



Study of Telehealth Expansion and Payment Parity

PRELIMINARY REPORT TO THE MINNESOTA LEGISLATURE 2023

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Study of Telehealth Expansion and Payment Parity – Preliminary Report to the Minnesota Legislature 2023

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<https://www.health.state.mn.us/data/economics/telehealth/index.html>

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Protecting, Maintaining and Improving the Health of All Minnesotans

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May 18, 2023

To the Honorable Chairs and Ranking Members:

MDH is pleased to share the **Minnesota Department of Health (MDH)'s Preliminary Report from the Study of Telehealth Expansion and Payment Parity.**

The Legislature requested this study in 2021 to help inform their work to set telehealth coverage and reimbursement policies, and to explore the role of telehealth in the future of health care for Minnesotans. A final report is due in a year, on January 15, 2024.

While telehealth has been part of the health care delivery mix for more than a decade, the pandemic dramatically accelerated and expanded its use. The research and knowledge base regarding telehealth continues to grow, but answers to many important questions about quality, outcomes, best-use cases, and other impacts (both intended and unintended) are still pending. This preliminary report to the Legislature pulls together findings from a qualitative study conducted for MDH by Wilder Research, results from surveys conducted by MDH, and data from initial analyses of the Minnesota All Payer Claims Database (MN APCD). The report also includes information from national studies where relevant.

The following themes have emerged from the MDH study to date:

- The COVID-19 pandemic sparked a profound shift in telehealth's role as part of our health care ecosystem.
- Audio-only telehealth addresses narrow but important access challenges, especially for Minnesotans residing in rural areas or with challenges using or accessing video-based telehealth.
- Minnesota patients and health care providers value telehealth's benefits, including the convenience and flexibility it offers.
- Telehealth's potential benefits for expanding access to mental and behavioral health care and specialists are especially notable.
- Assigning fair financial value to telehealth will take added research and consideration.
- Telehealth has potential to improve health equity, but the digital divide and other systemic challenges risk making disparities worse.
- Telehealth sits at the nexus of rapidly changing systems. Telehealth shows promise for improving access, equity, and engagement in health care, but the long-term impact on health outcomes and how the availability of in-person care might change remains uncertain.

The year ahead will reveal much more about Minnesotans' enduring preferences for telehealth as a mode of care delivery, how it impacts health care quality and outcomes, how it can help to reduce disparities and improve health equity, and more. At the same time, telehealth capabilities, applications and markets will continue to evolve. In the meantime, **MDH makes the following two recommendations:**

Recommendation 1: To continue to include audio-only telehealth as a type of telehealth service in statute.

Recommendation 2: To extend payment parity for audio-only telehealth beyond the current June 30, 2023 sunset until more complete evidence becomes available.

May 18, 2023

In 2023, MDH's work will include: in-depth analysis of claims data and electronic health record data, a broader review of emerging telehealth literature and research findings, and community and stakeholder engagement. Additionally, MDH will continue seeking input from a Technical Advisory Group of professionals from research, patient-advocate, provider, and payer perspectives. MDH expects to provide a fuller picture of telehealth in Minnesota for the final report and a clearer picture of the many concerns and considerations surrounding telehealth that will continue to evolve beyond this study.

Questions or comments about the report may be directed to Stefan Gildemeister, State Health Economist and Director of the Health Economics Program, at Stefan.gildemeister@state.mn.us or (651) 201-3550.

Sincerely,

A handwritten signature in black ink that reads "Brooke A. G" followed by a long horizontal flourish.

Brooke Cunningham, MD, PhD
Commissioner
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Acronyms

Minnesota Department of Health (MDH)

Minnesota Department of Human Services (DHS)

Black, Indigenous, and People of Color (BIPOC)

Health Information Portability and Accountability Act (HIPAA)

Minnesota Health Care Programs (MHCP)

Public Health Emergency (PHE)

Technical Advisory Group (TAG)

Department of Commerce (COMM)

Executive Summary

Telehealth—or health care delivered using real-time two-way interactive audio and visual communications such as video or telephone calls—moved to the forefront of health care during the COVID-19 pandemic. Use of telehealth increased dramatically in 2020. Though overall use has declined somewhat since then, the types of use are still evolving today. Early research shows that telehealth is a promising practice in helping many Minnesotans get the care they need, when they need it, and covered by their insurance. The increased use of audio-only and video-based telehealth to deliver mental and behavioral health services has been particularly notable since March 2020.

Emerging telehealth research, based upon the published literature as well as Minnesota-specific interviews with patients, providers and payers, population and clinic surveys, and initial analyses of claims data point to the following themes:

- **The COVID-19 pandemic sparked a profound shift in telehealth’s role as part of our health care ecosystem. Telehealth is here to stay.** Overall usage of telehealth increased dramatically at the start of the pandemic and remains higher than pre-pandemic levels. Equally important, the types of providers delivering care and the kind of care being delivered by telehealth has changed. Pre-pandemic, most telehealth services covered by private insurance were provided by telehealth-only platforms, and most often for the diagnosis and treatment of non-emergency, acute conditions. With the onset of the pandemic, use of telehealth by traditional “brick-and-mortar” health care systems and providers increased and expanded to provide more complex and ongoing care, including for chronic conditions, and mental and behavioral health care. Significantly more Minnesotans have used telehealth since March 2020 than before. Nearly 1 in 3 Minnesotans have used a telehealth service since the onset of the pandemic, and telehealth increased as a percentage of commercial payer claims from 1% in 2019 to 12-15% in mid-2021, with a peak of 36% in April 2020 (MN APCD, 2022). The uses of telehealth also changed dramatically and continue to evolve as patients and providers learn more about how telehealth can provide a valuable option as part of an overall health care strategy.
- **Audio-only telehealth addresses narrow but important access challenges.** Audio-only telehealth (or telehealth delivered by telephone without a visual component) has only been a reimbursable service since 2020. Information available so far points to audio-only being particularly important to telehealth access for some Minnesotans in areas of Greater Minnesota, as well as people of color, Indigenous communities, and older adults. Audio-only improves telehealth access where technology gaps prevent or limit use of audio-visual telehealth options.
- **Patients, health care providers, and public health leaders value telehealth’s benefits.** Minnesotans interviewed for this study have appreciated the expansion of telehealth that occurred during the pandemic. Patients who have used telehealth have been generally satisfied with telehealth care and appreciate the convenience. Providers also observed that telehealth helps make care more accessible for people with transportation, work, or childcare challenges, as well as decreasing the number of missed appointments. In addition, providers also noted that the addition of telehealth options permits more flexibility in their schedules and may help to reduce burnout. Public health leaders noted the important potential for telehealth to help patients connect with

providers who share their racial or cultural identity but who may not be available to patients through their local, in-person provider network.

