

CAN I SKYPE MY DOCTOR? LIMITED MEDICARE COVERAGE HINDERS TELEMEDICINE'S POTENTIAL TO IMPROVE HEALTH CARE ACCESS

Abstract: Telemedicine services, such as virtual consultations and remote patient monitoring, are revolutionizing health care delivery. The Patient Protection and Affordable Care Act of 2010 (“ACA”) promotes the use of technology in health care reform as a means to increase quality and access while reducing costs. Despite the excitement around telemedicine, the lack of Medicare reimbursement hinders access and innovation. This Note analyzes the utilization of telemedicine to promote health care access for Medicare beneficiaries, and argues that legislative and regulatory changes are needed to reconcile current Medicare policies with the ACA’s encouragement of using telemedicine services. Specifically, this Note recommends that Congress expand telemedicine reimbursement by increasing the number of covered telemedicine services, and by lifting site restrictions and geographical limitations on reimbursement.

INTRODUCTION

Imagine having an ailment and being able to avoid scheduling an appointment, taking time off from work, and traveling to your doctor’s office.¹ Instead, you go online in the comfort of your home, complete a virtual consultation with a physician, and in less than an hour, a physician provides a diagnosis and prescribes a treatment plan.² Companies like Teladoc, MDLIVE, and American Well are a few examples of a growing number of companies providing health services through virtual consultation.³ HelloMD,

¹ See Melinda Beck, *Where Does It Hurt? Log On. The Doctor Is In*, WALL ST. J. (May 8, 2014), <http://www.wsj.com/articles/SB10001424052702303678404579536284129494564> [<https://perma.cc/9VT3-NTKF>] (describing a number of companies offering virtual consultations through which doctors evaluate a patient by telephone or the Internet).

² See Abby Goodnough, *Modern Doctors’ House Calls: Skype Chat and Fast Diagnosis*, N.Y. TIMES (July 11, 2015), <http://www.nytimes.com/2015/07/12/health/modern-doctors-house-calls-skype-chat-and-fast-diagnosis.html> [<https://perma.cc/G844-JUVQ>] (describing patients who used virtual consultation services rather than going to an urgent care clinic or an emergency room, or opted out of care altogether because of the inconvenience of finding in-person consultations).

³ See *About American Well*, AM. WELL, <http://www.americanwell.com/about-us/> [<https://perma.cc/9R8R-RE7C>] (last visited Jan. 17, 2016) (providing virtual medical consultation services); *About Our Company*, TELADOC, <http://www.teladoc.com/about-our-company/> [<https://perma.cc/HNG2-U39G>] (last visited Apr. 2, 2016) (describing Teladoc as the first and largest telemedicine provider that connects individuals to board-certified doctors at anytime of the day); *How It Works*, MDLIVE, <https://www.mdlive.com> [<https://perma.cc/EK33-B8T3>] (last visited Jan. 16, 2016).

a telemedicine startup based in San Francisco, even assists patients in California in obtaining medical cannabis identification cards without ever stepping foot in a doctor's office.⁴

The popularity of telemedicine continues to increase as technology advances and patients become more tech-savvy.⁵ According to one study, roughly seventy-five percent of patients in the United States are willing to use telemedicine services, and roughly the same number of patients prioritize access to care over in-person interactions.⁶ The increase in telemedicine's popularity can also be attributed to the current state of health care in the United States.⁷ Despite the fact that the United States spends more money on health services

(offering virtual consultations with doctors to help treat non-emergency medical conditions). If a Teladoc patient needs to see a doctor, the patient logs onto their Teladoc account and requests a video or phone consultation with a physician. *How Does It Work?*, TELADOC, <https://www.teladoc.com/how-does-it-work/> [<https://perma.cc/AQ3W-YNL7>] (last visited Feb. 28, 2016). The request is then sent to Teladoc's network of providers who are licensed to practice in the patient's state. *Id.* When a physician accepts a patient's request, the physician gains access to the patient's medical records, which are already connected to the patient's Teladoc account. *Id.* The physician then reviews the patient's medical records and contacts the patient for a virtual consultation. *Id.*

⁴ See Farhad Manjoo, *Silicon Valley Tries to Alter Your Perception of Cannabis*, N.Y. TIMES (Nov. 11, 2015), <http://www.nytimes.com/2015/11/12/technology/marijuana-start-ups-see-an-industry-on-the-cusp-of-a-breakthrough.html> [<https://perma.cc/92BT-Z4KW>] (noting how Silicon Valley firms like HelloMD are developing technologies to provide alternatives to traditional in-person medical care). For \$49, users of HelloMD create an online profile with their medical history and current symptoms, participate in a video consultation with a doctor, and if medically appropriate, a doctor will write a medical marijuana recommendation. See *id.*; see also *About Us*, HELLOMD, <http://www.hellomd.com/about-us> [<https://perma.cc/T35P-NE67>] (last visited Jan. 17, 2016).

⁵ U.S. DEP'T OF HEALTH & HUMAN SERVS., REPORT TO CONGRESS: E-HEALTH AND TELE-MEDICINE 4 (Aug. 12, 2016), <https://aspe.hhs.gov/sites/default/files/pdf/206751/TelemedicineE-HealthReport.pdf> [<https://perma.cc/PWK7-WEEF>] [hereinafter REPORT TO CONGRESS: TELEMEDICINE] (estimating that 60% of health care institutions and between 40% to 50% of all U.S. hospitals use some form of telemedicine); See *TrendWatch: The Promise of Telehealth for Hospitals, Health Systems and Their Communities*, AM. HOSP. ASS'N, Jan. 2015, at 1 <http://www.aha.org/research/reports/tw/15jan-tw-telehealth.pdf> [<https://perma.cc/2D78-RK2Q>] [hereinafter *TrendWatch: Telehealth for Hospitals*] (attributing hospitals' interest in telemedicine to its potential to reduce costs, increase access, and allow patients to receive medical care in their homes).

⁶ See Fred Pennic, *Survey: 76% of Patients Would Choose Telehealth Over Human Contact*, HIT CONSULTANT (Mar. 8, 2013), <http://hitconsultant.net/2013/03/08/survey-patients-would-choose-telehealth-over-human-contact/> [<https://perma.cc/A284-4ZWQ>]; *TrendWatch: Telehealth for Hospitals*, *supra* note 5, at 1 (highlighting that the majority of patients are willing to use telemedicine, value access to care over in-person visits, and are comfortable using technology to communicate with their providers).

⁷ See *NHE Fact Sheet*, CTRS. FOR MEDICARE & MEDICAID SERVS., <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nhe-fact-sheet.html> [<https://perma.cc/DSR2-23MC>] (last visited Nov. 22, 2015) (noting that health care accounts for 17.5% of U.S. Gross Domestic Product and will rise to 20.1% by 2025).

than any other country in the world, Americans still struggle to access quality and affordable care.⁸

As more people become eligible for Medicare or gain health coverage through the Patient Protection and Affordable Care Act of 2010 (“ACA”), the question remains whether individuals are actually accessing the care for which they have coverage.⁹ Some barriers to access include the lack of primary care physicians and the costs associated with seeing a physician in-person, such as taking time off from work and arranging travel.¹⁰ Telemedicine provides an alternative health care delivery system that many see as part of the solution for reducing this access gap for underserved populations.¹¹ Furthermore, the ACA promotes the use of telemedicine by incentivizing pro-

⁸ See generally KAREN DAVIS ET AL., MIRROR, MIRROR ON THE WALL: HOW THE U.S. HEALTH CARE SYSTEM COMPARES INTERNATIONALLY (Commonwealth Fund June 2014), http://www.commonwealthfund.org/~media/files/publications/fund-report/2014/jun/1755_davis_mirror_mirror_2014.pdf [<https://perma.cc/KBZ6-HPHX>] (comparing the U.S. health care system to systems in other developed countries).

⁹ See Bill Frist, *Telemedicine: A Solution to Address the Problems of Cost, Access, and Quality*, HEALTH AFF. BLOG (July 23, 2015), <http://healthaffairs.org/blog/2015/07/23/telemedicine-a-solution-to-address-the-problems-of-cost-access-and-quality/> [<https://perma.cc/7MDA-HV8T>] [hereinafter Frist, *A Solution*] (“[C]overage does not guarantee access to cost-effective care.”). See generally Patient Protection and Affordable Care Act (“ACA”), 42 U.S.C. § 18001–18122 (2012) (increasing health care coverage by expanding Medicaid, guaranteeing coverage for individuals with pre-existing conditions, and providing subsidies to households with incomes between 100% and 400% of the federal poverty level).

¹⁰ See Patricia C. Kuszler, *Telemedicine and Integrated Health Care Delivery: Compounding Malpractice Liability*, 25 AM. J.L. & MED. 297, 303 (1999) (highlighting how telemedicine programs target rural communities because of the shortage of health care services and public transportation). Accessing care is especially challenging for a number of elderly who live in rural areas, suffer from a number of health problems, and have limited mobility. See *id.*; Jeremy Berke, *There’s a Huge Problem with Healthcare in America, and Nurses Could Be the Solution*, BUS. INSIDER (Nov. 6, 2015), <http://www.businessinsider.com/nurse-practitioners-could-help-primary-care-shortage-2015-11> [<https://perma.cc/L5QS-8U2L>] (explaining that the current shortage of primary care physicians will worsen as demand increases). See generally HEALTH RES. & SERVS. ADMIN., PROJECTING THE SUPPLY AND DEMAND FOR PRIMARY CARE PRACTITIONERS THROUGH 2020 (Nov. 2013), <http://bhpr.hrsa.gov/healthworkforce/supplydemand/usworkforce/primarycare/projectingprimarycare.pdf> [<https://perma.cc/3TNL-PCEW>] (reporting that physician supply is not growing quickly enough to match the demand).

¹¹ See Lindsey T. Goehring, *H.R. 2068: Expansion of Quality or Quantity in Telemedicine in the Rural Trenches of America?*, 11 N.C. J.L. & TECH. ONLINE 99, 103 (2009) (arguing that telemedicine has revolutionized health care access in rural communities); Kuszler, *supra* note 10, at 304 (discussing the advantages of using telemedicine programs to provide care to prisoners who have historically been underserved). In addition to prisoners, medically underserved communities include populations in rural areas and inner cities, or the disabled and elderly who are often homebound or have limited mobility. See Rashid L. Bashshur, *Telemedicine Effects: Cost, Quality, and Access*, 19 J. MED. SYSTEMS 81, 87 (1995) (highlighting a number of factors that hinder accessibility).

viders to implement innovative delivery models that incorporate telemedicine.¹²

Despite the excitement around telemedicine by practitioners, patients, and entrepreneurs, access and innovation are hindered by regulatory policies at the state and federal levels, including licensing issues and lack of reimbursement for providers.¹³ Physicians are currently licensed state-by-state, so if a physician wants to practice in more than one state, whether virtually or in-person, he or she must be licensed in each additional state.¹⁴ Some states facilitate telemedicine through special licensure laws, allowing an out-of-state provider to treat patients virtually, while many other states have narrowed their laws to restrict out-of-state telemedicine practitioners.¹⁵ Consequently, state-based licensing inhibits the growth and practice of telemedicine.¹⁶

¹² See *TrendWatch: Telehealth for Hospitals*, *supra* note 5, at 6 (connecting the rise of telemedicine technologies to the Patient Protection and Affordable Care Act of 2010, and explaining the new health care delivery models).

¹³ See Bill Frist, *Telemedicine Is a Game-Changer for Patients, The System*, FORBES (Mar. 12, 2015), <http://www.forbes.com/sites/billfrist/2015/03/12/telemedicine-is-a-game-changer-for-patients-the-system/> [<https://web.archive.org/web/20160410034037/http://www.forbes.com/sites/billfrist/2015/03/12/telemedicine-is-a-game-changer-for-patients-the-system/#453e4cea54d5>] [hereinafter *Frist, Game-Changer*] (explaining that state level regulatory policies are barriers to increased telemedicine use, and identifying four changes needed in state legislation); Goodnough, *supra* note 2 (attributing telemedicine pushback to concerns of cost if Medicare coverage increased, and to concerns of potential misdiagnoses). Barriers to telemedicine at the state level include patient privacy and medical malpractice issues. Avery Schumacher, *Telehealth: Current Barriers, Potential Progress*, 76 OHIO ST. L.J. 409, 427 (2015).

¹⁴ Bill Marino et al., *A Case for Federal Regulation of Telemedicine in the Wake of the Affordable Care Act*, 16 COLUM. SCI. & TECH. L. REV. 274, 278–79 (2015) (arguing that federal physician licensing would encourage the development and use of telemedicine); Schumacher, *supra* note 13, at 421 (noting that the process for being licensed in multiple states is burdensome and hinders the interstate practice of telemedicine).

¹⁵ Diane Hoffmann & Virginia Rowthorn, *Legal Impediments to the Diffusion of Telemedicine*, 14 J. HEALTH CARE L. & POL'Y 1, 10 (2011). Some state policies that facilitate telemedicine include: (1) special licenses allowing physicians to virtually treat patients in another state; (2) consultation exceptions permitting consultation between out-of-state physicians with in-state licensed physicians; (3) border state exceptions allowing licensed physicians to practice in a border state; and (4) licensure by reciprocity agreements in which states agree to grant licenses to each other. See *TrendWatch: Realizing the Promise of Telehealth: Understanding the Legal and Regulatory Challenges*, AM. HOSP. ASS'N, May 2015, at 5–6, <http://www.aha.org/research/reports/tw/15may-tw-telehealth.pdf> [<https://perma.cc/2SYX-6GSU>] [hereinafter *TrendWatch: Legal and Regulatory Challenges*].

¹⁶ See Robert Kocher, *Doctors Without State Borders: Practicing Across State Lines*, HEALTH AFF. BLOG (Feb. 18, 2014), <http://healthaffairs.org/blog/2014/02/18/doctors-without-state-borders-practicing-across-state-lines/> [<https://perma.cc/VHF6-YQ7H>] (arguing that more states should recognize out-of-state physician licenses to overcome the licensing hurdle). On July 15, 2015, Senator Mazie Hirono (D-HI) and Representative Devin Nunes (R-CA) introduced the TELEmedicine for MEDicare Act of 2015, a bill that would permit certain Medicare providers to provide telemedicine services across state borders without being licensed in that patient's state. TELEmedicine for MEDicare Act of 2015, S. 1778, 114th Cong. (2015); TELEmedicine for MEDicare Act of 2015, H.R. 3081, 114th Cong. (2015).

