



# State Use of Patient-Centered Outcomes Research in Telehealth Policymaking

By Amanda Attiya, Christina Cousart, and Maureen Hensley-Quinn  
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The adoption and use of telehealth have exploded across states, spurred by the COVID-19 pandemic, the need for social distancing, and swift federal and state action to enable how telehealth is delivered and covered by insurers. These changes will have a lasting impact on how health care is delivered, affecting payers, medical providers, and patients across the health care system.

As states address the ongoing effects of COVID-19 and look ahead to a post-pandemic world, patient-centered evidence that can support the evaluation of telehealth service delivery is critical and welcome. State policymakers need to weigh the advantages and disadvantages of telehealth services, including their impact on access, costs, and patient outcomes in determining the sustainability of policies.

## Background

For several years, with funding from the Patient-Centered Outcomes Research Institute (PCORI), the National Academy for State Health Policy (NASHP) has worked to support states to incorporate comparative effectiveness research and patient-centered outcomes research into policymaking. To continue this work – and recognizing the interest of states in this topic and PCORI’s growing portfolio of telehealth research<sup>1</sup> – NASHP established an affinity group of state policymakers who met quarterly to discuss telehealth initiatives and research from July 2019 through September 2020.

The project created opportunities for state official participants to discuss key issues related to telehealth, including the policy implications of emerging findings, especially as states made rapid adjustments in response to the emerging COVID-19 pandemic. This report shares themes that emerged from NASHP’s work with this group, including opportunities and challenges state policymakers face in the development of evidence-based telehealth policies.

For more information, read NASHP’s:

- [Lessons from States on Advancing Evidence-based State Health Policymaking for the Effective Stewardship of Health Care Resources](#) and
- [A Roadmap for State Policymakers to Use Comparative Effectiveness and Patient-Centered Outcomes Research to Inform Decision Making](#)

## Evolution of Telehealth and its Acceleration under COVID-19

Prior to the pandemic, adoption of telehealth — the application of electronic systems or technologies to support the delivery of health care services at a distance — had been steadily increasing across the United States.<sup>2</sup> However, actual use of telehealth services was still sporadic, influenced by various factors including:

- Existence of the infrastructure necessary for health systems and providers to employ telehealth tools (e.g., electronic records systems, widespread access to broadband);
- Implementation of policies by different payers (public and commercial) that enable telehealth adoption, including defining what counts as a telehealth visit (using remote video or telephone to connect providers with patients) and reimbursement structures for telehealth services;
- Use of telehealth to increase access in a particular region or community, especially as a means to address physician shortages; and
- Patient and provider capacity and/or their desire to use telehealth tools and services.

The emergence of COVID-19 and subsequent mandates to socially distance required the federal government, states, health insurers, and providers to make swift changes to enable greater ability for health care to be delivered remotely. These changes included:

- Relaxing point-of-service requirements so care could more easily be delivered in patients' homes, rather than requiring patients to initiate a telehealth visit from a specified location — such as a primary care provider's office — to connect with a specialist;
- Broadening the types of services that could be provided via telehealth, such as audio or telephone visits;
- Accepting use of new tools and technologies for the delivery of care (including greater use of video services supported by Microsoft, Apple, Google, Zoom, etc.); and
- Changing reimbursement policies to ensure providers are paid for telehealth delivery at the same rate as services delivered in-person (payment parity).

These changes accelerated telehealth adoption and utilization by both providers and patients. Looking ahead, state policymakers must now contend with important questions as they deliberate whether and how policies should be sustained. These include questions about ensuring privacy and security protections, especially regarding health information; understanding the comparative effectiveness and quality of services delivered remotely; and better understanding of how increased utilization of telehealth impacts health care capacity and costs.

### **Rapidly Changing Technology Poses Barriers to Adoption of Research**

Technology improvements continue to occur at an accelerated pace as tech companies compete to create products that are faster, smarter, and more user-friendly. As technology advances, so have Americans' utilization of tech tools and services. By 2019, 90 percent of US adults were internet users (up from just 52 percent in 2000). In addition, 96 percent of US adults owned a mobile phone and 81 percent used smartphones — representing significant growth considering that Apple's iPhone, which popularized the product, had only hit the market in 2007.<sup>3,4</sup>

This rapidly changing technology poses a significant challenge for researchers exploring how a specific technological intervention affects patients' access to and experience with health services. Over the course of just a few years, certain methods of using technology may become irrelevant or outdated as new devices emerge. Furthermore, states report that technological improvement has led to greater patient familiarity with various technologies that could trigger an increased ability and willingness by patients to adopt new technological interventions.