- **Telehealth’s potential benefits for expanding access to mental and behavioral health and specialists are especially strong.** While overall rates of telehealth use appear to be declining from the peak of the pandemic, the use of telehealth for mental and behavioral health services remains high, with 60% of commercial claims for these services continuing to be telehealth as of June 2021 (MN APCD, 2022). Several providers have also pointed to telehealth as being an important strategy for making mental and behavioral health care and specialists more accessible to residents in Greater Minnesota, where provider shortages can make such care especially challenging to reach without telehealth.
- **Assigning fair financial value to telehealth will take added research and consideration.** While many patients, payers, and providers agree that telehealth provides great benefits, they are less unified on the price of, or reimbursement for, telehealth when compared with in-person visits. Some patients perceive telehealth visits as something that should cost less and therefore require a lower co-pay, while providers interviewed consistently favored payment parity. Payers express hesitance on any government or statutory mandates regarding payment parity.
- **Telehealth has potential to improve health equity, but the digital divide and other systemic challenges risk making disparities worse.** While patient satisfaction with telehealth was positive overall, it was somewhat lower for Black, Indigenous and people of color (BIPOC) residents (MNHA, 2021). Communities that face disproportionate inequities in digital access and affordability, or comfort in using digital technology, face barriers to telehealth access. Telehealth could unintentionally increase health disparities without adequate investments to address the existing digital divide and remedy other structural inequities impacting health care access, delivery, and outcomes, particularly for historically marginalized populations.
- **Telehealth sits at the nexus of rapidly changing systems.** From how we deliver and pay for health care to the technology people rely on in daily life, the systems that telehealth bridges are changing at an unprecedented pace. Consumer and provider preferences for in-person versus online services remain in flux and likely vary depending on the situation. Ongoing health care workforce shortages raise ethical and capacity questions in how much telehealth might supplant, versus supplement, in-person care delivery. Telehealth shows promise for improving access, equity, and engagement in health care, but the long-term impact on health outcomes and how the availability of in-person care might change remains uncertain.

Important questions remain and will continue to be studied by the Minnesota Department of Health (MDH) and partners as we continue this study for the final legislative report due in January 2024. In the interim, MDH makes the following recommendations:

Recommendation 1: To continue to include audio-only telehealth as a type of telehealth service in statute.

Recommendation 2: To extend payment parity for audio-only telehealth beyond the current June 30, 2023 sunset until more complete evidence becomes available.

Research Methods and Data Sources

MDH gathered data and other evidence using both quantitative and qualitative research methods, sometimes called a “mixed methods” approach. The following original data sources informed this report:

- **Minnesota Health Information Technology Ambulatory Clinics Survey (HIT):** A biennial survey of clinics in the state. The survey explores adoption and effective use of electronic health record (EHR) systems, health information exchange, and related health information technologies. The data in this report were collected as part of the 2020 survey. Over 1,100 clinics participated in this survey. (HIT, 2022)
- **Minnesota All Payer Claims Database (MN APCD):** A large-scale database that systematically collects health care transaction records, including medical claims, pharmacy claims, and enrollment information from multiple private and public payers. The data in this report are based on analyses of data for 2019, 2020, and the first six months of 2021. (MN APCD, 2022)
- **Minnesota Health Access Survey (MNHA):** A large-scale biennial population survey that focuses on information about how Minnesotans access health insurance and health care services to inform policy to help improve access to health care and health insurance for all Minnesotans. The data in this report from the 2021 survey wave were collected between October 2021 and January 2022 and document telehealth use in the 12 months prior to when the survey was taken. About 18,000 Minnesotans participated in this survey. (MNHA, 2021)
- **Minnesota Health Care Workforce Survey:** A survey administered to nearly 180,000 providers from across 20 different healthcare professions at the time they renew their professional license in Minnesota. The survey provides an understanding of the availability, distribution, and demographics of the workforce. The data in this report are based on analyses at two time periods: calendar year 2019, and October 2021 through July 2022.
- **Wilder Research Qualitative Study:** A qualitative study based on interviews with 30 service recipients and 20 health care providers, as well as individual and group interviews with 16 leadership representatives of five payer organizations. Service recipients were individuals ages 18 to 65 living in Minnesota with commercial health insurance coverage who had used telehealth in the last 18 months. All interviews were conducted between August and October 2022. The full Wilder report is provided in Appendix B to this report. (Wilder Research, 2022)

As is the case with any research study, each data collection tool used here is associated with some degree of imprecision, uncertainty, and potential for bias. For example:

- **Survey data** can be associated with potential biases resulting in findings from the survey that differ somewhat from the “truth” that exists in the broader population. This type of discrepancy may stem from how the study population is selected, how questions are framed, and how respondents interpret and answer the questions.

- **Health care claims data** can be affected by the degree of accuracy and completeness of the data recorded in the claim. By their nature, health care claims do not include detail about care received by people who do not have insurance coverage or for services delivered and paid for outside of an insurance benefit. Further, there are gaps in the data because not all payers report to MDH.
- **Interviews and listening sessions** generally rely on discussions with a small number of individuals and may not include all perspectives, nor are findings fully generalizable to the broader population.

A more complete discussion of the research methods used in the Wilder Research Qualitative Study, including limitations, may be found in Appendix B. Additional information about the MDH surveys or the MN APCD is available from MDH upon request.

As MDH's work on the telehealth study continues, there will be opportunities to bring additional evidence to this investigation, including more recent data and data from other sources. This will help to corroborate and clarify some of the initial research findings in this report and strengthen policymakers' foundation for decision-making.

Introduction

Telehealth provides important options for health care delivery. There are questions about how it gets paid for.

Telehealth has been part of the health care delivery mix for more than a decade but moved to the forefront at the start of the COVID-19 pandemic. The use of telehealth in the U.S. grew by an explosive 88 times between 2019 and 2020 (United States Office of Inspector General, 2022). The unprecedented growth reflected changes to who was using telehealth and seismic shifts in how telehealth was delivered, such as increased video conferencing, remote monitoring, and more.

Changes were possible, in part, because several federal and state regulations (e.g., permissible technologies, prescribing controlled substances outside without an in-person visit, and where and how much telehealth could be delivered or received) were relaxed for the public health emergency. As the crisis of the pandemic begins to subside, Minnesota policymakers, health care researchers, health systems, providers, and payers are wrestling with many of the same questions about the future of telehealth as other states across the country, such as:

- How much has telehealth reshaped what patients and health care providers expect from health care visits—and to what degree will these changes remain and reshape health care, even after the pandemic?
- How has audio-only telehealth proven itself effective for care delivery – and where is audio-only limited in its effectiveness because providers cannot see patients?
- What is a fair price or reimbursement for telehealth services for payers, providers, and patients, when compared with in-person care from a traditional health care system?
- What policies are needed to support the availability, delivery, and use of appropriate and beneficial telehealth, while preventing use that is harmful or wasteful – and, at the same time, ensuring that in-person options remain available and accessible to Minnesotans?