Additionally, telemedicine reimbursement varies for Medicaid, Medicare, and private insurance.¹⁷ Medicaid provides states the flexibility to decide what telemedicine services they will cover, at what rates they will reimburse providers, and whether telemedicine services are geographically restricted.¹⁸ Private insurance has expanded telemedicine coverage.¹⁹ Private payers in half of the states benefit from parity laws, which require commercial insurers to cover telemedicine services to the same extent as insurers would cover in-person services.²⁰ Medicare currently limits telemedicine coverage to certain rural areas where the patient must be at a clinic.²¹ Consequently, less than one percent of Medicare beneficiaries take advantage of telemedicine.²²

¹⁷ See Schumacher, *supra* note 13, at 425 (explaining that reimbursement for telemedicine is essential because providers will not offer patients services without guaranteed compensation). Absent reimbursement, telemedicine's growth is restricted and current telemedicine projects are unsustainable because current funding will diminish. See *id.* Reimbursement refers to the payment that health care providers receive in return for covered services rendered to the insured. See *Financing and Reimbursement*, MEDICAID, <https://www.medicaid.gov/medicaid-chip-program-information/by-topics/financing-and-reimbursement/financing-and-reimbursement.html> [<https://perma.cc/7TQR-9ASB>] (last visited Feb. 29, 2016) (explaining that states reimburse providers for services provided to Medicaid recipients); *How Original Medicare Works*, MEDICARE, <https://www.medicare.gov/sign-up-change-plans/decide-how-to-get-medicare/original-medicare/how-original-medicare-works.html> [<https://perma.cc/46RU-6ERZ>] (last visited Feb. 29, 2016) (stating that Medicare providers are compensated by filing claims for covered services provided to Medicare beneficiaries).

¹⁸ *TrendWatch: Legal and Regulatory Challenges*, *supra* note 15, at 2; see *Telemedicine*, MEDICAID, <https://www.medicaid.gov/medicaid-chip-program-information/by-topics/delivery-systems/telemedicine.html> [<https://perma.cc/KL2P-9KTA>] (last visited Sept. 25, 2016) (noting that reimbursing telemedicine under Medicaid is each state's choice). As a result, telemedicine reimbursement varies widely between states. *TrendWatch: Legal and Regulatory Challenges*, *supra* note 15, at 2. See generally CTR. FOR CONNECTED HEALTH POLICY, STATE TELEHEALTH LAWS AND MEDICAID PROGRAM POLICIES (2015), <http://cchpca.org/sites/default/files/resources/STATE%20TELEHEALTH%20POLICIES%20AND%20REIMBURSEMENT%20REPORT%20FINAL%20%28c%29%20JULY%202015.pdf> [<https://perma.cc/X4BJ-65QL>] (reporting how each state's Medicaid program reimburses telemedicine).

¹⁹ *TrendWatch: Legal and Regulatory Challenges*, *supra* note 15, at 2.

²⁰ *Id.*; see Nathaniel M. Lacktman, *Delaware Enacts Telehealth Commercial Insurance Parity Law*, NAT'L L. REV. (July 8, 2015), <http://www.natlawreview.com/article/delaware-enacts-telehealth-commercial-insurance-parity-law> [<https://perma.cc/2JK6-LXLE>] [hereinafter Lacktman, *Commercial Insurance Parity*] (explaining Delaware's parity law); see also Carl Benjamin Lewis, Note, *Private Payer Parity in Telemedicine Reimbursement: How State-Mandated Coverage Can Be the Catalyst for Telemedicine Expansion*, 46 U. MEM. L. REV. 471, 472, 494–98 (2015) (explaining private payer parity statutes and providing model legislation for states without parity laws).

²¹ See Frist, *A Solution*, *supra* note 9.

²² See Phil Galewitz, *Medicare Slow to Adopt Telemedicine Due to Cost Concerns*, KAISER HEALTH NEWS (June 23, 2015), <http://khn.org/news/medicare-slow-to-adopt-telemedicine-due-to-cost-concerns/> [<https://perma.cc/8UVB-QLCU>] ("In 2012 . . . Medicare paid about \$5 million for telemedicine services—barely a blip compared with the program's total spending of \$466 billion . . .").

This Note analyzes the utilization of telemedicine to promote health care access for Medicare beneficiaries, and argues that legislative and regulatory changes are needed to align current Medicare policies with the ACA's promotion of technology.²³ Part I of this Note provides an overview of telemedicine's growth in the United States, describes how telemedicine is promoting health care access, and sets forth the current state of Medicare reimbursement for telemedicine.²⁴ Part II introduces the ACA, discusses how telemedicine can achieve the ACA's goals of improving access and quality while reducing costs, and examines current and pending efforts to resolve these inconsistencies.²⁵ Part III argues that modifications to Medicare's coverage and payment structures are needed to reconcile current Medicare law with the ACA, such as increasing the services reimbursed and eliminating practice and geographical limits on reimbursement.²⁶

I. TELEMEDICINE AND ACCESS TO HEALTH CARE IN THE UNITED STATES

Technology has transformed health care in the United States.²⁷ As technology advances and patients become more tech-savvy, a growing number of individuals are demanding access to telemedicine services.²⁸ This Part presents an overview of telemedicine and its relationship with Medicare.²⁹ Section A provides a brief history and definition of telemedicine.³⁰ Section B discusses the challenges of accessing health care in the United States and how telemedicine addresses this problem.³¹ Section C provides an overview of Medicare and its current telemedicine policies.³²

²³ See *TrendWatch: Telehealth for Hospitals*, *supra* note 5, at 7 (advocating for legislative and regulatory changes to reconcile the ACA with Medicare's reimbursement policies for telemedicine).

²⁴ See *infra* notes 27–78 and accompanying text.

²⁵ See *infra* notes 79–146 and accompanying text.

²⁶ See *infra* notes 147–187 and accompanying text.

²⁷ See Hoffmann & Rowthorn, *supra* note 15, at 1 (noting that research over the past fifty years has focused on the integration of health care and technology to provide alternatives to requiring patients to see their physicians in-person).

²⁸ See Nathaniel M. Lacktman, *Five Telemedicine Trends Transforming Health Care in 2016*, NAT'L L. REV. (Nov. 16, 2015), <http://www.natlawreview.com/article/five-telemedicine-trends-transforming-health-care-2016> [<https://perma.cc/CTS7-QU96>] [hereinafter Lacktman, *Telemedicine Trends*] (projecting that the telemedicine market will grow from \$14.3 billion in 2014 to \$36.2 billion in 2020). Telemedicine is broadly defined as the use of technology in health care to deliver clinical services remotely. See *About Telemedicine*, AM. TELEMEDICINE ASS'N, <http://www.amricantelemed.org/about/telehealth-faqs-> [<https://perma.cc/HK3J-EFY5>] (last visited Oct. 14, 2016).

²⁹ See *infra* notes 33–78 and accompanying text.

³⁰ See *infra* notes 33–44 and accompanying text.

³¹ See *infra* notes 45–60 and accompanying text.

³² See *infra* notes 61–78 and accompanying text.

A. The Rise of Telemedicine

The first reference to telemedicine was in a 1950 medical publication, which detailed the transmission of radiology images by telephone.³³ Telemedicine did not take off, however, until major technology advances were made in the 1990s and early 2000s, including video communications in high definition and the quick and accurate transmission of data.³⁴ Other factors to its growth included lower costs for data transmission and the development of health care coverage for telemedicine.³⁵ Furthermore, an increasing number of patients embraced technology's integration with health care as they became more tech-savvy by regularly using the Internet and communicating virtually through smartphone applications.³⁶ The utilization of telemedicine in health care is expected to keep growing with revenue projected to increase from \$240 million in 2013 to \$1.9 billion in 2018.³⁷ With significant growth projected, technology will continue evolving to improve health care delivery.³⁸

³³ Chul-Young Roh, *Telemedicine: What It Is, Where It Came From, and Where It Will Go*, 6 COMP. TECH. TRANSFER & SOC'Y 35, 37 (2008). Throughout the 1950s and 1960s, medical schools and hospitals started utilizing technologies by transmitting neurological images through two-way, closed-circuit televisions and by monitoring patients remotely. *Id.* For example, in 1964, a hospital and a university established a 112-mile link for virtually exchanging services including speech therapy, neurological exams, consultations, and continuing education. *Id.* In the 1960s and 1970s, NASA was heavily involved in the development of telemedicine. *Id.* at 37–38. For example, NASA developed techniques for remotely monitoring astronauts in outer space. Sam Servello, *Is Telemedicine the Next Big Thing . . . Again?*, 10 ABA SCITECH LAW. 1, 2 (2014) (describing NASA's use of technology to share vital sign data from astronauts to scientists on earth to understand the health effects of spaceflight). NASA also partnered with the U.S. Indian Health Services through the Space Technology Applies to Rural Papago Advanced Health Care project, which provided residents in an isolated Native American reservation with medical services through satellite-based communications. *Id.*

³⁴ See Servello, *supra* note 33, at 2 (noting that before the 1990s, the limitations on internet speed and reliable connectivity hindered the growth of telemedicine). The U.S. military has also advanced telemedicine through the Telemedicine & Advanced Technology Research Center of the U.S. Army. *Id.* at 3. In 2013, for example, telemedicine coverage was expanded for veterans under the National Defense Authorization Act to "help those suffering from PTSD, reducing any stigma a veteran may perceive from walking into a mental health professional's office that may otherwise be an impediment to their seeking care." *Id.*

³⁵ See Roh, *supra* note 33, at 38 (stating that the interest in telemedicine increased once commercial insurance companies, Medicare, and Medicaid started reimbursing providers for telemedicine services).

³⁶ See Servello, *supra* note 33, at 3–4 (projecting that more and more people will expect telemedicine services from their providers).

³⁷ Bruce Japsen, *ObamaCare, Doctor Shortage to Spur \$2 Billion Telehealth Market*, FORBES (Dec. 22, 2013), <http://www.forbes.com/sites/brucejapsen/2013/12/22/obamacare-doctor-shortage-to-spur-2-billion-telehealth-market/#6206a88b15fa> [https://web.archive.org/web/20161016151432/http://www.forbes.com/forbes/welcome/?toURL=http://www.forbes.com/sites/brucejapsen/2013/12/22/obamacare-doctor-shortage-to-spur-2-billion-telehealth-market/&refURL=&referrer=]. The number of patients is also projected to increase from 250,000 in 2013 to 3.2 million in 2018. *Id.*

³⁸ See THE ECONOMIST INTELLIGENCE UNIT, POWER TO THE PATIENT: HOW MOBILE TECHNOLOGY IS TRANSFORMING HEALTHCARE 12, 15 (2015), <https://www.eiuperspectives.economist>.

As a result of telemedicine's continuous development, the definition of telemedicine is constantly evolving.³⁹ Telemedicine is broadly defined as the use of technology in health care to remotely deliver clinical services.⁴⁰ Telemedicine is typically divided into two categories: real-time communication and store-and-forward services.⁴¹ Real-time, or synchronous, communication includes remote virtual care between practitioner and patient by phone or videoconference, and it is a common practice for patients in rural areas.⁴² Store-and-forward services, or asynchronous communications, do not require real-

com/sites/default/files/HowMobileisTransformingHealthcare.pdf [https://perma.cc/DF39-G4CB] [hereinafter POWER TO THE PATIENT] (presenting the challenges and promises of telemedicine, and ultimately arguing that technology will improve health outcomes, reduce costs, and transform health care from being reactive to proactive); Servello, *supra* note 33, at 4 (highlighting a case study which found that remote patient monitoring is more beneficial in managing patient care and that telemedicine patients spent less time in the hospital); Jessica Davis, *10 Top Healthcare Technology Advances for 2016, According to ECRI*, HEALTHCARE IT NEWS (Jan. 7, 2016), <http://www.healthcareitnews.com/news/10-top-healthcare-technology-advances-2016-according-ecri> [https://perma.cc/C5ZY-MVBJ] (providing a list of ten technological advances in health care technology).

³⁹ See Roh, *supra* note 33, at 38. Federal and state policymakers, practitioners, and even governmental agencies define telemedicine differently. See Schumacher, *supra* note 13, at 416 (noting that the definition of telemedicine is not absolute); *TrendWatch: Telehealth for Hospitals*, *supra* note 5, at 1–2 (providing a number of telemedicine definitions). The Federation of State Medical Boards defines telemedicine as “the practice of medicine using electronic communication, information technology or other means, between a physician in one location and a patient in another location with or without an intervening health care provider.” FED’N STATE MED. BDS., MODEL POLICY FOR THE APPROPRIATE USE OF TELEMEDICINE TECHNOLOGIES IN THE PRACTICE OF MEDICINE 1, 2 (2014), https://www.fsmb.org/Media/Default/PDF/FSMB/Advocacy/FSMB_Telemedicine_Policy.pdf [https://perma.cc/Y6ZX-7CZR]. The American Telemedicine Association, an international advocacy organization for advanced remote medical technologies, defines telemedicine as “the remote delivery of health care services and clinical information using telecommunication technology.” *About Telemedicine*, *supra* note 28.

⁴⁰ See *About Telemedicine*, *supra* note 28. Some use the terms telemedicine and telehealth interchangeably, but telehealth’s scope is often broader than telemedicine, including both clinical and non-clinical services. See *What Is Telehealth? How Is Telehealth Different from Telemedicine?*, HEALTHIT, <https://www.healthit.gov/providers-professionals/faqs/what-telehealth-how-telehealth-different-telemedicine> [https://perma.cc/AYA4-7RX5] (last visited Nov. 22, 2015) (“[T]elehealth can refer to remote non-clinical services, such as provider training, administrative meetings, and continuing medical education, in addition to clinical services.”); *How Does Telehealth Differ from Telemedicine?*, HEALTH RESOURCES & SERVS. ADMIN., <http://www.hrsa.gov/healthit/toolbox/RuralHealthIT/toolbox/Telehealth/howdoestelehealthdiffer.html> [https://perma.cc/E35Y-JCQM] (last visited Nov. 22, 2015) (defining telemedicine as “clinical applications of technology” and excluding other services like patient and provider education). For the sake of consistency, this Note uses the term telemedicine rather than telehealth and focuses on the use of technology in clinical settings.

⁴¹ See Hoffmann & Rowthorn, *supra* note 15, at 2–3 (explaining the two categories of telemedicine).

⁴² See *id.* at 3 (noting that real-time communication is not limited to communications between patients and providers and that providers also use real-time communication for remote mentoring). Real-time communication can be used for consultations, diagnosis, prescribing, and treatment. *TrendWatch: Telehealth for Hospitals*, *supra* note 5, at 3 (describing real-time communication as including remote consults, telepsychiatry, telehomecare, and telecardiology).

time exchanges and involve the transmission of medical data, such as x-rays and photos that can be later assessed by providers.⁴³ Asynchronous communication also includes remote patient monitoring, which involves collecting a patient's health data that is then transmitted to a health care provider in a different location, enabling the provider to remotely monitor the patient.⁴⁴

B. Telemedicine's Potential to Improve Health Care Access

Telemedicine's exponential growth can also be attributed to the current state of health care in the United States.⁴⁵ The United States spends more money than any other country in the world on health services, yet Americans still struggle to access affordable care.⁴⁶ Individuals struggling to access health services include the twenty-five percent of America's population living in rural communities and those in urban communities who opt out of seeking

⁴³ See Hoffmann & Rowthorn, *supra* note 15, at 2 (noting that unlike virtual consultations, store-and-forward services do not require communication to be exchanged simultaneously). Store-and-forward services are typically used for diagnosis and treatment decisions in specialties like dermatology, radiology, and pathology. *Id.* at 3.