For example, when examining the research report, [\*Comparing Two Methods of Caring for Black and Hispanic Adults with Heart Failure after They Leave the Hospital\*](#),<sup>5</sup> NASHP's Affinity Group participants speculated that the use of specific home telemonitoring equipment described in the study may have been perceived as intimidating and/or intrusive to study participants, whereas newer, more familiar technologies that are now more available may have elicited better use by study participants. By the time a multi-year patient-centered study releases results about a particular tool or technology, new technologies and/or changing patient attitudes may limit the value of results for that particular telehealth intervention.

It is impractical for states and providers to hold off on implementing new and promising or — as in the case with COVID-19 — necessary telehealth interventions until researchers can issue results from in-depth studies. To this end, state policymakers have noted the challenge of balancing the need for fast-paced decision-making with their desire to develop evidence-based policies. They recommend that findings be framed to be broadly applicable to developing circumstances and the development of synthesized meta-analysis that share general conclusions related to the success or impact of telehealth.

### **Patient and Provider Satisfaction May Impact Long-term Adoption**

Increased familiarity and ability to handle technology do not necessarily mean that *all* patients have a preference for care delivered via telehealth. While states reported that there has been an increased level of comfort with telehealth since the beginning of the pandemic, concerns remain, especially regarding patient and provider concerns related to privacy and safety.

These attitudes may affect long-term adoption of telehealth tools, mitigating their utility even if evidence suggests use of the technology may lead to improved health outcomes or lower costs. Officials noted that even if evidence around a given intervention points to improved health outcomes and lower costs, states will only consider investment if the intervention is supported by patients and providers. Some states have enacted patient satisfaction surveys to collect data to direct their future decisions surrounding telehealth, but more comprehensive research will be needed to help assess long-term patient and provider attitudes regarding telehealth as well as to understand the most effective strategies for allaying those concerns.

### **Ensuring Telehealth Maintains Care Quality**

There is strong pressure on states to maintain policies that increase access, but states want to ensure these policies will not sacrifice quality or effectiveness of care. In response to COVID-19, states relaxed many standards for telehealth services, some operating under a belief that “some

service is better than none,” in the case of patients who are unable to leave their homes or visit physician’s offices. Some of these changes included:

- Relaxation of which technologies were allowed to be used for telehealth visits (eg., Zoom, Google Meet, Skype);
- Broadening licensing requirements to allow for delivery of telehealth from out-of-state providers;
- Eliminating or limiting point-of-service restrictions to allow for delivery from various service sites directly to patient’s homes, even when the patient or provider had no prior relationship; and
- Acceptance of audio-only services as a telehealth visit.

As state policymakers review these policies, a leading question is whether quality of care can and will be on par with in-person care delivery if these policies are maintained.

As officials look to evidence to use to evaluate these policies, there is a need for studies that make clear and direct comparisons to services delivered remotely versus those delivered in-person. One study, [\*Comparing a Smartphone Program with a Peer-Led Program to Help People with Serious Mental Illness Manage their Symptoms\*](#),<sup>6</sup> by Dror Ben-Zeev, PhD, particularly caught the interest of state members in NASHP’s Telehealth Affinity Group because it provided a clear and direct comparison between use of a telehealth intervention and counseling delivered in-person. Specifically, the study compared use of an online program involving a smartphone app with a treatment program involving in-person group sessions. Both programs proved equally effective in helping patients manage symptoms. Affinity group participants were particularly interested that the online program, despite being significantly less intensive, did not sacrifice quality.

State officials also desire more specificity in identifying which part of an intervention led to its success. In several cases, telehealth studies focus on a multi-part intervention, including use of in-person and remote tools or the use of multiple telehealth interventions, such as remote visits paired with a smart device. But studies involving multiple tools or steps sometimes lack clarity about which piece of the intervention led to a specific outcome. Researchers could improve on the real-world applicability of their findings by identifying which portion of a studied intervention would be most effective if implemented. This would allow policymakers to draw more concise conclusions from a study’s results.

### **Evaluating How Telehealth Impacts Equity**

States are committed to implementing and continuing telehealth policies that expand access and improve care, especially those that may address health disparities. However, states are also wary of initiating or maintaining policies that exacerbate inequities. Among these concerns include access to modern technology, including broadband services, especially in rural or low-income communities. The Federal Communications Commission estimates approximately 21.3 million Americans lack access to broadband services, and the majority of these individuals reside in rural America.<sup>7,8</sup> State officials raised concerns that the existing digital divide will only make

accessing quality health care even more difficult if telehealth services become more of the “norm” for how certain types of care is delivered.