In 2021, when making significant policy changes to telehealth access and payment provisions, the Minnesota Legislature also directed the Minnesota Department of Health (MDH) to study the impacts of telehealth on health care access, quality, patient satisfaction, health care outcomes and health equity for people covered by commercial (private) health insurance to inform answers to these important policy questions. This preliminary report to the Legislature pulls together findings from a qualitative study conducted for MDH by Wilder Research, results from surveys conducted by MDH of Minnesotans, Minnesota ambulatory clinics, and Minnesota health care providers, and data from initial analyses of the MN APCD. These studies are described in the Data Sources section of this report. In addition, there are citations to various published studies. The research and knowledge base regarding telehealth continues to grow, but answers to many important questions about quality, outcomes, best-

use cases, and other impacts (both intended and unintended) are still pending.

This report summarizes MDH findings from work to date and describes research activities planned for the remainder of 2023 to develop final recommendations for the 2024 legislative session. MDH worked with SDK Communications, Wilder Research, and staff from the Management Analysis Division of the Department of Management and Budget to plan and prepare this report. MDH has also engaged a Technical Advisory Group to help shape the research approach and review initial findings. In addition, the work has been undertaken in coordination with the Department of Human Services (DHS)—which is leading a parallel study of telehealth’s impact on Minnesota Health Care Programs (MHCP), including Minnesotans covered by Medical Assistance (the state’s Medicaid program) and MinnesotaCare (the state’s basic health plan). MDH also consulted with the Minnesota Department of Commerce on this study. Finally, MDH has held listening sessions with MDH leaders to better understand how telehealth has been or could be used to support the MDH mission of protecting, maintaining, and improving the health of Minnesotans.

It is important to note that other technology-driven health care and niche, pay-as-you-go or subscription app-based telehealth services are not included in this data or the evaluation, overall. However, these emergent and evolving health services are having significant impacts on patients, health care delivery, quality, health care spending, and more. Long term, policymakers will need to continue taking a holistic view of telehealth to ensure that payment models, criteria for coverage, and oversight extend to these emerging service options.

Policy Context

Telehealth services and regulations are not new, but they changed rapidly during the pandemic.

Minnesota first comprehensively addressed telehealth in legislation with **the Minnesota Telemedicine Act of 2015**. Since then, telehealth visits have been required to be reimbursed at the same rate as in-person visits and out-of-pocket-costs for telehealth patients remained the same for both delivery methods, otherwise known as “payment parity.”

However, the 2015 law also included several stipulations about what constitutes a telehealth visit. For example, patients had to meet with a provider in person at least once for telehealth to be reimbursable. Audio-only telehealth was also not included as eligible for reimbursement.

The federal COVID-19 Public Health Emergency (PHE) of January 2020 enacted several measures that expanded access to telehealth services and broadly impacted the telehealth landscape. Examples include allowing for reimbursement for all Medicare beneficiaries (rather than only designated rural

areas), adding audio-only as a reimbursable mode of telehealth, and relaxing Health Insurance Portability and Accountability Act (HIPAA) regulations around data and technology for telehealth delivery. At the end of 2022, Congress passed an appropriations package that included a two-year extension of Medicare and commercial market telehealth flexibilities. The extended flexibilities impact providers, settings, in-person requirements, and use of audio-only platforms for non-behavioral mental telehealth services through December 31, 2024. In addition, the latest extension of the federal PHE is currently scheduled to end May 11, 2023. After the PHE ends, HIPAA flexibility for telehealth technology will return to pre-2020 regulations, depending on actions of federal agencies.

In **March 2020, Governor Walz declared a peacetime emergency** through executive order and granted the Commissioner of Human Services temporary authority to waive or modify certain requirements to expand telehealth access and coverage. Specific modifications included:

- **More Places:** allowing telehealth services at a patient’s home.
- **More Practitioners:** expanding telehealth-eligible professions to include mental health, substance use counselors, and respiratory therapists; and allowing out-of-state mental health providers to be reimbursed.
- **More Times:** allowing mental health and substance counseling services to be provided on an emergency basis.
- **More Modes:** making audio-only telehealth eligible for reimbursement on parity with audio-visual telehealth visits.

In **2021, the Legislature passed the Minnesota Telehealth Act** to codify many of the executive order’s provisions for commercial sector health insurance and MHCP. Specifically, the 2021 legislation defined telehealth as:

“The delivery of health care services or consultations through the use of real time, two-way interactive audio and visual communications to provide or support health care delivery and facilitate assessment, diagnoses, consultation, treatment, education and care management of a patient’s health care. Telehealth includes the application of secure video conferences, store-and-forward technology and synchronous interactions between a patient located at an originating site and a healthcare provider located at a distant site.”

(Laws of Minnesota 2021, 1st Spec. Sess. chapter 7, article 6, section 1, subdivision 2(h))

The expanded telehealth services codified through this law include:

- **Preventing limits** on coverage for telehealth services based on geography.
- **Increasing accessibility** of mental health and substance use disorder services.
- **Removing limitations** on services for MHCP recipients—including limits on number of visits and expanded provider options.

- **Adding audio-only** visits to the definition of telehealth and the corresponding requirement to cover these at parity until July 1, 2023 (without further legislative action).
- **Requiring reimbursement** to be the same as in-person services for both commercial insurers and MHCP.

The legislature established the Minnesota Study of Telehealth Expansion and Payment Parity under Section 27 of Laws of Minnesota 2021, 1st Special Session, Chapter 7, Article 6, to study the impact of telehealth services and payment parity on access to health care services, quality of care, health outcomes, patient satisfaction, and value-based payments and innovation in health care delivery. See Appendix A for the full legislation.

Impact of the Pandemic on Telehealth

The COVID-19 pandemic sparked a profound shift in telehealth's role as a health care option.

The entire health care continuum, from preventive and primary care to emergency services, is touched by telehealth. It is widely acknowledged that the COVID-19 pandemic sparked an explosive growth in the number of telehealth visits. What is less known, but equally important, is the profound shift in the types and diversity of telehealth visits that have emerged since 2020.

Pre-pandemic: From ear infections and mental health to remote hospital services

Prior to the pandemic, telehealth services made up about 1% of health care claims in Minnesota (MN APCD, 2022). For Minnesotans with commercial health insurance, telehealth services were most often used for acute non-emergency medical needs, such as sinusitis and urinary tract infections (Yu et al., 2018). For Minnesotans with public insurance, telehealth was more commonly used for behavioral and mental health care. Another early use of telehealth was providing real-time consultations between health care providers in rural hospitals and specialists in the Metro Area or other locations, such as telestroke programs.