⁴⁴ *TrendWatch: Telehealth for Hospitals*, *supra* note 5, at 3. Remote patient monitoring is typically used to manage chronic conditions such as heart disease and diabetes. *Id.*

⁴⁵ See Amar Gupta & Deth Sao, *The Constitutionality of Current Legal Barriers to Telemedicine in the United States: Analysis and Future Directions of Its Relationship to National and International Health Care Reform*, 21 HEALTH MATRIX 385, 389–91 (2011) (attributing the rise of telemedicine to “the rising costs and failings of the U.S. health care system”); Felice J. Freyer, *It Costs You \$43 Every Time You Wait for the Doctor*, BOS. GLOBE (Oct. 5, 2015), <https://www.bostonglobe.com/metro/2015/10/05/study-puts-dollar-value-time-spent-waiting-for-doctor/1f7KB4aU9mkY5qK8CqDYUO/story.html> [<https://perma.cc/9XAN-9WQL>] (highlighting research that calculated that the “typical visit to a doctor consumes 121 minutes of the patient's time—37 minutes in travel, 64 minutes waiting for care or filling out forms, and only 20 minutes face to face with the physician”).

⁴⁶ See DAVIS ET AL., *supra* note 8, at 7–8 (stating that the United States outspends all other countries on health care, yet underperforms compared to other developed countries on measures of access, efficiency, and quality of care); Gupta & Sao, *supra* note 45, at 390 (noting that in 2008 the United States spent over \$2.3 trillion on health care, which amounts to 16.2% of the country's Gross Domestic Product). Also, unlike other developed countries, the United States does not offer universal health insurance coverage. DAVIS ET AL., *supra* note 8, at 8. Although the ACA has improved coverage, the United States continues to underperform. *Id.*; see RACHEL GARFIELD & ANTHONY DAMICO, THE COVERAGE GAP: UNINSURED POOR ADULTS IN STATES THAT DO NOT EXPAND MEDICAID—AN UPDATE 5 (Kaiser Comm'n on Medicaid & Uninsured Jan. 2016), <http://files.kff.org/attachment/issue-brief-the-coverage-gap-uninsured-poor-adults-in-states-that-do-not-expand-medicaid-an-update-2> [<https://perma.cc/DQM8-NVJ7>] (noting that the ACA Medicaid expansion did not lower the number of low-income uninsured adults as planned because the expansion became a state option); Kimberly Leonard, *Study: Obamacare Hasn't Solved Health Care Disparities*, U.S. NEWS & WORLD REP. (Apr. 9, 2015), <http://www.usnews.com/news/blogs/damaine/2015/04/09/study-obamacare-hasnt-solved-health-care-disparities> [<https://perma.cc/XJY6-3A3A>] (reporting that language, financial, and technological barriers continue to hinder health care access).

care because of costs associated with seeing a physician in-person, including taking time off from work and arranging travel.⁴⁷

Proponents of telemedicine argue that technology's integration with health care is a tool that can make accessing care much more convenient for typically underserved populations.⁴⁸ Telemedicine allows providers and patients to overcome geographical, temporal, and resource barriers.⁴⁹ By no longer relying on in-person communication, medically underserved patients have better access to previously inconvenient and expensive care.⁵⁰ Providers located in remote or isolated areas also benefit from telemedicine because they are able to remotely consult with other providers to better care for patients in communities where specialists are typically sparse.⁵¹

⁴⁷ See Gupta & Sao, *supra* note 45, at 390–91 (noting that because trauma centers are usually located in urban areas, rural patients must overcome travel costs to access certain medical care); Joy Elizabeth Matak, Note, *Telemedicine: Medical Treatment Via Telecommunications Will Save Lives, but Can Congress Answer the Call?: Federal Preemption of State Licensure Requirements Under Congressional Commerce Clause Authority & Spending Power*, 22 VT. L. REV. 231, 236 (1997) (stating that patients in rural communities face challenges in accessing care because of the lack of health care providers serving their communities); Samina T. Syed et al., *Traveling Towards Disease: Transportation Barriers to Health Care Access*, 38 J. COMMUNITY HEALTH 976, 976 (2013) (attributing transportation issues as a barrier to health care access because they could lead to missed appointments, delayed care, and overall poor management of patients with chronic conditions).

⁴⁸ REPORT TO CONGRESS: TELEMEDICINE, *supra* note 5, at 4; see Kirsten Rabe Smolensky, *Telemedicine Reimbursement: Raising the Iron Triangle to a New Plateau*, 13 HEALTH MATRIX 371, 397 (2003) (highlighting the difficulties in accessing care for individuals in rural areas who must drive long distances); Frist, *A Solution*, *supra* note 9 (arguing that telemedicine provides patients access to primary care on their own terms that is more convenient and cheaper than in-person services). Even if a rural patient has insurance coverage, they may opt out of seeking care altogether because of the inconveniences associated with accessing care. See Smolensky, *supra*, at 397–98 (explaining how rural patients benefit from telemedicine).

⁴⁹ See Bashshur, *supra* note 11, at 87 (stating that telemedicine will mostly benefit the “medically underserved,” such as the elderly, inner-city residents, and those in rural areas as well as prisons). Telemedicine specifically addresses the needs of elderly patients by allowing the elderly to remotely monitor their vital signs and virtually communicate with health care professionals. Maria M. Bujnowska-Fedak & Urszula Grata-Borkowska, *Use of Telemedicine-based Care for the Aging and Elderly: Promises and Pitfalls*, 3 SMART HOMECARE TECH. & TELEHEALTH 91, 93 (2015).

⁵⁰ Bashshur, *supra* note 11, at 87 (explaining how patients benefit from telemedicine); Rashid L. Bashshur & Gary W. Shannon, *National Telemedicine Initiatives: Essential to Healthcare Reform*, 15 TELEMEDICINE & E-HEALTH 600, 601 (2009) (noting that telemedicine improves health care access; encourages patients to be proactive with their health, especially with managing chronic illnesses; decreases the time, distance, and costs associated with seeking care; and prevents duplicative services and unnecessary visits to emergency rooms). For example, in rural Arizona, a study found that home monitors for patients with chronic illnesses saved patients money and decreased the number of days they spent in hospitals and emergency rooms. POWER TO THE PATIENT, *supra* note 38, at 6. Patients were less likely to call 911; instead of assuming changes in vital signs meant something life-threatening, patients virtually connected with nurses to understand whether the change required immediate attention. *Id.*

⁵¹ Bashshur, *supra* note 11, at 87 (noting that telemedicine may also help providers manage their work loads); Clint MacKinney, *Telemedicine Is Changing Emergency Care in Rural America*, STAT

The shortage of primary care physicians in the United States also hinders access to care.⁵² The shortage is exacerbated by the expansion of coverage under the ACA and by the aging American population that will eventually need more services.⁵³ With fewer physicians available, individuals in underserved communities increasingly have to wait long periods of time to see providers.⁵⁴ Proponents of telemedicine expansion contend that the lack of primary care physicians results in unnecessary and expensive visits to urgent care and emergency departments for minor concerns.⁵⁵ Instead, telemedicine

(May 12, 2016), <https://www.statnews.com/2016/05/12/telemedicine-emergency-care/> [<https://perma.cc/5LU7-S2SY>] (arguing that rural clinicians benefit from remote access to other providers because it allows them to provide better care while building relationships and reducing feelings of isolation); see Servello, *supra* note 33, at 3 (stating that providers can use telemedicine for follow-up appointments and for monitoring chronic illness patients).

⁵² See Servello, *supra* note 33, at 3 (estimating that there will be a shortage of 45,000 primary care physicians by 2020). The Health Resources and Services Administration estimates that 20% of Americans live in areas with a shortage of primary care doctors, and 30% live in areas lacking sufficient mental health providers. Michael Ollove, *Are There Enough Doctors for the Newly Insured?*, KAISER HEALTH NEWS (Jan. 3, 2014), <http://khn.org/news/doctor-shortage-primary-care-specialist/> [<https://perma.cc/YM4B-EXDD>].

⁵³ See *Physician Supply and Demand Through 2025: Key Findings*, ASS'N AM. MED. COLLEGES, <https://www.aamc.org/download/426260/data/physiciansupplyanddemandthrough2025keyfindings.pdf> [<https://perma.cc/8JTD-P6RD>] (last visited Nov. 22, 2015) (“Total physician demand is projected to grow by up to 17 percent [by 2025], with population aging/growth accounting for the majority.”). The Congressional Budget Office projects that as a result of the ACA, “26 million more [people] will be insured each year from 2017 through 2024.” CONG. BUDGET OFFICE, *UPDATED ESTIMATES OF THE EFFECTS OF THE INSURANCE COVERAGE PROVISIONS OF THE AFFORDABLE CARE ACT 3* (Apr. 2014), http://www.cbo.gov/sites/default/files/cbofiles/attachments/45231-ACA_Estimates.pdf [<https://perma.cc/T2AV-GWG3>].

⁵⁴ Smolensky, *supra* note 48, at 397.

⁵⁵ See Frist, *Game-Changer*, *supra* note 13 (noting that patients without primary care providers utilized emergency rooms for both non-emergency and emergency care). “[T]he ER is also the most expensive and least efficient way to provide non-emergent care, costing from \$1,500 to \$3,000 on average compared to \$130 to \$190 for a PCP visit. A telemedicine visit can cost as little as \$40.” *Id.* Despite the general acceptance and positive view towards increasing health care accessibility, opponents of telemedicine argue that increased access will lead to overutilization and to increased costs. See AM. HOSP. ASS'N, *TELEHEALTH: HELPING HOSPITALS DELIVER COST-EFFECTIVE CARE 3* (Apr. 2016), <http://www.aha.org/content/16/16telehealthissuebrief.pdf> [<https://perma.cc/J6VN-GD5B>] [hereinafter *TELEHEALTH: HELPING HOSPITALS*] (attributing telemedicine opposition to the uncertainty around cost); Galewitz, *supra* note 22 (highlighting concerns that telemedicine would increase Medicare costs because access to virtual care would be too convenient and lead individuals to use more services). A number of case studies, however, suggest that cost concerns may be overstated. See, e.g., *TELEHEALTH: HELPING HOSPITALS*, *supra*, at 3 (reporting that telemedicine visits led to fewer follow-up appointments as compared to physician office visits and emergency department visits); Robert Pearl, *Kaiser Permanente Northern California: Current Experiences with Internet, Mobile, and Video Technologies*, 33 *HEALTH AFF.* 251, 254–55 (2014) (finding that access to telemedicine led to more patient visits, but that it facilitated better quality care, and therefore, minimized costs overtime). Opponents also argue that telemedicine is not as effective as in-person care. See E. Ray Dorsey & Eric J. Topol, *State of Telehealth*, 375 *NEW ENG. J. MED.* 154, 156 (2016) (acknowledging that further research is needed on the clinical barriers to telemedicine to ensure quality care and to prevent abuse); Jeremy M. Kahn,

could reduce these unnecessary expenses by providing a convenient alternative for patients.⁵⁶

In addition to facing barriers to access and the lack of primary care physicians, elderly patients are also burdened by expensive chronic illnesses that require constant oversight.⁵⁷ Telemedicine specifically addresses the needs of elderly patients through remote monitoring of vital signs and accessibility to health professionals through virtual communications.⁵⁸ For exam-

Virtual Visit—Confronting the Challenges of Telemedicine, 372 NEW ENG. J. MED. 1684, 1684–85 (2015) (challenging the argument that telemedicine will decrease costs, increase access, and improve the quality of care and demanding more research to ensure that telemedicine improves patient care). Though proponents of telemedicine agree that more studies are needed to fully understand the effectiveness of all telemedicine services, a recent study by the Agency of Healthcare Research and Quality shows that quality concerns may also be overstated. See AGENCY FOR HEALTHCARE RESEARCH & QUALITY, *TELEHEALTH: MAPPING THE EVIDENCE FOR PATIENT OUTCOMES FROM SYSTEMATIC REVIEWS* 45–47 (June 2016), <https://effectivehealthcare.ahrq.gov/ehc/products/624/2254/telehealth-report-160630.pdf> [<https://perma.cc/DSS8-HVB2>] [hereinafter *TELEHEALTH: MAPPING THE EVIDENCE*] (studying fifty-eight systematic reviews that evaluate telemedicine and concluding that telemedicine is effective for remotely monitoring, communicating, and counseling patients with chronic conditions and for psychotherapy for behavioral health). The study recommended further research for other services, including consultation and urgent care. *Id.*

⁵⁶ See Frist, *Game-Changer*, *supra* note 13. For example, a health system in a rural community invested \$500 million in telemedicine, allowing clinicians to remotely assist patients and rural hospitals. Angela Boothe, *Curbing the Provider Shortage: More Coverage for Telehealth Services*, AM. ACTION F. (July 9, 2014), <http://americanactionforum.org/insights/curbing-the-provider-shortage-more-coverage-for-telehealth-services/> [<https://perma.cc/H2P4-QUMK>]. Instead of traveling long distances, patients could have a virtual consultation. See Beth Kutscher, *Wiring in Rural Patients*, MOD. HEALTHCARE (Mar. 8, 2014), <http://www.modernhealthcare.com/article/20140308/MAGAZINE/303089979> [<https://perma.cc/2S5M-99ZR>].

⁵⁷ See Bujnowska-Fedak & Grata-Borkowska, *supra* note 49, at 93 (noting that the majority of seniors have at least two chronic conditions). “The federal government estimates the physician supply will increase by 7 percent in the next 10 years. But the number of Americans over 65 will grow by about 36 percent” Ollove, *supra* note 52.

