ABA and limit it to uses such as intrastate telehealth services, how would this impact a hypothetical individual that lives in New York City but whose primary care physician operates in New Jersey? Or how would this impact a hypothetical individual that lives in Montana, but their primary care physician operates across the border in Idaho? These limits get even trickier to enforce if an individual is using telehealth services to see a specialist that may operate miles away from their home at a nationally renowned health center. Truly, one could see how this may slowly devolve into a "slippery slope" argument from intrastate limits on broadband internet access for telehealth purposes into an end run around to interstate broadband access.

A better solution may exist by applying legislation only to broadband service providers that operate solely within the state where the legislation is passed. This would help to limit the hypothetical end run around to limiting it solely to intrastate broadband access. However, as can be seen in the ABA, this may also provide problems to broadband service providers that do not operate at the same level that national corporations like AT&T or Verizon.¹³³ Then, one would have to balance the business interest of state-wide or local internet service providers against the public's interest in providing affordable broadband services to citizens of the state.

CONCLUSION

As the court stated in *New York State Telecommunications Ass'n v. James*, "[i]nternet access has transcended beyond mere luxury to modern necessity."¹³⁴ Individuals use the internet for tasks that are vital for their daily lives, such as traffic updates, weather, or even just reading the news and enlightening themselves on what is happening in the world. However, individuals also use the internet for things that shape their lives and outcomes in a much more existential way. The internet is now being used for education, personal financial management, and telehealth services. These uses can create vastly different

^{132.} New York State Telecomms. Ass'n v. James, 544 F. Supp. 3d 269, 285 (E.D.N.Y. 2021).

^{133.} N.Y. GEN. BUS. LAW § 399-zzzzz(5) (McKinney 2022).

^{134.} *N.Y. State Telecomms. Ass'n*, 544 F. Supp. 3d at 273.

outcomes for individuals.

When considering this, access to broadband services shifts from being thought of as a luxury to a true need in order to survive in today's society. Particularly when it comes to telehealth, broadband internet access can provide individuals with support to vastly change their own health outcomes. In some cases, telehealth services through broadband internet access can be the difference between life and death, surviving an ailment that could be life threatening and treatable with access to medical care.

The potential policy solutions offered are not exhaustive, nor should they be. Solving an issue as foundational as the "digital divide" will take a robust policy approach. The solution is highly unlikely to be as simple as one piece of sweeping national legislation. It will take coordination not just from the federal government and state governments, but it will also need to include interested parties such as the telehealth providers, those receiving care, and internet service providers. As Dr. Laura C. Hoffman stated, to "revolutionize the policy solutions that fully address the digital divide we must become the 'digital provide." We must ensure that stewardship remains paramount in shaping broadband access in a new global age, for no one deserves to be behind as others continue to thrive.