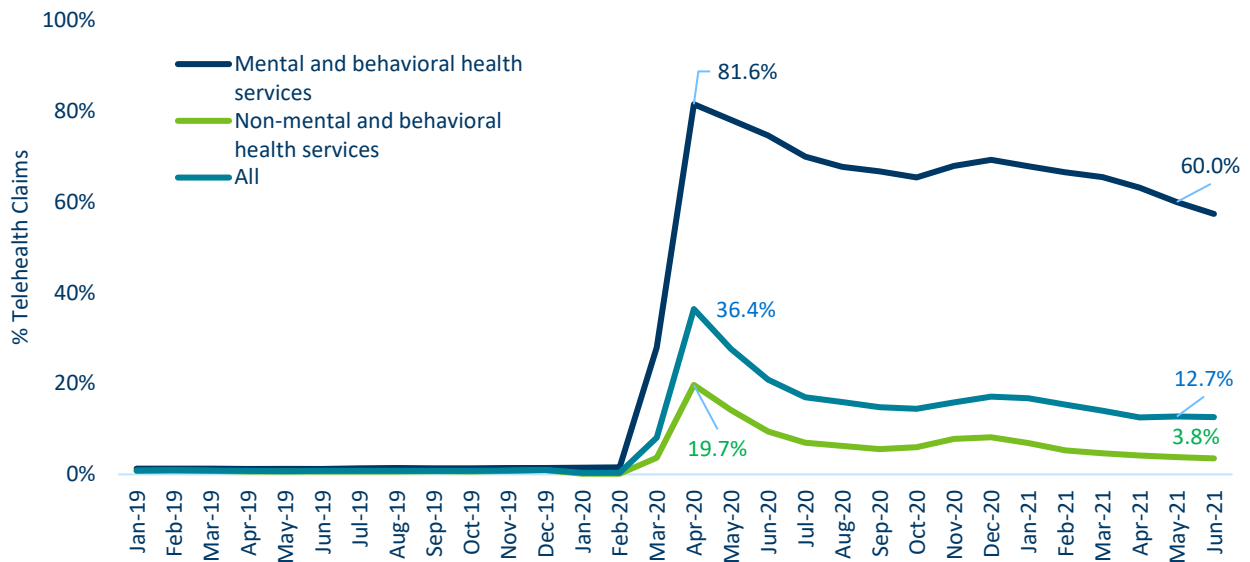
During the pandemic: The dawn of a new era in telehealth

From the onset of the COVID-19 pandemic, the use of telehealth expanded rapidly and broadly, and the types and ways patients and providers relied on telehealth fundamentally changed. Since the pandemic began up to the most recent data available, the telehealth services most often used by Minnesotans with commercial health insurance are for care related to anxiety and depression. For the commercially insured population, these are fundamentally different uses of telehealth than pre-

pandemic.

Telehealth usage increased dramatically at the onset of the pandemic in early 2020 and remained higher than pre-pandemic levels a year later (Figure 1). Specifically, claims for telehealth services as a percentage of all commercial health care claims rose to a high of 36% in April 2020, including 82% of all mental and behavioral health care claims and 20% of all non-mental and behavioral health claims (MN APCD, 2022). Telehealth services declined to just 12% to 15% of all claims by mid-2021. About 60% of mental and behavioral health claims were for telehealth visits for the same period. These Minnesota patterns are generally consistent with national data from this time, although claims for telehealth services as a percent of all health care claims was somewhat higher in Minnesota.

Figure 1: Telehealth Claims as a Percentage of All Health Care Claims for Minnesotans with Commercial Insurance, January 2019 - June 2021



Source: Minnesota All Payer Claims Database (MN APCD): Jan. 1, 2019 – June 30, 2021

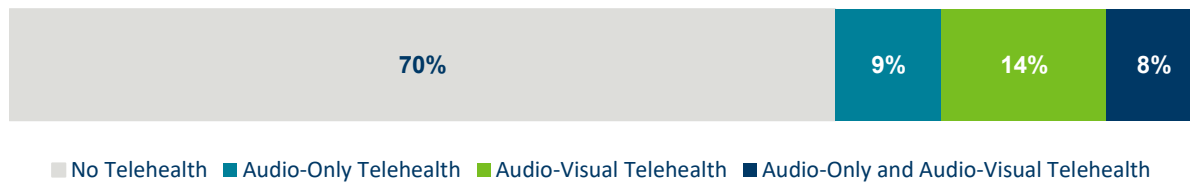
Uses of telehealth continue to evolve as patients and providers learn more about how telehealth can provide a valuable option as part of an overall health care strategy. Some examples offered by providers, patients, and payers interviewed by Wilder Research include pregnancy check-ups, chronic condition management, mental/behavioral health care services, and remote monitoring (telemonitoring) of patient health. In Greater Minnesota, patients are also using telehealth to widen access to specialists, among other uses.

Nearly 1 in 3 Minnesotans have used a telehealth service since the onset of the COVID-19 pandemic

Based on the MNHA survey MDH estimates that nearly 90% of Minnesotans had a health care visit (in-

person, telehealth, or both) during the period from late 2020 to late 2021. In this same time period, 30% of Minnesotans had a telehealth visit (Figure 2).

Figure 2: Percentage of Minnesotans with a Telehealth Visit, Late 2020 - Late 2021