⁵⁸ See Bujnowska-Fedak & Grata-Borkowska, *supra* note 49, at 94 (highlighting how telemedicine can address health problems specific to seniors by helping them remain in their homes as long as possible). Despite concerns that seniors will not adopt telemedicine technologies, devices are increasingly becoming senior-friendly. *How Innovation Is Helping Seniors Live Longer and Healthier—At Home*, FORBES (Oct. 1, 2015), <http://www.forbes.com/sites/philips/2015/10/01/how-innovation-is-helping-seniors-live-longer-and-healthier-at-home/#59321d386785> [<https://perma.cc/UPA7-3B6E>] [hereinafter *Innovation Helping Seniors*] (improving elderly care with technology); see also Tsipi Heart & Efrat Kalderon, *Older Adults: Are They Ready to Adopt Health-Related ICT?*, 82 INT’L J. MEDICAL INFO. e209, e210 (2013) (noting that increased age may be negatively related to technology use); Andrea Smith, *Addressing the Healthcare Needs of an Aging Population*, CHIRON HEALTH (Nov. 30, 2015), <http://chironhealth.com/blog/addressing-the-healthcare-needs-of-an-aging-population/> [<https://perma.cc/H93A-MGXU>] (acknowledging that the elderly are less comfortable with technology). Also, the promise of reducing health care costs while allowing seniors to stay at home is leading to greater acceptance of various technologies. See *Innovation Helping Seniors*, *supra*; Eric Wicklund, *Using mHealth to Help Seniors Age in Place*, MHEALTH INTELLIGENCE (Dec. 10, 2015), <http://mhealthintelligence.com/news/using-mhealth-to-help-seniors-age-in-place> [<https://perma.cc/P5T8-N85P>] (highlighting a 2010 AARP study that found 90% of seniors desired to stay at home for as long as possible); see also Miha

ple, monitoring chronic illness can help identify changes in medical status and manage disorders to prevent expensive emergency room visits.⁵⁹ Overall, efficient and direct access to health services—without having to make an appointment, arrange travel, and wait in physician offices—is a particularly appealing option for the elderly.⁶⁰

C. Medicare Reimbursement for Telemedicine

Medicare, a federal health insurance program, was created in 1965 under Title XVIII of the Social Security Act to respond to the growing number of retired and aging Americans who were unable to afford health care.⁶¹ In general, Medicare provides and guarantees health care to American citizens over the age of sixty-five and those under sixty-five with disabilities.⁶² Medicare covers fifty-five million Americans, and its spending accounts for

Cimperman et al., *Older Adults' Perceptions of Home Telehealth Services*, 19 TELEMEDICINE & E-HEALTH 786, 789 (2013) (suggesting that the adoption of telemedicine by seniors will increase if tablets have intuitive designs and if seniors have easy access to technical support).

⁵⁹ See Bujnowska-Fedak & Grata-Borkowska, *supra* note 49, at 96. Banner Health, an Arizona hospital system, successfully implemented a program targeting elderly patients with multiple chronic conditions. *Innovation Helping Seniors*, *supra* note 58. Patients were each given a tablet to monitor their health and to check in with doctors if necessary. *Id.* The tablets run one program and are specifically designed to appeal to seniors with large on-screen buttons and text. *Id.* Data is collected and sent to remote health care professionals who monitor and recommend early interventions if necessary. *Id.*

⁶⁰ See Bujnowska-Fedak & Grata-Borkowska, *supra* note 49, at 94 (promoting home-based elderly care).

⁶¹ See Amy J. Chaho, *To Pay or Not to Pay: Medicare and the Preventable Adverse Event: A Rational Decision or Dangerous Philosophical Change?*, 22 J.L. & HEALTH 91, 95 (2009) (highlighting similarities between the 1960s health care crisis for the elderly to today's problems of unaffordable care). The Centers for Medicare & Medicaid Services ("CMS"), a federal agency within the U.S. Department of Health and Human Services ("Health and Human Services"), is responsible for administering the Medicare program. Michael J. DeBoer, *Medicare Coverage Policy and Decision Making, Preventive Services, and Comparative Effectiveness Research Before and After the Affordable Care Act*, 7 J. HEALTH & BIOMEDICAL L. 493, 500–01 (2012) (noting that CMS is also responsible for administering parts of the Medicaid program and the Children's Health Insurance Program).

⁶² See 42 U.S.C. § 1395c (2012) (establishing Medicare coverage for individuals sixty-five years and older, those with disabilities, or individuals with end-stage renal disease); Chaho, *supra* note 61, at 95–96 (explaining how Medicare is similar to a private insurance company). Medicare is structured in four parts: Part A covers inpatient hospital stays; Part B covers outpatient services, physician visits, preventative services, and home health visits; Part C is the Medicare Advantage program, which covers Part A and B services through a private health plan; and Part D covers outpatient prescription drugs through private plans. *What's Medicare?*, MEDICARE, <https://www.medicare.gov/sign-up-change-plans/decide-how-to-get-medicare/whats-medicare/what-is-medicare.html> [https://perma.cc/H9FC-QZYU] (last visited Apr. 4, 2016). See generally Eleanor D. Kinney, *The Accidental Administrative Law of the Medicare Program*, 15 YALE J. HEALTH POL'Y, L. & ETHICS 111 (2015) (providing a historical overview of the Medicare program).

roughly fifteen percent of total federal spending.⁶³ Consequently, Medicare has significant power over the health care industry because it utilizes the congressional spending power to control health care reimbursement.⁶⁴ Medicare determines covered services and their corresponding payment rates for physicians and hospital care.⁶⁵ Accordingly, doctors and hospitals follow Medicare payment and quality requirements because large portions of patients are Medicare beneficiaries.⁶⁶

Although telemedicine reimbursement under Medicare has expanded over time, it remains limited.⁶⁷ Medicare coverage for telemedicine was first authorized with the passage of the Balanced Budget Act of 1997, which provided partial reimbursement for some telemedicine services in rural, federally designated Health Professional Shortage Areas (“Shortage Areas”).⁶⁸ As part of the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 (“BIPA”), coverage for telemedicine expanded to include ser-

⁶³ See *An Overview of Medicare*, HENRY J. KAISER FAM. FOUND. (Apr. 1, 2016), <http://kff.org/medicare/fact-sheet/medicare-at-a-glance-fact-sheet/> [<https://perma.cc/U7CE-DX6H>] (describing the characteristics of people on Medicare).

⁶⁴ See U.S. CONST. art. I § 8, cl. 1 (“The Congress shall have Power To lay and collect Taxes . . . to pay the Debts and provide for the common Defense and general Welfare of the United States.”). Congress can use its spending power to place conditions on federal funds. See *South Dakota v. Dole*, 483 U.S. 203, 206 (1987) (holding that Congress can place conditions on funds given to state governments). Medicare reimbursement refers to the payments providers receive for services provided to Medicare beneficiaries. See Ryan Mcaskill, *Examining Differences Between Medicare, Medicaid Reimbursement*, REVCYCLE INTELLIGENCE (Nov. 4, 2014), <http://revcycleintelligence.com/news/examining-differences-medicare-medicaid-reimbursement> [<https://perma.cc/DFZ7-FLMK>].

⁶⁵ Chaho, *supra* note 61, at 98–99 (describing Medicare’s influence on health care pricing).

⁶⁶ See *id.* at 98 (“Medicare has become the leader in the field of medical reimbursement and its negotiated prices have become the baseline by which other medical insurance agencies determine fair reimbursement for specific types of care and services.”).

⁶⁷ See Social Security Act of 1935 § 1834(m), 42 U.S.C. § 1395m (providing current reimbursement restrictions under Medicare); Steve Kreitner, *Telehealth Services Networks: A Promise Not Fully Delivered*, 39 MONT. LAW. 24, 25 (2014) (explaining that in order for a Medicare provider to get reimbursed for telemedicine, CMS must first approve telemedicine as appropriate for a specific service). Although Medicare beneficiaries are not utilizing telemedicine because of restrictive reimbursement, private insurers are increasingly reimbursing for telemedicine services. See Galewitz, *supra* note 22 (“About 37 percent of large employers said that they expect to offer their employees a telemedicine benefit this year . . .”). As of October 2015, twenty-nine states had enacted their own laws expanding telemedicine. See Lactman, *Commercial Insurance Parity*, *supra* note 20 (explaining that state legislatures are increasingly enacting parity laws that require commercial insurers to reimburse telemedicine services at the same rates as in-person services).

⁶⁸ Balanced Budget Act of 1997, Pub. L. No. 105-33, § 4206, 111 Stat. 251, 377–78 (1997); see Regina A. Bailey, *Cybermedicine: What You Need to Know*, 23 HEALTH LAW. 13, 15 (2011) (describing coverage as restricted to teleconsultations). Health Professional Shortage Areas (“Shortage Areas”) have a shortage of health care providers, and the areas “may be urban or rural areas, population groups or medical or other public facilities.” *Shortage Designation: Health Professional Shortage Areas & Medically Underserved Areas/Populations*, HEALTH RESOURCES & SERVS. ADMIN., <http://www.hrsa.gov/shortage/> [<https://perma.cc/6SJL-XZQD>] (last visited Jan. 31, 2016) (noting that there are currently over 6100 designated primary care Shortage Areas).

vices provided outside of Metropolitan Statistical Areas (“Statistical Areas”).⁶⁹ BIPA limited where a patient could receive telemedicine services to designated “originating sites,” which include “hospitals; the office of a physician or other practitioner; critical access hospitals (CAHs); rural health clinics (RHCs); and federally qualified health centers (FQHCs).”⁷⁰ The Medicare Improvements for Patients and Providers Act of 2008 further expanded reimbursement by adding community mental health centers, skilled nursing facilities, and hospital-based and critical access hospital-based renal dialysis centers as originating sites.⁷¹

Medicare reimbursement today, however, remains mostly limited to real-time telemedicine services where the patient must receive the service at an authorized originating site that is located in a rural area.⁷² Reimbursement, therefore, excludes virtual care in individuals’ homes as well as most store-

⁶⁹ Medicare, Medicaid and SCHIP Benefits Improvement and Protection Act of 2000 (“BIPA”), Pub. L. No. 106-554, § 223, 114 Stat. 2763, 2763A–487–88 (2000); see Bailey, *supra* note 68, at 15 (noting that BIPA expanded reimbursement for teleconsultation, but that teleconsultation remained limited to real-time communications in rural areas). A Metropolitan Statistical Area (“Statistical Areas”) is an area with a core urban population of fifty thousand or more. *Metropolitan and Micropolitan Statistical Areas Main*, U.S. CENSUS BUREAU, <http://www.census.gov/population/metro/> [<https://perma.cc/UAS2-A5TT>] (last visited Jan. 31, 2016).

⁷⁰ *TrendWatch: Legal and Regulatory Challenges*, *supra* note 15, at 2.

⁷¹ Medicare Improvements for Patients and Providers Act of 2008, Pub. L. 110-275, § 149, 122 Stat. 2494, 2549 (2008).

⁷² Frist, *A Solution*, *supra* note 9; see also *Your Medicare Coverage*, MEDICARE, <https://www.medicare.gov/coverage/telehealth.html> [<https://perma.cc/UXC5-DGV4>] (last visited Jan. 30, 2016) (noting that individuals currently have coverage for a limited number of telemedicine services through Medicare Part B). These services include, but are not limited to: initial and follow-up inpatient consultation, office or other outpatient visits, kidney disease education, behavior assessment and intervention, psychotherapy, psychiatric diagnostic interview exam, end-stage renal disease, medical nutrition therapy, neurobehavioral status exam, alcohol and/or substance abuse, and depression screening. *Telehealth Services*, CTRS. FOR MEDICARE & MEDICAID SERVS., <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/telehealthsrvcfsht.pdf> [<https://perma.cc/2A4U-2UYG>] (last visited Jan. 31, 2016). Authorized originating sites are limited to: “The offices of physicians or practitioners; Hospitals; Critical Access Hospitals (CAHs); Rural Health Clinics; Federally Qualified Health Centers; Hospital-based or CAH-based Renal Dialysis Centers (including satellites); Skilled Nursing Facilities (SNFs); and Community Mental Health Centers (CMHCs).” *Id.* The originating site, or where the patient is located, must be in a Shortage Area or in a county outside of a Statistical Area. *What Are the Reimbursement Issues for Telehealth?*, HEALTH RESOURCES & SERVS. ADMIN., <http://www.hrsa.gov/healthit/toolbox/RuralHealthIT/toolbox/Telehealth/whatarethereimbursement.html> [<https://perma.cc/MX35-ADMG>] (last visited Oct. 17, 2016). Roughly 80% of Medicare beneficiaries live in Statistical Areas, and are thereby automatically prohibited from receiving telemedicine services that would be reimbursable. See *Transforming Health Care for Patients: 2016 Policy Priorities*, AM. TELEMEDICINE ASS’N, <https://higherlogicdownload.s3.amazonaws.com/AMERICANTELEMED/3c09839a-fffd-46f7-916c-692c11d78933/UploadedImages/Policy/2016%20Policy%20Priorities.pdf> [<https://perma.cc/AQ4X-HYWH>] [hereinafter *2016 Policy Priorities*] (last visited Oct. 16, 2016).

and-forward services.⁷³ Medicare only reimburses for services provided by a limited number of health care physicians and practitioners.⁷⁴ Reimbursement is further limited by the Centers for Medicare & Medicaid Services (“CMS”), which is responsible for approving each telemedicine service on a case-by-case basis through the annual physician fee schedule.⁷⁵ Approved services are given individual codes under the Current Procedural Terminology code or the Healthcare Common Procedure Coding System.⁷⁶ Currently, only seventy-five telemedicine services out of more than 10,000 service codes are approved for reimbursement.⁷⁷ As a result of these limitations, less than one percent of current Medicare beneficiaries take advantage of telemedicine.⁷⁸

⁷³ See *What Are the Reimbursement Issues for Telehealth?*, *supra* note 72 (noting that an originating site cannot be a patient’s home); *Telehealth Services*, *supra* note 72. Some store-and-forward services that Medicare covers include teleradiology and remote electrocardiogram (“EKG”) applications. See Kreitner, *supra* note 67, at 25 (noting that CMS requires store-and-forward services to “mimic the normal interactions between patients and their health-care providers,” and therefore technologies like remote EKG applications “are reimbursed . . . because those services don’t usually involve real time interactions with patients”).

⁷⁴ See *Bill Analysis of H.R. 2948—Medicare Telehealth Parity Act of 2015*, CTR. FOR CONNECTED HEALTH POL’Y 1, <http://cchpca.org/sites/default/files/resources/Thompson%20Bill%20HR%202948.pdf> [<https://perma.cc/C62D-WU9A>] [hereinafter *Bill Analysis of H.R. 2948*] (last visited Jan. 30, 2016) (listing the eligible providers: “Physicians, Nurse Practitioners, Physician Assistants, Nurse Midwives, Clinical Nurse Specialists, Clinical Psychologists, and Clinical Social Workers”).

⁷⁵ *TrendWatch: Legal and Regulatory Challenges*, *supra* note 15, at 2. Since 1992, Medicare has paid for physicians’ services under § 1848 of the Social Security Act, “Payment for Physicians’ Services.” 42 U.S.C. § 1395w-4. Each year, CMS must establish a fee schedule of payment amounts for physicians’ services for the following year, incorporating “geographic adjustments to reflect the variations in the costs of furnishing services in different geographic areas.” See Medicare Program; Revisions to Payment Policies Under the Physician Fee Schedule, 79 Fed. Reg. 67,550 (Nov. 13, 2014) (updating the fee schedules and re-codifying within the federal regulations which is done on an annual basis).

⁷⁶ *TrendWatch: Legal and Regulatory Challenges*, *supra* note 15, at 2.

⁷⁷ *Id.* This number includes the seven additional codes added in 2015 to reimburse Medicare physicians for “annual wellness visits, psychotherapy services . . . prolonged services in the office,” and chronic care patient management. Eric Wicklund, *CMS Boosts Telehealth in 2015 Physician Pay Schedule*, MHEALTHNEWS (Nov. 3, 2014), <http://www.mobihealthnews.com/news/cms-boosts-telehealth-2015-physician-pay-schedule> [<https://perma.cc/XKK5-SJTD>]; see Jennifer Bresnick, *CMS Offers Expanded Telehealth Coverage for Providers*, EHR INTELLIGENCE (Nov. 20, 2014), <https://ehrintelligence.com/news/cms-offers-expanded-telehealth-coverage-providers> [<https://perma.cc/77MD-ME6T>] (noting that despite reimbursement for chronic care management, these changes do not include data collection itself).