To address this, states expressed a desire for more detailed research findings into the geographic and demographic makeup of populations targeted in a study. Other data points of interest include understanding language access barriers and more information about the technological capacity of study participants, their age, and income. By having more refined demographic information, states can more easily scale and apply research findings to their unique populations.

### **The Need for Enhanced Cost and Benefit Data on Telehealth Interventions**

While emerging evidence about the effectiveness of telehealth interventions is of interest to state officials, among the most critical data sought is information about costs and related cost-benefit analysis. For example, while examining results from the study, [\*Does a Video Chat Referral Process Help Families with Children Who Have Medicaid to Initiate Mental Health Care?\*](#),<sup>9</sup> affinity group members indicated that a more in-depth explanation of the benefits of increased mental health care screening and access would have aided their ability to use the findings to enact future policies or programs.

This is especially important as adopting new technologies and initiatives could lead to substantial costs for states. Policymakers appreciate data that shows how interventions will result in not only better health outcomes for their patients, but also overall lower health costs. Such data is critical for policymakers as they evaluate the value of large-scale infrastructure investments, such as expansion of broadband services or spending on a discrete technology that could be quickly outdated in a few years.

### **Future Telehealth Research and Data Needs**

In addition to the issues identified above, state officials noted many ongoing and future telehealth issues that they will be closely evaluating. Some of the focus areas they identified include:

- A robust evaluation of medical service billing codes used for telehealth to inform development of a more universal and streamlined system;
- Understanding the differences between remote services delivered via audio and video, including cost and quality benefits of care delivered by either method;
- Evaluating the effect of payment parity on telehealth utilization and overall health care costs;
- Strategies to improve use of telehealth interventions to address behavioral health needs;
- Understanding the baseline conditions for providers and patients that lead to best practices in telehealth adoption and utilization; and
- How telehealth may strengthen or worsen fraud, waste, and abuse in the health care system.

In a society in which technology is increasingly integrated into the lives of both patients and practitioners — including use of audio, video, email, and smart technologies — more information is needed to understand how telehealth interventions and technologies can be more

effectively used and how – or whether – they should be paid for. Research into these areas could provide invaluable resources to policymakers as they make critical decisions in the coming months and years, but only if it can be framed and presented in the context of current technologies and societal needs.

## Notes

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<sup>1</sup> “Telehealth.” Patient-Centered Outcomes Research Institute, 2020. <https://www.pcori.org/topics/telehealth>.

<sup>2</sup> Barnett, Michael L, Kristin N Ray, and Jeff Sauza. “Trends in Telemedicine Use in a Large Commercially Insured Population, 2005-2017.” *Jama Network*, November 27, 2018. <https://doi.org/10.1001/jama.2018.12354>.

<sup>3</sup> “Demographics of Mobile Device Ownership and Adoption in the United States.” Pew Research Center: Internet, Science & Tech. Pew Research Center, June 12, 2019. <https://www.pewresearch.org/internet/fact-sheet/mobile/>.

<sup>4</sup> “Demographics of Internet and Home Broadband Usage in the United States.” Pew Research Center: Internet, Science & Tech. Pew Research Center, June 12, 2019. <https://www.pewresearch.org/internet/fact-sheet/internet-broadband/>.

<sup>5</sup> Pekmezaris, Renee. “Comparing Two Methods of Caring for Black and Hispanic Adults with Heart Failure after They Leave the Hospital.” Patient-Centered Outcomes Research Institute, September 2018. <https://www.pcori.org/research-results/2013/comparing-two-methods-caring-black-and-hispanic-adults-heart-failure-after>.

<sup>6</sup> Ben-Zeev, Dror. “Comparing a Smartphone Program with a Peer-Led Program to Help People with Serious Mental Illness Manage Their Symptoms.” Patient-Centered Outcomes Research Institute, September 2018. <https://www.pcori.org/research-results/2014/comparing-smartphone-program-peer-led-program-help-people-serious-mental>.

<sup>7</sup> Broadband Deployment Report: Digital Divide Narrowing Substantially.” Federal Communications Commission, May 29, 2019. <https://www.fcc.gov/document/broadband-deployment-report-digital-divide-narrowing-substantially-0>.

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