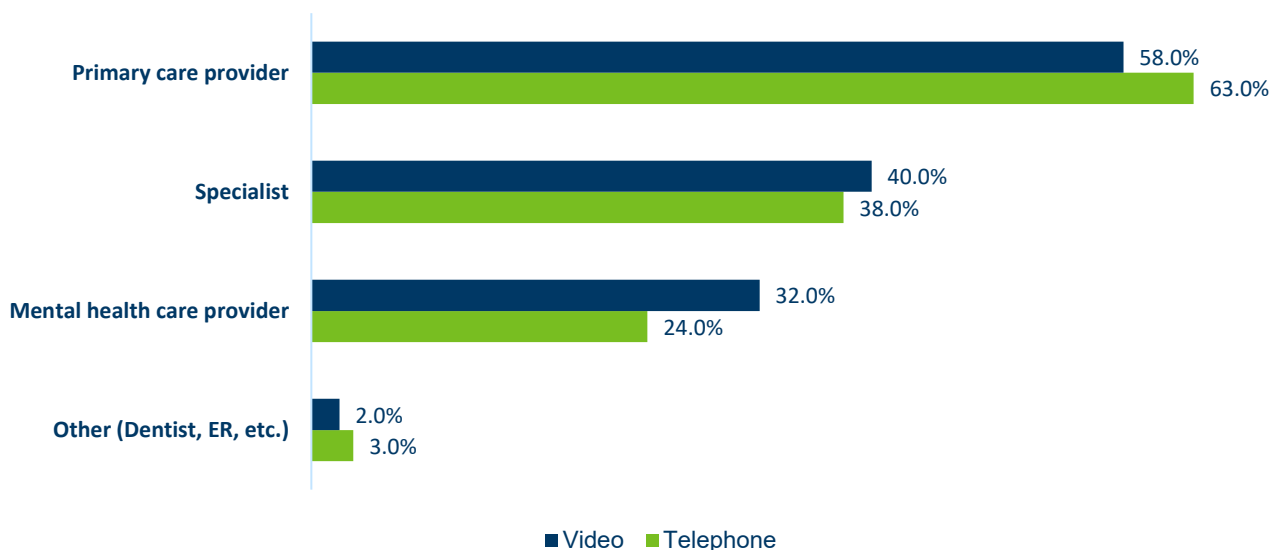


Source: Minnesota Health Access (MNHA) Survey, 2021

Minnesotans are relying on telehealth for primary care and more

Most individuals who used telehealth used it to see a primary care provider (Figure 3). According to the MNHA survey, 63% of people who had an audio-only telephone visit and 58% of those with a video visit consulted with a primary care provider. Telehealth was also used to see specialists and mental health care providers. Among people who had telephone visits, 38% visited with a specialist and 24% visited a mental health provider. Among those with video visits, 40% reported seeing a specialist and 32% reported seeing a mental health care provider via telehealth.

Figure 3: Type of Provider Seen at Telehealth Visit, Late 2020 - Late 2021



Note: Respondents could choose more than one response, thus percentages do not sum to 100%.

Source: Minnesota Health Access (MNHA) Survey, 2021

Providers are using telehealth as part of their overall care system

The 2020 health information technology survey of ambulatory clinics (HIT, 2022) found that health care providers integrated telehealth tools into their overall health care delivery. Specifically, providers reported the following as the most common uses for telehealth that year:

- **Provide low-risk urgent care**, identify those persons who may need additional medical consultation or assessment, and refer as appropriate (66% of clinics used telehealth to provide low-risk urgent care)
- **Screen patients** who may have symptoms of influenza, COVID-19, or other conditions and refer as appropriate (64%)
- **Access primary care providers and specialists**—including mental and behavioral health—for chronic health conditions and medication management (61%)
- **Follow up with patients after hospitalization** (55%)
- **Monitor clinical signs of certain chronic medical conditions** (e.g., blood pressure, blood glucose, other remote assessments) (53%)

The Minnesota Health Care Workforce survey found that the proportion of mental health care providers who used telehealth for at least some of their patient encounters nearly quadrupled from 21% in 2019 to 80% in 2022. Use of telehealth by alcohol and drug counselors, physical therapists, physicians, and physician assistants also increased considerably between 2019 and 2022.

Telehealth is not just a rural service

An even higher percentage of primary care clinics and clinics located in small town or rural areas of Minnesota reported using telehealth to facilitate access to providers including specialists, the delivery of low-risk urgent care, screening for viral illnesses, monitoring chronic conditions, and the provision of post-hospitalization follow up.

Still, most telehealth claims since 2020 reported to the MN APCD are in Minnesota's metropolitan areas, where most Minnesotans reside. The Minnesota Health Care Workforce survey found that telehealth use increased across health care providers in all regions of Minnesota, with the greatest increase in urban areas, rising from 25% of providers using telehealth to some degree in 2019 to 42% in 2022. One contributing factor to the increased use of telehealth in metropolitan areas is the policy change that makes more providers outside of designated rural areas eligible for reimbursement by Medicare. Providers interviewed reported that having telehealth available as a reimbursable service to older adults covered by Medicare made it simpler to make telehealth available to all patients.

Telehealth Impacts: Access, Quality, Satisfaction, and Equity

Health care access, quality, and outcomes; patient satisfaction; and the equitable delivery of care are important components of an effective health care system. With time, our understanding of telehealth and its impacts, whether positive or negative or mixed, will become clearer as more research is conducted and the evidence continues to grow. Preliminary research conducted for this study offers some insights on these components and highlights their interconnected nature in ensuring Minnesota continues to offer a leading health care system.

It is important to keep in mind that the underlying causes of barriers to access (economic, cultural, or otherwise), low quality, poor outcomes, low satisfaction, and inequities across all of these metrics, are multifactorial, structural, and intersecting, and that health care alone cannot eliminate them. Expanding and improving telehealth may help address some of these challenges, but telehealth cannot solve, nor should it be judged on the basis of whether it solves, some of these deeply rooted problems. Telehealth should not be used as a band-aid that permits ignoring the need for foundational and structural changes to the delivery and financing of health care.

Access: Telehealth has made health care more accessible to many Minnesotans

Telehealth is increasing access to health care in Minnesota. Interviews with Minnesota patients, providers, and payers, conducted by Wilder Research on behalf of MDH (Appendix B), found that patients reported being able to schedule appointments sooner, or were able to see health care providers they would otherwise have been unable to see (e.g., mental health providers and specialists). This was especially true for rural patients. Others added that they prefer telehealth when care from an in-person setting carries health or safety risks such as exposure to contagious illnesses, including COVID-19.

In addition to these broad benefits, patients and providers view telehealth as making health care more accessible in the following ways:



- **Telehealth reduced multiple barriers to care for patients.** Patients noted that telehealth simplified scheduling and made scheduling more flexible and quicker. Over 90% of rural telehealth service recipients interviewed noted that telehealth required less time than in-person care, an observation that reflects the long travel time that can be required to access care. Patients reported less need for transportation and the associated costs of gas, parking, or transit. Patients, particularly rural residents, also found it easier to see providers and specialists located far from their homes. These interview findings are consistent with the MNHA survey results.
- **Telehealth increased patient engagement.** Interviews with providers and listening sessions with MDH’s program leaders (see Appendix C) found numerous examples of increased patient engagement through telehealth. For example, some observed better follow-through on treatment goals and increased frequency of recommended follow-up visits with the expansion of telehealth. These providers felt that when telehealth was an option, patients were more likely to schedule appointments when they needed to and on a more appropriate timeline. Patients also said that telehealth was especially useful for simpler appointments such as quick follow-up appointments. Others observed that patients who felt intimidated by the health care system found telehealth visits to be a more welcoming entry point, especially for those who may be immigrants and refugees, unhoused, or have other experiences and identities that can make navigating health care more challenging.

Overall, telehealth shows the potential to make health care more accessible by:

- Reducing time and cost of commuting to appointments.
- Facilitating greater access to different types of health care, including mental health and specialty care.
- Meeting patients where they are.