⁷⁸ Galewitz, *supra* note 22. Each year, Medicare pays on average \$6 million for telemedicine services. INST. OF MED. ET AL., THE ROLE OF TELEHEALTH IN AN EVOLVING HEALTH CARE ENVIRONMENT: WORKSHOP SUMMARY 32 (2012). About 14,000 Medicare beneficiaries had at least one telemedicine visit in 2009, for a total of 40,000 telemedicine visits, and 369 practitioners provided ten or more services, mostly for mental health care. *Id.* Psychologists, psychiatrists, and clinical social workers provided the most telemedicine services to Medicare beneficiaries. See *id.* Medicare’s limited reimbursement prevents seniors from benefiting from potentially cheaper and easier to access quality care that could improve their health and keep seniors in their homes longer. See Julie Potyraj, *Telemedicine: A Promising Model for Senior Health Care*, AGINGCARE.

II. LEGISLATIVE INCONSISTENCIES BETWEEN THE AFFORDABLE CARE ACT'S PROMOTION OF TELEMEDICINE AND REIMBURSEMENT UNDER MEDICARE

The ACA promotes the use of telemedicine by incentivizing providers to test and implement innovative delivery models that incorporate technology.⁷⁹ Despite these initiatives, the lack of reimbursement under Medicare has hindered innovation and health care access for Medicare beneficiaries.⁸⁰ This Part examines the legislative inconsistencies between the ACA and reimbursement under Medicare.⁸¹ Section A introduces the ACA and discusses the ACA provisions that address telemedicine.⁸² Section B discusses how telemedicine can help achieve the ACA's goals.⁸³ Section C examines the gap between the ACA and Medicare reimbursement and provides an overview of current efforts trying to resolve these inconsistencies.⁸⁴

A. Telemedicine in the ACA

Congress enacted the ACA to expand health care coverage and improve quality of care throughout the United States.⁸⁵ To improve the quality

COM, <https://www.agingcare.com/Articles/Telemedicine-A-Promising-Model-for-Senior-Health-Care-191659.htm> [<https://perma.cc/HS67-V9LM>] (last visited Feb. 29, 2016).

⁷⁹ See *TrendWatch: Telehealth for Hospitals*, *supra* note 5, at 6 (connecting the rise of telemedicine technologies to the ACA). In addition to expanding health coverage, the ACA includes provisions supporting the development of new health care models that cut costs and improve quality of care for patients. DeBoer, *supra* note 61, at 546. The ACA contains seven provisions directing health care systems to explore and implement telemedicine practices. Marino et al., *supra* note 14, at 278.

⁸⁰ *TrendWatch: Telehealth for Hospitals*, *supra* note 5, at 8 (noting how restrictive reimbursement under Medicare has hindered provider adoption); see Bashshur & Shannon, *supra* note 50, at 602 (arguing that telemedicine will remain limited without Medicare coverage).

⁸¹ See *infra* notes 85–146 and accompanying text.

⁸² See *infra* notes 85–101 and accompanying text.

⁸³ See *infra* notes 102–119 and accompanying text.

⁸⁴ See *infra* notes 120–146 and accompanying text.

⁸⁵ See generally Patient Protection and Affordable Care Act, 42 U.S.C. § 18001–18122 (2012) (overhauling the regulatory framework of the U.S. health care system). In order to expand coverage, the ACA included an individual mandate that required individuals who are not insured to either purchase insurance or pay a tax penalty. BARRY R. FURROW ET AL., *THE LAW OF HEALTH CARE ORGANIZATION AND FINANCE* 177 (7th ed. 2013); see *Nat'l Fed'n of Indep. Bus. v. Sebelius*, 132 S.Ct. 2566, 2594 (2012) (upholding the constitutionality of the individual mandate). The ACA also included tax credits to help individuals making up to 400% of the poverty level pay for private health insurance. See FURROW ET AL., *supra*, at 176–77. Another strategy was expanding Medicaid, “a means-tested public insurance program,” to cover all individuals under age sixty-five with adjusted gross incomes below 133% of the poverty level. *Id.* Historically, Medicaid was limited to the “worthy poor” and excluded able-bodied adults. See *id.* at 177. In 2012, the U.S. Supreme Court decision in *National Federation of Independent Business v. Sebelius* made Medicaid expansion a state option. 132 S.Ct. at 2608. Nevertheless, the individual mandate and Medicaid expansion shifted the United States’ view of health care from exclusive to

of care, the ACA encourages providers to shift from fee-for-service models to value-based models, and it includes provisions that support the use of technology as a way to improve the quality of care.⁸⁶ The ACA includes three provisions specific to Medicare that promote the use of technology as part of health care reform.⁸⁷ Sections 3021, 3022, and 3024 provide for the testing of innovative payment and care delivery models that increase access, improve quality, and potentially reduce health care costs.⁸⁸

Section 3021 established the Center for Medicare and Medicaid Innovation (“Innovation Center”) within CMS to test and evaluate new health care delivery models that would reduce federal health spending.⁸⁹ The Innovation

inclusive. Nicole Huberfeld & Jessica L. Roberts, *Health Care and the Myth of Self-Reliance*, 57 B.C. L. REV. 1, 3 (2016).

⁸⁶ See FURROW ET AL., *supra* note 85, at 129 (highlighting the ACA’s quality control efforts such as shifting to outcome standards); *TrendWatch: Telehealth for Hospitals*, *supra* note 5, at 6 (“The [ACA] has accelerated the use of telehealth technologies by incentivizing Medicare-participating hospitals and other providers to test and implement various types of clinically integrated care models.”). The ACA established at least thirty-five innovative pilot programs and demonstrations to test alternatives to pure fee-for-service models. See FURROW ET AL., *supra* note 85, at 460 (explaining that the ACA included plans that offered bonuses and penalties for controlling costs and improving care). Traditionally, fee-for-service had been the dominant model of physician payment, where the physician is paid for each service provided to a patient. Robert A. Berenson & Eugene C. Rich, *US Approaches to Physician Payment: The Deconstruction of Primary Care*, 25 J. GEN. INTERNAL MED. 613, 613 (2010). Consequently, fee-for-service models reward physicians by the number of patient encounters, rather than incentivizing physicians to provide quality care. See *id.* at 614 (recognizing that fee structures have not caught up with today’s medical practice).

⁸⁷ See Amy E. Zilis, *The Doctor Will Skype You Now: How Changing Physician Licensure Requirements Would Clear the Way for Telemedicine to Achieve the Goals of the Affordable Care Act*, 2012 U. ILL. J.L. TECH. & POL’Y 193, 199–201 (2012) (explaining the three provisions that support the use of technology in new health care delivery models). The ACA also has a provision specific to Medicaid that promotes the use of technology. *Id.* at 198. The provision, § 2703, is intended to improve quality of care for Medicaid patients by providing states a “health home” option for coordinating care for patients with chronic conditions. *Id.*; *Health Homes*, MEDICAID, <https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Long-Term-Services-and-Supports/Integrating-Care/Health-Homes/Health-Homes.html> [<https://perma.cc/74R6-Q3YQ>] (last visited Jan. 30, 2016) (explaining that health home providers are responsible for integrating and coordinating all of a Medicaid beneficiary’s care for the course of their entire life). States are required to include, as part of their proposal, how they will integrate technology to improve care coordination. See 42 U.S.C. § 1396w-4 (requiring state plans to include “a proposal for use of health information technology . . . including the use of wireless patient technology to improve coordination and management of care and patient adherence to recommendations made by their provider”).

⁸⁸ Patient Protection and Affordable Care Act, Pub. L. No. 111-148, §§ 3021, 3022, 3024, 124 Stat. 119, 389–99, 404–08 (2010); see also Zilis, *supra* note 87, at 199–201.

⁸⁹ See 42 U.S.C. § 1315a (directing the Center for Medicare and Medicaid Innovation (“Innovation Center”) to explore a care model that “[f]acilitate[s] inpatient care, including intensive care, of hospitalized applicable individuals at their local hospitals through the use of electronic monitoring”); Zilis, *supra* note 87, at 199 (noting that the Innovation Center hopes telemedicine will achieve its goals of decreasing costs and improving care).

Center funds models that aim to improve health outcomes and reduce costs.⁹⁰ When selecting models for testing, the Innovation Center may consider technology, such as remote patient monitoring, as a factor.⁹¹ If a project is found to reduce costs and improve quality, the Secretary of the U.S. Department of Health and Human Services has the authority to expand the model project by testing the project nationwide.⁹²

Section 3022 created Medicare's Shared Savings Program, incentivizing Accountable Care Organizations ("ACOs") to develop innovative models to shift health care from a pure fee-for-service system to value-based care, tying reimbursement to positive health outcomes along specific metrics.⁹³ ACOs are a new type of health care entity consisting of groups of doctors, hospitals, and other health care providers who provide coordinated care to Medicare beneficiaries.⁹⁴ If ACOs improve quality while reducing costs, they receive a share of the savings achieved for the Medicare program.⁹⁵ ACOs are encouraged to use telemedicine to help meet quality and cost metrics, such as reducing excess hospital readmissions, reducing hospital falls, and utilizing preventative care.⁹⁶ In 2015, twenty percent of ACOs used telemedicine services.⁹⁷

⁹⁰ FURROW ET AL., *supra* note 85, at 460 (noting that the ACA empowers Health and Human Services to "initiate demonstration models that involve medical homes, coordinated care, alternative payment mechanisms, health information technology (HIT), medication management, patient education, integrated care for dual-eligibles, care for cancer patients, post-acute care, chronic care management, and collaboration among mixed provider types, rural telehealth and various payment reform models"); Zilis, *supra* note 87, at 199.

⁹¹ 42 U.S.C. § 1315a (stating that the Innovation Center may consider "[w]hether the model utilizes technology, such as . . . patient-based remote monitoring systems, to coordinate care over time and across settings"); Zilis, *supra* note 87, at 199.

⁹² *About the CMS Innovation Center*, CTRS. FOR MEDICARE & MEDICAID SERVS., <https://innovation.cms.gov/about/index.html> [<https://perma.cc/RHG8-JKYG>] (last visited Nov. 23, 2015).

⁹³ See 42 U.S.C. § 1395jjj; Japsen, *supra* note 37 (arguing that telemedicine will increase as providers move "away from fee-for-service medicine where they are paid based on volume of services to reimbursement based on the value of care they provide").

⁹⁴ See *Finalized Changes to the Medicare Shared Savings Program Regulations*, CTRS. FOR MEDICARE & MEDICAID SERVS. (June 4, 2015), <https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2015-Fact-sheets-items/2015-06-04.html> [<https://perma.cc/B4XA-GPB5>] (explaining the Shared Savings Program and Accountable Care Organizations ("ACOs")). Under § 1899(b)(2)(G) of the Social Security Act, ACOs "shall define evidence-based medicine and patient engagement, report on quality and cost measures, and coordinate care, such as through the use of telehealth, remote patient monitoring, and other such enabling technologies." 42 U.S.C. § 1395jjj.

⁹⁵ FURROW ET AL., *supra* note 85, at 462 (highlighting that providers are incentivized to form ACOs because of the potential to share in the savings to the Medicare program).

⁹⁶ RTI INT'L, ACCOUNTABLE CARE ORGANIZATION 2016 PROGRAM QUALITY MEASURE NARRATIVE SPECIFICATIONS 2-4 (2016), <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Downloads/2016-ACO-NarrativeMeasures-Specs.pdf> [<https://perma.cc/WXQ8-7S2T>] (outlining the thirty-four performance measures); *TrendWatch: Telehealth for Hospitals*, *supra* note 5, at 6 (explaining how telemedicine can help ACOs meet their goals). Propo-

Finally, Section 3024 authorized the Independence at Home Demonstration to test delivery models for Medicare beneficiaries in their homes who suffer from multiple chronic conditions.⁹⁸ Selected primary care practices participate in the program for three years to improve quality and reduce costs for often poorly managed, disjointed care affecting chronically ill patients.⁹⁹ Demonstration programs are directed to provide home-based primary care by utilizing remote patient monitoring and other technologies.¹⁰⁰ These telemedicine services allow health care providers to remotely monitor and communi-

nents of telemedicine argue that ACOs should adopt telemedicine because both ACOs and telemedicine services strive to increase quality of care efficiently. See Japsen, *supra* note 37 (arguing that basing reimbursement on quality measures will force the U.S. health care system to adopt methods, like utilizing telemedicine, to keep patients out of hospitals, where care is more expensive).

⁹⁷ See Lacktman, *Telemedicine Trends*, *supra* note 28, at 58 (predicting that ACOs will increase their use of telemedicine in 2016 as a way to meet CMS cost reduction metrics and to share in the savings generated for the Medicare program).

⁹⁸ See 42 U.S.C. § 1395cc-5; see also Brian M. Daucher, *Independence at Home Provision of the Patient Protection and Affordable Care Act*, NAT'L L. REV. (Mar. 5, 2011), <http://www.natlawreview.com/article/independence-home-provision-patient-protection-and-affordable-care-act-wydenmarkey-ppaca-sec> [<https://perma.cc/2AQL-8KFH>] (comparing the Independence at Home project to a model program run by the Veteran's Administration that "reduced hospital days by 62% and overall costs by 24%").

⁹⁹ See *Independence at Home Demonstration*, CTRS. FOR MEDICARE & MEDICAID SERVS., <https://innovation.cms.gov/initiatives/independence-at-home/> [<https://perma.cc/54LY-BUS4>] (last visited Jan. 30, 2016) (explaining that in addition to improving quality of care for chronically ill patients, the projects "will test whether home-based care can reduce the need for hospitalization, improve patient and caregiver satisfaction, and lead to better health and lower costs to Medicare"). Medicare beneficiaries with multiple chronic conditions account for a disproportionate share of Medicare spending; roughly two-thirds of Medicare beneficiaries have multiple chronic conditions, and those with multiple conditions account for almost all of Medicare hospital readmissions. See CTRS. FOR MEDICARE & MEDICAID SERVS., CHRONIC CONDITIONS AMONG MEDICARE BENEFICIARIES 10, 21–22 (2012), <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/chronic-conditions/downloads/2012chartbook.pdf> [<https://perma.cc/HJ3B-GYKM>] [hereinafter CHRONIC CONDITIONS AMONG MEDICARE BENEFICIARIES]. The Independence at Home Demonstration saved over \$25 million for the Medicare program in its first year, and as a result, a number of participating practices will share in those savings. Shruti Barker, *The Independence at Home Demonstration Project Completes Its First Year and Saves over \$25 Million*, NAT'L L. REV. (July 1, 2015), <http://www.natlawreview.com/article/independence-home-demonstration-project-completes-its-first-year-and-saves-over-25-m> [<https://perma.cc/7VPT-V7NQ>].