Quality and outcomes: Early results show promise, especially for certain health conditions

Measuring quality and outcomes in health care is a complex topic generally, as health care treatment is only responsible for a relatively small portion of health outcomes (Hood et.al., 2016; Artiga and Hinton, 2018), and because broad outcome measurement remains inadequate. This makes the question of telehealth’s impact on health care quality and outcomes both challenging and important.

- **For some services and specialties, telehealth is showing promise.** While research on telehealth is still relatively new as the practice continues to rapidly evolve, early findings show encouraging results across several areas. For example:
 - Mental health services provided through telehealth are found to be as effective as in-person treatment (Bashshur et al., 2016; Lazur et al., 2020; Batastini et al., 2021).

- Telehealth services for substance use disorders, including opioid use disorder, can address access and privacy concerns in people who face barriers that make other types of care harder to reach (Research Triangle Institute, 2017; Jones et al., 2022).
- Pediatric patients and providers benefit from telehealth with improved care coordination and opportunities to reach underserved patient populations (Curfman et al., 2022).
- Telehealth is beneficial for managing chronic conditions, specifically hypertension, diabetes, and asthma (Chongmelaxme et al., 2019; Totten et al., 2022; Zhang et al., 2021; Baughman et al., 2022).
- **Improved health care access supports improved health outcomes.** Telehealth provides important options for people with challenges related to transportation, distance to care, or other access barriers. Some people report being able to receive health care services days earlier via telehealth than if they would have if it were necessary for them to leave work for an in-person visit, and they believe earlier visits contribute to better outcomes. Especially in Greater Minnesota, telehealth is also expanding Minnesotans’ access to different types of care and more specialists than would be available via in-person health care.

For patients who may need to choose between telehealth or no health care at all, telehealth is likely the better choice. This is most acutely felt in Greater Minnesota and among people with mental health needs—for these patients, telehealth may often be their only timely care option. Telehealth is likely better than delayed care for many illnesses or health maintenance appointments. While some alternative telehealth platforms—particularly those that are staffed by unregulated and/or uncredentialed providers rather than by licensed/credentialed clinicians or other professionals—have the potential to cause harm, telehealth as a tool used by licensed health care practitioners for real-time communication with patients has not shown serious risks (Tang et al., 2022).

Still, telehealth does not work for all conditions or health care needs.

These early results show that telehealth offers unique value as both a standalone service and a complement to in-person health care that will hold true long past the public health emergency (Blue Cross and Blue Shield of Minnesota 2020; Reed et al., 2021). Telehealth is not currently poised to take the place of office visits when physical care is needed, such as for blood samples, physical examinations, and certain treatments (e.g., some forms of dermatology, orthotics, etc.).

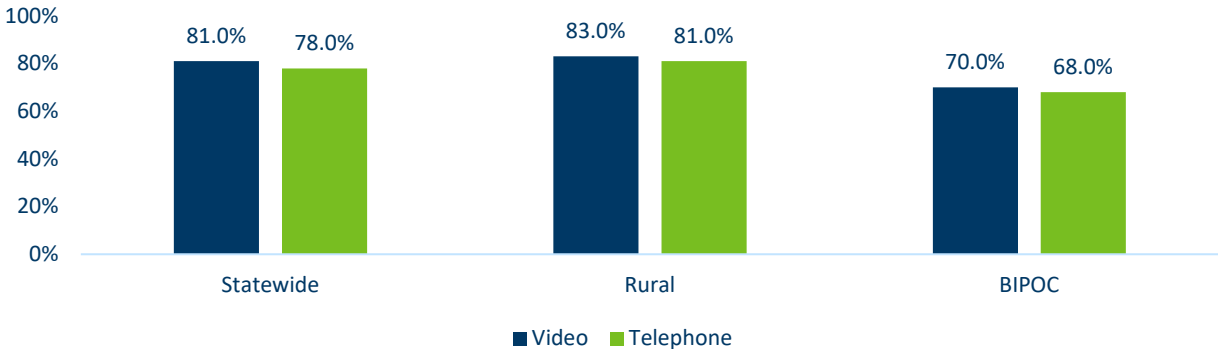
However, it is showing significant promise in enabling providers to find innovative new ways to deliver care beyond the clinic setting. For example, the use of home medical devices or technology can support patient engagement. Providers had positive experiences with their patients using blood pressure cuffs or glucose monitoring at home and reporting results/data back for follow-up care (Wilder Research, 2022). Providers also pointed to the benefits of hospital-based telehealth, including “hospital at home” programs and access to specialists for patients in rural hospitals through tele-ICU or other consultations.

Satisfaction: Most Minnesotans like telehealth, but some have reservations

Both the MNHA Survey and Wilder Research interviews found that most Minnesotans who have used telehealth viewed their experience positively. This did not differ much based on whether the visit was via telephone or video (Figure 4). People especially appreciated the convenience of telehealth visits and felt they could get an equal level of care faster via telehealth than in person.

The level of satisfaction with telehealth was not consistent across all demographic groups. Overall, the MNHA survey estimates about 80% of Minnesotans would do a telehealth visit again (responses: agree or strongly agree). However, Black, Indigenous, and people of color (BIPOC Minnesotans) were less likely than non-Hispanic White Minnesotans to agree or strongly agree that they would do a video visit again (70% vs 84%, respectively). Additional qualitative work is needed to better understand why these groups feel differently, and to explore why and when some individuals are not offered or do not choose telehealth.

Figure 4: Satisfaction with Telehealth Visit: Percentage of MNHA Survey Respondents who "Agreed" or "Strongly Agreed" They Would Do a Telehealth Visit Again, Late 2020 - Late 2021



Source: Minnesota Health Access (MNHA) Survey, 2021; Rural and BIPOC responses did not differ significantly from statewide responses at the 0.05 level of significance.

In interviews with patients, the most common reason mentioned for feeling satisfied with telehealth was that it was convenient, followed by being able to address the reason for the visit to their satisfaction. Patients reported that telehealth providers met their expectations by listening, answering questions, and “getting to the bottom of the patient’s need.” Patients also emphasized the importance of the provider making the visit feel personal and giving their full attention to the patient.

The primary way patients felt that telehealth fell short of expectations was when technological issues arose. This included lack of access to sufficient bandwidth to engage in video visits, and/or insufficient cellular signal for a phone visit, particularly for patients located in remote areas.

Several providers shared positive impressions of telehealth because its convenience and accessibility provided a benefit to patients. Other providers said they personally preferred face-to-face interactions. Still others believe the flexibility telehealth offers, including the ability to work remotely, may help reduce burnout associated with the medical profession.

Health equity: Telehealth has the potential to reduce some health disparities but does not work equally well for all patients

National research has found disparities in use of telehealth, including the use of video versus audio, by race and ethnicity, age, education, income, and health insurance (Karimi et al., 2022). For example, overall use of any telehealth was most common among people covered by public health insurance (i.e., Medicaid and Medicare), Black individuals, and people earning less than \$25,000 per year. However, use of video telehealth (versus audio telehealth) was highest among the groups with lower overall telehealth use, such as young adults ages 18 to 24, those earning at least \$100,000 per year, those with commercial insurance, and White individuals. Audio-only telehealth use (versus video telehealth) was highest among adults ages 65 and older and those with less than a high school education.

Most Minnesota providers interviewed felt that telehealth resulted in an overall reduction in disparities in access to health care, especially in Greater Minnesota (Wilder Research, 2022). However, they noted some examples of inadequate support for patients who speak English as a second language. For example, patient portals may be offered in English only, or providers may not have appropriate infrastructure or processes for patients who request an interpreter. Additionally, other providers highlighted the limited availability of broadband as a barrier to equitable delivery of telehealth.

As noted in the previous section (Figure 4), the MNHA survey found that patient satisfaction with telehealth was positive overall, though satisfaction was somewhat lower for BIPOC residents. Public health leaders noted the important potential for telehealth to help patients connect with providers who share their racial or cultural identity but who may not be available to patients through their local, in-person provider network. More research and evaluation studies are needed to further explore and understand this potential.

Digital inequities limit telehealth's ability to reduce health care inequities

Several providers noted that equitable broadband access is a key determinant to equitable telehealth access. Communities that face disproportionate inequities in digital access, affordability, and/or comfort and experience with digital technology face barriers to telehealth access as a result. According

to American Community Survey data from 2017 to 2021, 11.4% of Minnesota households do not have a broadband internet subscription and 6.2% of Minnesota households do not have access to a computer (US Census Bureau, 2022).

The MNHA Survey found that 89% of respondents statewide have internet access that is reliable enough to support a video visit. However, the data also show a statistically significant difference between urban and rural residents, with 82% of rural Minnesotans reporting reliable enough internet access for video telehealth compared to 91% of Minnesotans in urban areas.

Digital equity requires access to broadband as a first step, but achieving full digital equity requires that a broad set of conditions be met as defined by the National Digital Inclusion Alliance:

- **Access:** the wires, computer and smartphone needed to access high-speed internet.
- **Affordability:** funding, income levels, and programs to put data, broadband subscriptions, and computers / smartphones / tablets in people's hands.
- **Skills:** knowledge by users of the technology and apps needed to fully use online opportunities, and the ability to use them successfully.

Many of the populations and communities most reliant on audio-only telehealth are the people who face barriers to digital equity, such as:

- Rural residents – Many lack access to broadband wires.
- Urban residents – There is variation in prices and available internet speeds within cities, with many poorer and non-White neighborhoods facing slower internet speeds and higher prices (Yin and Sankin, 2022; Dernbach, 2022).
- Older adults – Many older adults are slower to adopt new technology and less comfortable navigating the apps needed for telehealth. They may also struggle with transportation access as they age, making telehealth an attractive option if easily accessible and user-friendly.
- BIPOC communities– Minnesota's Black, Indigenous, and people of color are more likely to face poor quality internet access.
- People with low incomes – The tiered services offered with different costs and credit requirements mean that people with low incomes often cannot afford the connectivity needed to fully participate in download/upload intensive activities like video calls (SDK Communications, 2023).
- People experiencing homelessness or leaving a correctional facility – Lack of stability and credit mean added barriers to the technology needed for telehealth.
- People with limited English proficiency – Language barriers create added challenges to installing apps and accessing services.

Minnesota's existing digital inequities negatively impact some groups' abilities to access telehealth as an option. According to the federal Office of Health Policy, "Investments in internet access, video-enabled devices, and culturally-competent care are needed to ensure equitable use of telehealth services" (Karimi et al. 2022). Nevertheless, improvements to digital access, literacy, and equity will not, in and of themselves, be able to solve challenges stemming from a complex and often confusing health system where information about coverage and costs for services is not clearly communicated or easily understood.

Payment Parity and Telehealth

Payers, providers, and patients have different perspectives on payment for telehealth

Payment for health care delivered via telehealth is complex. Minnesota health plans are currently required to reimburse health care providers equally for comparable health care services delivered in-office, via audio-visual telehealth, or via audio-only telehealth.

At the same time, value-based payment models are being explored by payers and providers, with telehealth as a tool supporting innovations in care delivery, including goals of limiting the total cost of care. Lessons from telehealth's rapid expansion during the pandemic may provide more avenues to explore alternative payment models. Payers are exploring adding suites of population health, social support, and educational services delivered via technology. MDH plans to engage further with payer organizations in 2023 to learn more about these ideas and activities, as well as the role telehealth plays in provider network design and what criteria shape (or should shape) the use of telehealth services.

Payers, providers, and patients seemed to have similarly positive views about how telehealth could serve as a tool to improve access to appropriate care at the appropriate time for certain health care needs and services. However, they expressed different perspectives on equal payment for telehealth. Interviews conducted by Wilder Research found:

- **Payers expressed hesitance on any government or statutory mandates on payment parity.** Payers interviewed for this study emphasized their view that reimbursement should be results-driven, and that care delivery should be designed in ways that drive the greatest value, rather than being incentivized by how it is delivered or paid. Payers expressed a desire to work with providers to come up with appropriate ways of reimbursing for telehealth services, considering things like type of services, demographics of clients, and region of the state that the providers serve. They also expressed that they would have more room for creativity and innovation if there were not strict payment parity requirements.
- **Providers strongly believe that similar types of health care visits and services should be reimbursed at the same rate regardless of whether in-person or via telehealth.** The key reason cited was that they should be reimbursed based on their expertise and the service provided. Because some patients only have access to audio-only care, providers emphasized that this type of care must continue to be reimbursed to support more equitable access to care.
- **Patients are most concerned about insurance coverage and out-of-pocket costs for telehealth.** Patients' telehealth comments focused more on satisfaction than cost. However, a few did express a desire to see telehealth continue to be covered in the years ahead, and others suggested that telehealth should include lower copays and other out-of-pocket costs.

- **Understanding the cost-related impacts of providing telehealth services is important.** Economic aspects of providing telehealth services were not directly addressed in the study interviews. However, technology evolves rapidly and demand for telehealth services is uncertain. Future research should include exploring the resources required to implement and maintain secure, high-quality telehealth as part of health care delivery.

As the impact of policies regarding telehealth and related payment are reviewed and revised, it is important to consider both intended and unintended consequences of these and future policies, and the extent to which they support or incentivize appropriate applications of telehealth without negatively impacting availability and delivery of in-person care.

Audio-only Telehealth

Audio-only serves a small but crucial segment of Minnesotans using telehealth

Audio-only telehealth refers to visits by telephone (with no video component). It was not until 2020 that audio-only telehealth services were reimbursable at the same rate as audio visual services in Minnesota. As a result, data about health care delivery by audio alone is limited. However, available data show that audio-only telehealth offers an important avenue to health care access for some Minnesotans.