¹⁰⁰ See 42 U.S.C. § 1395cc-5 (requiring participating practices to use "electronic health information systems, remote monitoring, and mobile diagnostic technology"). Remote patient monitoring and mobile diagnostic technologies that are part of the demonstration programs are not subject to Medicare reimbursement restrictions for telemedicine. See *id.*; *Independence at Home (IAH) Frequently Asked Questions for Applicants*, CTRS. FOR MEDICARE & MEDICAID SERVS. (Dec. 2011), https://www.cms.gov/Medicare/Demonstration-Projects/DemoProjectsEvalRpts/downloads/IAH_FAQ.pdf [<https://perma.cc/7QG9-9PER>] (requiring providers to use technology to decrease emergency room visits and to provide care to medically underserved populations).

cate with patients, thereby maximizing individuals' independence and preventing unnecessary hospital visits.¹⁰¹

B. How Telemedicine Can Achieve the ACA's Goals of Improving Quality and Access While Reducing Costs

A number of studies have shown that telemedicine can achieve the ACA's goals of improving quality and access while reducing costs.¹⁰² Telemedicine improves quality of care and health outcomes through care coordination, patient engagement, and timely delivery of care.¹⁰³ For example, the Indian Health Service partnered with tribes and care providers and implemented programs involving both real-time and store-and-forward technologies to successfully improve patient outcomes, such as managing diabetes and increasing life expectancy.¹⁰⁴

The ACA also promotes the reduction of health care costs while maintaining quality care.¹⁰⁵ The Federal Communications Commission estimates that by utilizing remote patient monitoring, the United States could save \$197

¹⁰¹ See Zilis, *supra* note 87, at 201 (highlighting how the program improves the quality of care for chronically ill patients while reducing costs through the use of technology to monitor and communicate with patients).

¹⁰² See REPORT TO CONGRESS: TELEMEDICINE, *supra* note 5, at 4 (recognizing the promise of telemedicine); TELEHEALTH: MAPPING THE EVIDENCE, *supra* note 55, at 45–47 (finding telemedicine effective for monitoring and counseling patients with chronic conditions); see also *Strategic Goal 1: Strengthen Health Care*, HEALTH & HUM. SERVS., <http://www.hhs.gov/about/strategic-plan/strategic-goal-1/index.html> [<https://perma.cc/QB4D-AB4J>] (last visited Jan. 31, 2016). Health and Human Services, which is responsible for implementing many of the ACA provisions, identified a number of goals, including the reduction of health care costs while improving quality care through the use of health information technology. See *Strategic Goal 1: Strengthen Health Care*, *supra*.

¹⁰³ See Smolensky, *supra* note 48, at 397 (highlighting a number of patient satisfaction, clinician satisfaction, and clinical outcomes studies that show that telemedicine maintains or improves the quality of care for patients); Priyal Patel, *Telehealth—Impacting Access, Cost and Quality*, PERFICIENT (Jan. 5, 2015), <http://blogs.perficient.com/healthcare/blog/2015/01/05/telehealth-impacting-access-cost-and-quality-2/> [<https://perma.cc/36QP-Y9RA>] (providing an overview of studies on improved quality, care coordination, and patient engagement).

¹⁰⁴ Thomas D. Sequist et al., *Indian Health Service Innovations Have Helped Reduce Health Disparities Affecting American Indian and Alaska Native People*, 30 HEALTH AFF. 1965, 1968–69 (2011), <http://content.healthaffairs.org/content/30/10/1965.long> [<https://perma.cc/9SWS-K5MC>] (attributing the improved health care for American Indian and Alaska Native people to telemedicine and the use of health information technology). The Indian Health Service also developed a teleophthalmology program that improved annual screening and treatment rates. *Id.* at 1969. Teleophthalmology is a type of telemedicine that allows providers to remotely provide diabetic eye exams. *Id.*; *IHS-Joslin Vision Network Teleophthalmology Program*, INDIAN HEALTH SERV., <https://www.ihs.gov/teleophthalmology/> [<https://perma.cc/P33G-EG8R>] (last visited Feb. 29, 2016) (explaining that patients in the teleophthalmology program go to their primary care clinic and have images taken of their eyes, which are then sent to doctors for evaluation).

¹⁰⁵ See *Strategic Goal 1: Strengthen Health Care*, *supra* note 102.

billion over approximately twenty-five years.¹⁰⁶ Telemedicine services provide a promising opportunity to reduce costs for servicing patients with expensive chronic conditions.¹⁰⁷ For example, at Banner Health, a chain of twenty-eight hospitals based in Arizona, home monitoring technologies were integrated to care for patients with chronic diseases.¹⁰⁸ Banner Health was able to reduce overall related service costs by twenty-seven percent and reduce the number of unnecessary hospitalizations by forty-five percent.¹⁰⁹ From the patient perspective, telemedicine could also reduce the personal costs associated with accessing care.¹¹⁰ Rural patients would no longer incur the costs for traveling to access services; instead they would have the option to access care from home.¹¹¹

The Veterans Health Administration (“VHA”) has been successful at achieving each of the ACA goals through utilizing telemedicine to provide cost-effective, quality care to patients with chronic conditions.¹¹² Within the VHA, veterans can participate in Care Coordination/Home Telehealth (“VHA Telehealth Program”), a program that utilizes remote monitoring to care for

¹⁰⁶ AT&T, *TELEHEALTH: BREAKING DOWN BARRIERS FOR MORE CONNECTED HEALTHCARE* 2–3 (2012), http://www.corp.att.com/healthcare/docs/connected_hc.pdf [<https://perma.cc/LCS5-G8E6>]. The Federal Communications Commission also estimates \$700 billion in savings over fifteen to twenty-five years with the utilization of electronic health records and remote monitoring technology. *Broadband & Health Care*, BROADBAND, <http://www.broadband.gov/issues/healthcare.html> [<https://perma.cc/5YQ9-NCPK>] (last visited Jan. 31, 2016).

¹⁰⁷ See Bujnowska-Fedak & Grata-Borkowska, *supra* note 49, at 96 (highlighting a number of studies that show home monitoring for the elderly reduces emergency room visits, the number of bed stays, and rehospitalization); Jennifer Bresnick, *Telehealth, Team-Based Care Coordination Key to 2% Savings*, HEALTHIT ANALYTICS (June 4, 2014), <http://healthitanalytics.com/news/telehealth-team-based-care-coordination-key-to-27-savings> [<https://perma.cc/M7KW-W54H>] (reporting a hospital system’s success in reducing costs).

¹⁰⁸ Bresnick, *supra* note 107 (explaining that patients receive a tablet to monitor their condition and that the data is then sent directly to the patient’s provider).

¹⁰⁹ *Id.* (noting that coaches help patients get comfortable with the technology, and highlighting a number of elderly patients utilizing the technology).

¹¹⁰ Jessica Harper, *Pros and Cons of Telemedicine for Today’s Workers*, U.S. NEWS & WORLD REP. (July 24, 2012), <http://health.usnews.com/health-news/articles/2012/07/24/pros-and-cons-of-telemedicine-for-todays-workers> [<https://perma.cc/3XXB-LJLN>].

¹¹¹ See *id.* Also, some providers are simply charging less for telemedicine consultations that are similar to those provided in-person. See *id.*

¹¹² ANDREW BRODERICK, *THE VETERANS HEALTH ADMINISTRATION: TAKING HOME TELEHEALTH SERVICES TO SCALE NATIONALLY* 1 (Commonwealth Fund Jan. 2013), http://www.commonwealthfund.org/~media/Files/Publications/Case%20Study/2013/Jan/1657_Broderick_telehealth_adoption_VHA_case_study.pdf [<https://perma.cc/8GGT-94H9>]; Adam Darkins et al., *Reduced Cost and Mortality Using Home Telehealth to Promote Self-Management of Complex Chronic Conditions: A Retrospective Matched Cohort Study of 4,999 Veteran Patients*, 21 *TELE-MEDICINE & E-HEALTH* 70, 74 (2015); see also John C. Fortney et al., *Telemedicine-Based Collaborative Care for Posttraumatic Stress Disorder*, 72 *JAMA PSYCHIATRY* 58, 65 (2015) (concluding that veterans with PTSD benefited from a Veterans Health Administration (“VHA”) program that utilized telemedicine to provide care). See generally REPORT TO CONGRESS: *TELEMEDICINE*, *supra* note 5, at 11–12 (providing an overview of telemedicine used within the VHA).

veterans with chronic conditions.¹¹³ Today, over seventy thousand veterans utilize different telemedicine technologies in the VHA Telehealth Program, such as messaging devices, which ask patients questions to help assess their health status and disease self-management capabilities, and monitoring devices, which help patients record and collect their vital signs.¹¹⁴ The VHA Telehealth Program has been successful in managing chronic condition patients in both rural and urban settings while reducing overall health care costs.¹¹⁵

Although the ACA promotes telemedicine implementation, current Medicare law hinders its growth because of limitations placed on reimbursement.¹¹⁶ Even though the ACA expands health care coverage and encourages providers to shift from pure fee-for-service models to value-based models, coverage does not guarantee individuals cost-effective care.¹¹⁷ The ACA promotes telemedicine as an alternative health care delivery model to address access and cost concerns, yet Medicare reimbursement remains restrictive and therefore inconsistent with the ACA.¹¹⁸ As a result of these legislative inconsistencies, a number of steps have been taken since the enactment of the ACA to reduce the gap between the ACA's support for telemedicine and current Medicare policies.¹¹⁹

¹¹³ BRODERICK, *supra* note 112, at 2. The Care Coordination/Home Telehealth ("VHA Telehealth Program") developed from a pilot program, where nine hundred patients used simple home telemedicine devices to self-manage their chronic conditions. *Id.* at 4. The pilot resulted in a "40 percent reduction in emergency room visits, a 63 percent reduction in hospital admissions, and an 88 percent reduction in nursing home bed days of care, as well as a high (94%) level of patient satisfaction." *Id.*

¹¹⁴ *Id.* at 5. Patients use remote monitoring much more than video consultations. *See id.* Of the seventy thousand veterans, "the age range is 20 to 101 years, with a mean of 66.5 years and 16.5 percent of patients 85 years or older." *Id.*

¹¹⁵ *See id.* at 6. A study comparing patients before they entered the program to six months later revealed fewer bed days of care, fewer hospital admissions, and high satisfaction scores. *Id.* at 6–7. Also, the VHA Telehealth Program cost \$1,600 per patients per year, as compared to VHA's home-based primary care service of \$13,121 and market nursing home care rates of \$77,745. *Id.* at 6.

¹¹⁶ *See TrendWatch: Telehealth for Hospitals*, *supra* note 5, at 7 (advocating for legislative and regulatory changes to align Medicare policies with the ACA).

¹¹⁷ *See* Frist, *A Solution*, *supra* note 9 ("[C]overage does not guarantee access to cost-effective care.").

¹¹⁸ *See* Schumacher, *supra* note 13, at 425 (explaining that reimbursement for telemedicine is essential because providers will not provide services without guaranteed compensation).

¹¹⁹ *See* Henry Powderly, *Next Generation ACO Launched by CMS, Tightens Financial Benchmarks*, HEALTHCARE FIN. (Mar. 10, 2015), <http://www.healthcarefinancenews.com/news/next-generation-aco-launched-cms-tightens-financial-benchmarks> [<https://perma.cc/6WY8-U2HU>] (highlighting the new ACO program's requirement of providing access to telemedicine services); Eric Wicklund, *CMS Boosts Telehealth in 2015 Physician Pay Schedule*, MHEALTHNEWS (Nov. 3, 2014), <http://www.mhealthnews.com/news/cms-boosts-telehealth-2015-physician-pay-schedule> [<https://perma.cc/7ZGQ-B2YQ>] (noting that the 2015 physician pay schedule will increase originating sites by 0.8%).

C. Current Efforts to Reduce the Gap Between Medicare Policies and the ACA's Support for Telemedicine

As of January 2015, CMS agreed to reimburse seven additional telemedicine services, including annual wellness visits, psychotherapy, and prolonged evaluation and management services.¹²⁰ CMS also added a new Current Procedural Terminology service code to reimburse providers for non-face-to-face care coordination for Medicare recipients with multiple chronic conditions.¹²¹ Because it is not a telemedicine code, it is not limited geographically or by originating site.¹²² Nevertheless, the new code is limited in that a provider can only bill the code once a month, and the code does not include data collection itself, such as utilizing store-and-forward technologies.¹²³

CMS has taken another step to reconcile current Medicare law and the ACA's promotion of telemedicine by implementing Next Generation ACOs, the most recent innovative health care model.¹²⁴ In January 2016, CMS unveiled this new ACO model, which allows provider groups to take greater

¹²⁰ See Perry Payne, *What Physicians Need to Know About Medicare's New Telemedicine Reimbursement Rules*, IMEDICALAPPS (Jan. 14, 2015), <http://www.imedicalapps.com/2015/01/physicians-medicare-telemedicine-reimbursement/> [<https://perma.cc/P2HS-DM7S>] (providing the new service codes for psychotherapy, prolonged services, and for annual wellness visits). CPT and HCPCS codes are used to report health care services to payers for reimbursement. See FURROW ET AL., *supra* note 85, at 447.

¹²¹ *Chronic Care Management Services*, CTRS. FOR MEDICARE & MEDICAID SERVS. (May 2015), <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/ChronicCareManagement.pdf> [<https://perma.cc/28PH-DCH8>]. In order for providers to use the code, the Medicare patient must have multiple chronic conditions expected to last at least one year or until the patient dies, and the patient's condition must lead to significant risk of health deterioration or death. *Id.* A physician can use the code to "receive as much as \$42.60 per patient per month for 20 minutes of contact." Eric Wicklund, *Doctors Struggle to Find Value in Telehealth*, MHEALTH INTELLIGENCE (Jan. 22, 2016), <http://mhealthintelligence.com/news/doctors-struggle-to-find-value-in-telehealth> [<https://perma.cc/LFN9-B5RG>] (explaining that despite the additional code, providers are not necessarily using it because the code is very limited and the guidelines are confusing). Physicians are also deterred by the simple fact that tracking each minute for specific conversations on chronic care takes a lot of additional effort. Eric Wicklund, *Why Are Doctors Skipping Chronic Care Reimbursement?*, MHEALTHNEWS (Sept. 4, 2015), <http://www.mhealthnews.com/news/why-are-doctors-skipping-chronic-care-reimbursement?single-page=true> [<https://perma.cc/LHT5-YUUT>].

¹²² See Bresnick, *supra* note 77.

¹²³ See *id.*; *Chronic Care Management Services*, *supra* note 121.

¹²⁴ See *Next Generation ACO Model*, CTRS. FOR MEDICARE & MEDICAID SERVS., <https://innovation.cms.gov/initiatives/Next-Generation-ACO-Model/> [<https://perma.cc/AQT4-B6F6>] (last visited Jan. 30, 2016). ACOs are patient-centered organizations consisting of groups of doctors, hospitals, and other health care providers, which aim to improve quality of care while reducing costs. *Id.* The Next Generation ACO model is designed for ACOs already experienced in care coordination through other ACOs like the current Pioneer Model and Shared Savings Program. *Id.*

financial risks and share in potentially more savings.¹²⁵ The Next Generation ACOs are also provided waivers for some of the Medicare restrictions on telemedicine.¹²⁶ The Telehealth Rule Waiver eliminates Medicare reimbursement restrictions such as the originating site requirement and the rural Shortage Area requirement.¹²⁷ This means that Medicare beneficiaries can utilize telemedicine in their home, and users are no longer limited to rural areas.¹²⁸ Despite the waivers, all telemedicine services must still follow all other Medicare coverage and payment criteria.¹²⁹

There are also a number of legislative proposals that have been introduced in the 114th U.S. Congress that would address the gap between the ACA and Medicare reimbursement.¹³⁰ On July 7, 2015, Representative Mike Thompson (D-CA) introduced the Medicare Telehealth Parity Act of 2015.¹³¹ The Act is a bipartisan bill that would increase telemedicine coverage and reimbursement for Medicare beneficiaries.¹³² The bill addresses current Medicare limitations by expanding telemedicine coverage and reimbursement af-

¹²⁵ See *id.* (noting that the goal of the Next Generation ACO model is to see whether strong financial incentives and utilizing patient care tools, including telemedicine, can improve quality and decrease costs for the Medicare program).

¹²⁶ *Id.*; see also REPORT TO CONGRESS: TELEMEDICINE, *supra* note 5, at 3 (noting that Next Generation ACO beneficiaries can receive telemedicine services at home).

¹²⁷ *Telehealth Rule Waiver*, CTRS. FOR MEDICARE & MEDICAID SERVS., <https://innovation.cms.gov/Files/x/nextgenaco-telehealthwaiver.pdf> [<https://perma.cc/K2V6-UTGF>] (last visited Jan. 30, 2016).

¹²⁸ *Id.*; see Eric Wicklund, *Telemedicine a Key Component of Next-Generation ACOs*, MHEALTH INTELLIGENCE (Jan. 13, 2016), <http://mhealthintelligence.com/news/telemedicine-a-key-component-of-next-generation-acos> [<https://perma.cc/4W2D-XKHX>] (reporting how telemedicine proponents support the waiver and argue that it is a crucial step in improving the quality of care for Medicare beneficiaries).

¹²⁹ CTR. FOR MEDICARE & MEDICAID INNOVATION, NEXT GENERATION ACO MODEL: REQUEST FOR APPLICATION 21–22, <https://innovation.cms.gov/Files/x/nextgenacorfa.pdf> [<https://perma.cc/2NUE-BVV7>] [hereinafter CTR. FOR MEDICARE & MEDICAID INNOVATION, NEXT GENERATION ACO MODEL] (last visited Sept. 29, 2016).

¹³⁰ *TrendWatch: Telehealth for Hospitals*, *supra* note 5, at 7. For example, in 2013, Representative Mike Thompson (D-CA) introduced the Telehealth Enhancement Act of 2013, and in 2014 he introduced the Medicare Health Parity Act of 2014. See Shruti C. Barker, *The Proposed Medicare Telehealth Parity Act of 2015 Would Expand Medicare Reimbursement for Telehealth Services*, NAT'L L. REV. (Aug. 5, 2015), <http://www.natlawreview.com/article/proposed-medicare-telehealth-parity-act-2015-would-expand-medicare-reimbursement-tel> [<https://perma.cc/KQC9-NTCW>]. Despite industry support, the 2013 and 2014 bills did not make it out of committee. See *id.* In May and June of 2015, the Furthering Access to Stroke Telemedicine Act of 2015 was introduced in the House and Senate. Furthering Access to Stroke Telemedicine Act of 2015, H.R. 2799, 114th Cong. (2015); Furthering Access to Stroke Telemedicine Act of 2015, S. 1465, 114th Cong. (2015). The bills would amend Title XVII of the Social Security Act to expand access to stroke telemedicine through Medicare by eliminating geographical limitations and site restrictions for reimbursement. See H.R. 2799; S. 1465. These bills have also not made it out of committee. See H.R. 2799; S. 1465.

¹³¹ Medicare Telehealth Parity Act of 2015, H.R. 2948, 114th Cong. (2015); Barker, *supra* note 130.

¹³² H.R. 2948.

ter a four-year implementation period in the following ways: (1) geographical coverage would increase to include metropolitan counties; (2) types of providers would increase; (3) types of services would expand; (4) remote patient monitoring of chronic conditions would be covered; and (5) reimbursement for certain services provided in a patient's home, regardless of rural or urban location, would be permitted.¹³³

In addition, U.S. Senators Cory Gardner (R-CO) and Gary Peters (D-MI) introduced the Telehealth Innovation and Improvement Act of 2015 on December 2, 2015.¹³⁴ Although telemedicine has always been an option under the Innovation Center payment models, the bill would require that "expanded telehealth service" models be tested beginning January 1, 2017.¹³⁵ The bill would expand the type of technologies that can be used, including both real-time communication technologies and store-and-forward technologies such as remote patient monitoring.¹³⁶ The bill would also eliminate geographic limitations and originating site restrictions.¹³⁷ The bill still places lim-

¹³³ See *id.*; *Medicare Telehealth Parity Act of 2015*, AM. SOC'Y NEPHROLOGY, <http://www.asn-online.org/policy/webdocs/one-pagermedicaretelehealthparityactof2015.pdf> [https://perma.cc/Z4RJ-RA9P] (last visited Oct. 20, 2015); Barker, *supra* note 130. Currently, Medicare does not reimburse for any remote patient monitoring, and it only reimburses for a few demonstration programs using store-and-forward services in Hawaii and Alaska. See *Bill Analysis of H.R. 2948*, *supra* note 74. After the bill's implementation, types of providers would expand to include respiratory therapists, audiologists, occupational therapists, physical therapists, and speech language pathologists. See H.R. 2948 § 2. Types of services would expand to cover "respiratory services, audiology services . . . and outpatient therapy services, including physical therapy, occupational therapy, and speech-language pathology services." *Id.*

¹³⁴ Telehealth Innovation and Improvement Act of 2015, S. 2343, 114th Cong. (2015). Representatives Diane Black (R-TN) and Scott H. Peters (D-CA) also introduced an identical bill in the House of Representatives. Telehealth Innovation and Improvement Act of 2015, H.R. 4155, 114th Cong. (2015).

¹³⁵ *Id.*; see *Bill Analysis of S. 2343—Telehealth Innovation and Improvement Act of 2015*, CTR. FOR CONNECTED HEALTH POL'Y 1, http://cchpca.org/sites/default/files/resources/S.%202343%20NEW_0.pdf [https://perma.cc/TVV6-U49Z] [hereinafter *Bill Analysis of S. 2343*] (last visited Jan. 30, 2016) ("Expanded telehealth services means services furnished for one or more specified conditions through one or more specific type of technology.").

¹³⁶ See *Bill Analysis of S. 2343*, *supra* note 135, at 2. Medicare currently reimburses for live video and for some store-and-forward services in demonstration programs in Hawaii and Alaska. *Id.* The bill lists six technologies that would be reimbursable, and the Health and Human Services Secretary would have the authority to make additions. *Id.* The technologies listed are: "Remote monitoring technologies . . . ; Bi-directional audio/video technologies; Physiologic and behavioral monitoring technologies; Engagement prompt technologies; Store and forward technologies; [and] Point-of-care testing technologies . . ." S. 2343 § 2; *Bill Analysis of S. 2343*, *supra* note 135, at 2.

¹³⁷ *Bill Analysis of S. 2343*, *supra* note 135, at 2. Current Medicare providers can only be reimbursed for services they provide to Medicare beneficiaries located in Shortage Areas, in a county outside of a Statistical Area, or in a participating federal telemedicine demonstration project. *Id.* If an "expanded telehealth service" in a test model reduces spending while maintaining quality of care or improves quality of care without increasing spending, that service would apply to all Innovation Center models and Medicare fee-for-service beneficiaries. *Id.* at 3.

its on providers and conditions eligible for testing.¹³⁸ Therefore, even if a service meets the requirements to be adopted into the fee-for-service program, there may still be some limitations as to who can provide the service and what conditions can be treated.¹³⁹

On February 2, 2016, a bipartisan group of U.S. Senators and Representatives introduced the most recent proposal, the Creating Opportunities Now for Necessary and Effective Care Technologies (CONNECT) for Health Act.¹⁴⁰ The bill would create bridge demonstration programs that allow providers to use telemedicine to meet the goals of alternative payment models by eliminating some of the current Medicare reimbursement restrictions.¹⁴¹ The bill would also provide reimbursement for remote patient monitoring for patients with multiple chronic conditions and would allow patients to receive acute stroke evaluation or management services in their homes.¹⁴²

Although the legislative proposals would greatly increase Medicare reimbursement, all three bills remain in committees for consideration.¹⁴³ In addition, the regulatory changes by CMS only narrowly reduced the gap between the ACA's support for telemedicine and current Medicare policy.¹⁴⁴ For example, the telemedicine waiver for Next Generation ACOs is limited to a select group of eighteen ACOs, thereby excluding the majority of Medicare patients and providers.¹⁴⁵ Despite CMS approving additional telemedicine

¹³⁸ *Id.* at 5–6.

¹³⁹ *See id.* Conditions are limited to: “Chronic hypertension, Ischemic heart diseases, Chronic obstructive pulmonary disease, Heart failure, Heart attack, Osteoarthritis, Diabetes, Chronic kidney disease, Depression, Atrial fibrillation, Cancer, Asthma, Stroke, Total hip replacement procedures, Total knee replacement procedures, Parkinson’s disease.” *Id.* at 5. Under the bill only an “eligible physician or practitioner” may provide services. *Id.* “A physician is defined by section 1861(r) and a practitioner is defined under section 1842(b)(18)(C), under the Social Security Act.” *Id.*

¹⁴⁰ Creating Opportunities Now for Necessary and Effective Care Technologies (CONNECT) for Health Act, S. 2484, 114th Cong. (2016); CONNECT for Health Act, H.R. 4442, 114th Cong. (2016) (identical bill).

¹⁴¹ *See* Jennifer S. Geetter et al., *Significant Telehealth Expansion Proposed in Bipartisan Senate Bill*, MCDERMOTT WILL & EMERY (Feb. 29, 2016), <http://www.mwe.com/Significant-Telehealth-Expansion-Proposed-in-Bipartisan-Senate-Bill-02-29-2016/> [https://perma.cc/2JWG-JJEK] (explaining that bridge programs will not be subject to Medicare reimbursement restrictions, such as originating site restrictions, geographic limitations, or limitations on types of providers).

¹⁴² *See id.* (noting that Medicare reimbursement is currently limited to real-time communication).

¹⁴³ *See* S. 2484 (referred to Comm. On Finance, Feb. 2, 2016); S. 2343 (referred to Comm. On Finance, Dec. 2, 2015); H.R. 2948 (referred to S. Comm. On Health, July 13, 2015).

¹⁴⁴ *See* Bresnick, *supra* note 77 (noting the limits of the additional codes approved by CMS); *Telehealth Rule Waiver*, *supra* note 127 (providing a waiver on reimbursement restrictions only to Next Generation ACOs).

¹⁴⁵ *See Next Generation ACO Model*, *supra* note 124 (limiting Next Generation ACOs to those already experienced in care coordination through other ACOs like the current Pioneer Model and Shared Savings Program). The Next Generation ACOs are also still limited to real-time communications. *See* CTR. FOR MEDICARE & MEDICAID INNOVATION, NEXT GENERATION ACO

codes for reimbursement, Medicare reimbursement remains mostly limited to virtual consultations where the patient must receive the service at an authorized site in a rural area.¹⁴⁶

III. LEGISLATIVE AND REGULATORY CHANGES ARE NEEDED TO RECONCILE THE ACA WITH MEDICARE'S REIMBURSEMENT POLICIES

Although CMS agreed to reimburse additional telemedicine services and the telemedicine waiver lifted some restrictions for Next Generation ACOs, modifications are still needed to align current Medicare law with the ACA.¹⁴⁷ Changes should be made to fill the gap between Medicare's restrictive reimbursement and the ACA's encouragement of telemedicine, and Medicare should be the insurer that takes the lead on telemedicine reimbursement policies.¹⁴⁸ States and private insurers that are reluctant to reimburse telemedicine services are mimicking Medicare's restrictive policies.¹⁴⁹ By taking the lead on reimbursement, Medicare policies could influence states and potentially lead to less variation between states' reimbursement policies.¹⁵⁰

This Part argues that changes, such as increasing services that are reimbursed and eliminating originating site restrictions, will help current Medicare law align with the ACA's goals and support of telemedicine.¹⁵¹ Section A recommends that Congress increase the number of telemedicine services cov-

MODEL, *supra* note 129, at 21–22; Kreitner, *supra* note 67, at 25 (noting that CMS requires telemedicine to “mimic the normal interactions between patients and their health-care providers,” and therefore technologies like remote EKG applications “are reimbursed . . . because those services don’t usually involve real time interactions with patients”).

¹⁴⁶ See Frist, *A Solution*, *supra* note 9; *Your Medicare Coverage*, MEDICARE, <https://www.medicare.gov/coverage/telehealth.html> [<https://perma.cc/4D2Y-CHUN>] (last visited Jan. 30, 2016) (listing the reimbursable locations for patients receiving telemedicine services); see also *supra* note 72 and accompanying text (explaining what telemedicine services are currently reimbursable through Medicare).

¹⁴⁷ See *TrendWatch: Telehealth for Hospitals*, *supra* note 5, at 7 (advocating for changes to Medicare reimbursement to rectify its departure from the ACA).

¹⁴⁸ See Smolensky, *supra* note 48, at 405, 407 (arguing that Medicare should take the lead on reimbursement policy, as opposed to private insurance, because of the government's unique access to information).

¹⁴⁹ See *id.* at 410–11 (arguing that many private insurers are copying Medicare's reimbursement restrictions). For instance, after the November 2001 Medicare coverage policies were released, Blue Cross Blue Shield of Texas released their January 2002 coverage policy that also did not cover “telemedicine services billed for the use of a telephone or fax machine.” *Id.* at 411; see also Schumacher, *supra* note 13, at 426 (highlighting Ohio's decision to restrict telemedicine reimbursement through Medicaid to a limited number of mental health services).

¹⁵⁰ See *TrendWatch: Legal and Regulatory Challenges*, *supra* note 15, at 2 (noting that because states have the flexibility to decide what telemedicine services they will cover under Medicaid, reimbursement varies widely with most reimbursing for live video, and only some covering store-and-forward services and remote patient monitoring).

¹⁵¹ See *infra* notes 155–187 and accompanying text.

ered by Medicare.¹⁵² Section B argues that Congress should lift originating site restrictions and geographical limitations on reimbursement.¹⁵³ Section C asserts that, at the very least, the Innovation Center should provide telemedicine waivers to all types of ACO models.¹⁵⁴

A. Congress Should Increase the Number of Reimbursable Telemedicine Services

Congress should reimburse for store-and-forward services by removing coverage barriers in Section 1834(m) of the Social Security Act.¹⁵⁵ Currently, reimbursement is limited to real-time communications, and store-and-forward technologies are restricted to demonstration projects in Hawaii and Alaska.¹⁵⁶ At minimum, Congress should adopt the provision in the Medicare Telehealth Parity Act of 2015 that would eliminate the restriction on store-and-forward services to only the demonstration projects in Hawaii and Alaska.¹⁵⁷ Despite the bill's four-year implementation period for the majority of other provisions, this specific provision is promising in that the change would take effect immediately.¹⁵⁸ Nevertheless, store-and-forward services would still have to overcome the other restrictions on reimbursement, including geographical, originating site, and provider limitations.¹⁵⁹ Thus, Congress should go further than the proposed bills by expanding store-and-forward services to all states and by eliminating geographical, originating site, and provider limitations.¹⁶⁰

¹⁵² See *infra* notes 155–169 and accompanying text.

¹⁵³ See *infra* notes 170–177 and accompanying text.

¹⁵⁴ See *infra* notes 178–187 and accompanying text.

¹⁵⁵ See Social Security Act of 1935 § 1834(m), 42 U.S.C. § 1395(m) (2012) (limiting reimbursement to real-time communications in specific originating sites and geographical locations); 2016 Policy Priorities, *supra* note 72 (recommending that Congress remove coverage barriers in § 1834(m)). The American Medical Association, the largest association of physicians in the United States, recommends additional pilot programs that would expand reimbursement. *Report of the Council on Medical Service: Coverage of and Payment for Telemedicine*, AM. MED. ASS'N 8, [http://www.jonesday.com/files/upload/AMA%20Policy%20on%20Telehealth%20\(June%202014\).PDF](http://www.jonesday.com/files/upload/AMA%20Policy%20on%20Telehealth%20(June%202014).PDF) [<https://perma.cc/N6GA-BLFW>] [hereinafter *Coverage of and Payment for Telemedicine*] (last visited Feb. 1, 2016).

¹⁵⁶ See *What Are the Reimbursement Issues for Telehealth?*, *supra* note 72 (noting that Medicare will only cover services that mimic a normal face-to-face interaction between a patient and a provider).

¹⁵⁷ See Medicare Telehealth Parity Act of 2015, H.R. 2948, 114th Cong. (2015) (striking the language “in the case of any Federal telemedicine demonstration program conducted in Alaska or Hawaii” from 42 U.S.C. § 1395(m)(m)(1) would allow more reimbursement for store-and-forward services); *Bill Analysis of H.R. 2948*, *supra* note 74, at 6 (noting that store-and-forward services would still be limited by other Medicare reimbursement restrictions).

¹⁵⁸ *Bill Analysis of H.R. 2948*, *supra* note 74, at 6.

¹⁵⁹ *Id.*

¹⁶⁰ See *id.* (explaining limitations of the Medicare Telehealth Parity Act of 2015).

Additionally, Congress should reimburse for remote patient monitoring, which includes the monitoring, evaluation, and management of an individual with chronic conditions.¹⁶¹ Despite the fact that CMS in 2015 created a new Current Procedural Terminology service code for beneficiaries receiving chronic care management services, the code does not allow for data collection itself, such as remote patient monitoring.¹⁶² Congress should therefore guarantee coverage for remote patient monitoring.¹⁶³ Virtual chronic care management has successfully reduced costs and improved health outcomes in a number of studies, including the VHA Telehealth Program.¹⁶⁴ Similarly, Medicare beneficiaries who often face challenges accessing care for which they have coverage, especially those with multiple chronic conditions, could benefit from remote patient monitoring.¹⁶⁵ Guaranteeing reimbursement to providers would encourage more providers to offer remote monitoring to their patients, and could result in lower costs for the Medicare program.¹⁶⁶

Congress should also expand conditions that can be treated or monitored by telemedicine.¹⁶⁷ Although the Telehealth Innovation and Improvement Act of 2015 provides the Secretary of the U.S. Department of Health

¹⁶¹ See *id.* at 5 (“Currently there is [sic] no remote patient monitoring laws related to telehealth as it is applied in the Medicare program.”). Telemedicine services provide a huge opportunity to reduce costs for patients who have expensive chronic conditions. See *supra* note 107 and accompanying text (explaining the potential for cost reduction for patients with chronic conditions).

¹⁶² See Bresnick, *supra* note 77. Remote patient monitoring, the collection of patient’s health data that is then transmitted to a health care provider in a different location, would still not be reimbursed. See *TrendWatch: Telehealth for Hospitals*, *supra* note 5, at 3.

¹⁶³ See Bresnick, *supra* note 77.

¹⁶⁴ See BRODERICK, *supra* note 112, at 6 (highlighting the program’s success in reducing hospital admissions and number of patient days in the hospital, while reducing costs and maintaining high patient satisfaction). The program also proved that monitoring devices that record vital sign data were widely used by patients, and overall led to improved patient outcomes. See *id.*

¹⁶⁵ See 2016 Policy Priorities, *supra* note 72 (recommending a number of changes to improve coverage for Medicare beneficiaries).

¹⁶⁶ See CHRONIC CONDITIONS AMONG MEDICARE BENEFICIARIES, *supra* note 99, at 21–22 (noting that Medicare beneficiaries with multiple chronic conditions account for a disproportionate share of Medicare spending—roughly two-thirds of Medicare beneficiaries have multiple chronic conditions, and those with multiple conditions account for almost all Medicare hospital readmissions). The Congressional Budget Office (“CBO”) has for many years been opposed to expanding reimbursement for telemedicine because of cost concerns. See *Telemedicine*, CONG. BUDGET OFF., <https://www.cbo.gov/publication/50680> [<https://perma.cc/7U26-W799>] (last visited Feb. 29, 2016) (arguing that current proposals for reimbursing telemedicine would lead to overutilization of care as opposed to substituting in-person care). But see *CMS Medicare Reimburses Nearly \$14 Million for Telemedicine in 2014*, CTR. FOR TELEHEALTH & E-HEALTH L. (May 8, 2015), <http://ctel.org/2015/05/cms-medicare-reimburses-nearly-14-million-for-telemedicine-in-2014/> [<https://perma.cc/A72Y-J46J>] (arguing that the CBO’s cost concerns have been overestimated—in 2001, CBO estimated that reimbursing for telemedicine would cost \$30 million a year, but from 2001 to 2014 Medicare spent a total of \$57.6 million).

¹⁶⁷ *Bill Analysis of S. 2343*, *supra* note 135, at 5; see REPORT TO CONGRESS: TELEMEDICINE, *supra* note 5, at 12 (noting the Medicare currently reimburses less than one hundred treatments).

and Human Services discretion to add conditions that may be treated by telemedicine, the bill limits conditions to a specified list.¹⁶⁸ Instead, Congress should not limit CMS to the specified list and should grant CMS the authority to add any condition that can be treated by telemedicine once it has proven to be cost-effective and of equal quality as in-person treatment.¹⁶⁹

B. Congress Should Lift Originating Site Restrictions and Geographical Limitations on Reimbursement

Congress should also lift the originating site restrictions and geographical limitations currently imposed on all telemedicine reimbursement.¹⁷⁰ Roughly eighty percent of Medicare beneficiaries live in Statistical Areas, and are thereby automatically prohibited from receiving telemedicine services that would be reimbursable.¹⁷¹ Instead, telemedicine services should be delivered wherever patients are, including in a patient's home.¹⁷² The VHA Telehealth Program does not have originating site and geographical limits, and it attributes much of its success to employing telemedicine services that can be used in patient homes.¹⁷³

The Medicare Telehealth Parity Act eliminates most originating site restrictions and geographical limitations over a period of four years.¹⁷⁴ The bill, however, does not go far enough because even though by year four, telemedicine sites would not face geographical limitations, there would still be restrictions on originating sites.¹⁷⁵ For example, by the end of implementation, the bill adds a patient's home to the list of originating sites, but the telemedicine service would still be restricted to home dialysis, hospice care, eligible

¹⁶⁸ See Telehealth Innovation and Improvement Act of 2015, S. 2343, 114th Cong. § 2 (2015). Conditions are limited to "chronic hypertension, ischemic heart diseases, chronic obstructive pulmonary disease, heart failure, heart attack, osteoarthritis, diabetes, chronic kidney disease, depression, atrial fibrillation, cancer, asthma, stroke, total hip replacement procedures, total knee replacement procedures, Parkinson's disease." *Id.*

¹⁶⁹ See, e.g., *Bill Analysis of S. 2343*, *supra* note 135, at 5 (arguing that limiting conditions could hinder innovation on how to treat other conditions, "for example other mental health conditions besides depression").

¹⁷⁰ See *Telehealth Services*, *supra* note 72. Originating sites, or the location of the Medicare beneficiary when they are receiving services, are limited to: "The offices of physicians or practitioners; Hospitals; Critical access hospitals (CAHs); Rural health clinics; Federally Qualified Health Centers, Hospital-based or CAH-based Renal Dialysis Centers (including satellites); Skilled Nursing Facilities (SNFs), Community Mental Health Centers (CMHCs)." *Id.* Originating sites must also be located in a rural Shortage Area or outside of a Statistical Area. *Id.*

¹⁷¹ See *2016 Policy Priorities*, *supra* note 72.

¹⁷² See *id.*

¹⁷³ See BRODERICK, *supra* note 112, at 2, 5 (noting that of the patients enrolled in the program from 2003 to 2007, "57 percent lived in urban areas, 37 percent in rural areas, and 2 percent in highly rural areas").

¹⁷⁴ See Medicare Telehealth Parity Act of 2015, H.R. 2948, 114th Cong. (2015).

¹⁷⁵ See *id.* (maintaining originating site restrictions).

outpatient mental and behavior health services, and home health services.¹⁷⁶ Congress should therefore go further than all of the current proposed bills by immediately lifting all originating site restrictions and geographical limitations on telemedicine services that have proven to provide the same quality and cost-effective care as in-person services.¹⁷⁷

C. The Innovation Center Should Provide Telemedicine Waivers to All Types of ACO Models

At a minimum, ACOs should have the flexibility to fully use telemedicine.¹⁷⁸ The ACA promotes value-based payment innovations through the Innovation Center, yet reimbursement restrictions prevent the use of telemedicine, a tool that can aid in the achievement of quality improvement and cost-reduction goals.¹⁷⁹ As of January 2016, Next Generation ACOs received a waiver on telemedicine that eliminates Medicare reimbursement restrictions such as the originating site restrictions and geographical limitations.¹⁸⁰ Although this was a step in the right direction, the waiver does not eliminate other Medicare coverage and payment criteria.¹⁸¹ For example, Next Generation ACOs are still limited to real-time communications, such as virtual consultations.¹⁸² The Innovation Center should broaden the current telemedicine waiver to include both real-time and store-and-forward technologies.¹⁸³

The Innovation Center should also extend the telemedicine waiver to all test models.¹⁸⁴ The American Medical Association, the largest association of physicians and medical students in the United States, supports additional

¹⁷⁶ See *id.* at § 2(b)(2).

¹⁷⁷ See Creating Opportunities Now for Necessary and Effective Care Technologies (CONNECT) for Health Act, S. 2484, 114th Cong. (2016) (lifting originating site restrictions for acute stroke evaluation or management); Telehealth Innovation and Improvement Act of 2015, S. 2343, 114th Cong. (2015) (lifting originating site restrictions for “expanded telehealth services”); Medicare Telehealth Parity Act of 2015, H.R. 2948, 114th Cong. (2015) (lifting some originating site and all geographical restrictions after a four-year implementation period to specific telemedicine services).

¹⁷⁸ See *Telehealth Rule Waiver*, *supra* note 127 (stating that only one type of ACO, Next Generation ACOs, receive telemedicine waivers).

¹⁷⁹ See FURROW ET AL., *supra* note 85, at 129 (highlighting the ACA’s quality control efforts such as shifting to outcome standards); *TrendWatch: Telehealth for Hospitals*, *supra* note 5, at 6 (explaining that the ACA encourages providers to use of telemedicine to provide “clinically integrated care”).

¹⁸⁰ See *Telehealth Rule Waiver*, *supra* note 127.

¹⁸¹ See CTR. FOR MEDICARE & MEDICAID INNOVATION, NEXT GENERATION ACO MODEL, *supra* note 129, at 21–22.

¹⁸² See *id.* at 22 (“[S]ervices allowed through telehealth are limited to those described under Section 1834(m)(4)(F) of the Social Security Act . . .”).

¹⁸³ See *id.* (noting the current coverage restrictions).

¹⁸⁴ See *id.* at 21 (noting that telemedicine waivers are currently offered only to Next Generation ACOs).

Medicare pilot programs and the Innovation Center demonstration projects that would allow telemedicine coverage beyond current Medicare reimbursement policies.¹⁸⁵ In terms of immediate action, telemedicine waivers should apply to the innovation payment and care delivery models established by the ACA.¹⁸⁶ This includes the ACOs created through Medicare's Shared Savings Program and authorized by § 3022 of the ACA, and the demonstration programs authorized by § 3024 of the ACA.¹⁸⁷

CONCLUSION

The use of telemedicine will continue to increase as technology advances and as patients become more tech-savvy. There will also be an increase in demand from the growing number of individuals who now have coverage but cannot access cost-effective care. Telemedicine provides an alternative health care delivery system that many see as part of the solution for reducing the access gap for medically underserved populations. Furthermore, the ACA promotes the use of telemedicine by incentivizing providers to test and implement innovative delivery models that incorporate telemedicine. Despite the excitement around telemedicine, access and innovation are hindered by regulatory policies, including lack of Medicare reimbursement. Legislative and regulatory changes are needed to reconcile restrictive Medicare policies with the ACA's encouragement of using telemedicine. Congress should therefore lift site restrictions and geographical limitations on reimbursement, and should increase the types of telemedicine services that are reimbursable under Medicare. By closing this gap, Congress and CMS will empower the ACA to provide the widespread and affordable access to health care that it promised.

HANA SAHDEV

¹⁸⁵ See *Coverage of and Payment for Telemedicine*, *supra* note 155, at 6–7 (recommending the expansion of telemedicine to additional projects to strengthen the evidence of telemedicine's effectiveness).

¹⁸⁶ See *id.*; see also 42 U.S.C. § 1315a (directing the Innovation Center to explore a care model that “facilitate[s] inpatient care, including intensive care, of hospitalized applicable individuals at their local hospitals through the use of electronic monitoring”); *id.* § 1395jjj (establishing the Shared Savings Program); *id.* § 1395cc-5 (establishing the Independence at home demonstration program and requiring each program to use “electronic health information systems, remote monitoring, and mobile diagnostic technology”).

¹⁸⁷ See 42 U.S.C. §§ 1395cc-5, 1395jjj.