Overall, about 30% of Minnesotans used some form of telehealth during the period from late 2020 to late 2021 (MNHA, 2021). Of the Minnesotans with a telehealth visit, 45% used audio-visual telehealth, 31% used audio-only for their visits, and 24% had both audio-visual and audio-only visits. The limited research on this topic to date points to audio-only as an important mode of telehealth delivery for small but critical segments of Minnesotans using telehealth (Wilder Research, 2022; Karimi et al., 2022).

In particular, audio-only:

- **Expands access to telehealth services for people of color and Indigenous communities.** An evaluation of audio-only telehealth using data from the Census Bureau’s Health Pulse Survey found that almost 50% of people of color use audio-only to access telehealth, compared with only 38% of white patients (Karimi et al., 2022). Locally, Hennepin Healthcare found significantly greater use of audio-only telehealth among patients who self-identified as Black or Hispanic, were non-English speaking, and/or relied on Medicaid or Medicare (Jelinek et al., 2022).
- **Provides telehealth access to people without the technology required for audio-visual telehealth.** Providers interviewed for this study pointed to a lack of broadband access as one of the biggest barriers to telehealth. Most health care providers talked about the lack of broadband in rural areas as making audio-only necessary (Wilder Research, 2022). In listening sessions, MDH staff working

with metro area populations, such as those experiencing homelessness, immigrant communities and people with low incomes, said these communities face different technology barriers that make audio-only telehealth important for access. For example, some have cell plans with data limits that cannot accommodate audio-visual, and others may have limited language skills to navigate technology needed for audio-visual telehealth or lack devices that are compatible with telehealth audio-visual tools and apps.

- **Provides essential mental and behavioral health care, including emergency visits.** Early data show that telehealth, and especially audio-only telehealth, continues to be a preferred method of care delivery for many people seeking care for mental health conditions or substance use disorder (Minnesota Department of Human Services (DHS), 2023).
- **Offers accessible follow up visits or monitoring.** Health care providers and patients interviewed report that audio-only telehealth can be an effective tool for some types of follow-up visits after someone is released from the hospital, has an outpatient procedure, or other more extensive health care treatment. During the pandemic, some health care providers in rural Minnesota reported using audio-only telehealth to monitor the symptoms of people with COVID-19 and help guide decisions on whether or when to bring a patient to the hospital.

Overall, most Minnesotans in the MNHA Survey reported being satisfied with audio-only telehealth. For example, a majority of respondents who had a telephone visit agreed or strongly agreed that their telephone visit saved travel time (85% agreed or strongly agreed), made it easier to keep the appointment (74%), and that they would do a telehealth visit again (79%). Responses were generally similar for those with video telehealth visits.

Challenges of note

Audio-only telehealth appears to have been a positive addition to the health care landscape overall, but there are some points of caution:

- **Limited Data.** Audio-only telehealth was not universally available to Minnesotans and was not eligible for reimbursement before 2020. In addition, health care claims data may not be able to accurately identify audio-only telehealth visits (distinct from video telehealth visits) until clinical codes are updated, further limiting data available for study. As a result, there is limited information available to reach definitive conclusions at this point.
- **Potential for Fraud, Waste, and Abuse.** An investigation into Medicare's telehealth reimbursement in 2020 found instances of kickbacks by telemedicine companies to doctors, instances of unnecessary or over-billed care, and other activities (United States Office of Inspector General, 2022). The federal review found more than 70 providers who each billed services for 2,000 Medicare beneficiaries (compared with the median of 21 beneficiaries per provider). These providers billed most commonly for office visits and audio-only services.
- **Over-Reliance.** Some mental health professionals suggest that patients should have an audio-visual or in-person visit at regular intervals, rather than allowing patients to only access care via audio-only. These professionals believe that looking directly at a patient at least sometimes is an important part of forming their best professional judgements (MN DHS, 2023).

Additional and more recent data are needed to better understand the uses and impacts of audio-only telehealth

Data since 2020 on telehealth are limited, but audio-only has clearly expanded health care access for some populations who have technology, language, or other communication obstacles. As MDH continues its study in 2023, several new and changing variables could add to our understanding of audio-only in the future of telehealth. Namely:

- **Expanded data.** MDH plans to contract with research partners to analyze data from electronic health records. Analysis of timely clinical data may shed additional light on Minnesotan’s more recent experience with audio-only telehealth.
- **Technology and generational changes.** Minnesota and states across the nation will be making historic investments in broadband infrastructure and digital equity strategies beginning in 2023 and for years forward. Audio-visual telehealth access is likely to benefit from these added investments, which could decrease the need for audio-only. Likewise, younger generations are showing greater comfort with audio-visual telehealth (Jelinek et al., 2022), whereas older adults are satisfied with audio-only (MNHA, 2021). Preferences for audio-only telehealth may change as a reflection of broader generational changes, as well.
- **Formal study implementation.** Researchers nationwide are conducting studies regarding the effectiveness of telehealth, including audio-only (Beschloss et. al 2022). The months ahead may provide added evidence that will clarify audio-only telehealth’s contributions to health care quality and outcomes.

For these reasons, MDH makes the following recommendations:

Recommendation 1: To continue to include audio-only telehealth as a type of telehealth service in statute.

Recommendation 2: To extend payment parity for audio-only telehealth beyond the current June 30, 2023 sunset until more complete evidence becomes available.

In MDH’s final report to the Legislature, due January 15, 2024, recommendations regarding audio-only telehealth will be revisited and updated, taking into account the most recent evidence available.

Looking Ahead

Telehealth will continue to shape, and be shaped by, rapidly changing systems

Telehealth came to the forefront of public and provider awareness during the COVID-19 pandemic, but the long-term impact of telehealth on health care delivery remains unknown for a few key reasons:

- **Telehealth sits at the nexus of rapidly changing systems.** From how we deliver and pay for health care, to the technology everyone relies on in daily life, the systems that telehealth bridges are changing at an unprecedented pace. These systems include:
 - **Health care.** Who, where, and how we deliver and pay for all types of care.
 - **Data privacy regulations.** Public expectations on data sharing have changed dramatically since HIPAA passed in 1996. In November 2022, federal agencies announced intent to begin revising the privacy regulations for patients with substance use challenges (United States Department of Health & Human Services, 2022).
 - **Digital equity.** Broadband and technology access received unprecedented investments during the pandemic and will receive even more investment over the coming years. These changes will fundamentally alter the landscape of access for telehealth.
 - **Commercial health-tech (apps, niche services, etc.).** From Apple to Amazon, the world’s biggest companies, start-ups, and private investors are creating tech solutions outside of traditional health care to help people manage their health. It is unknown how these additions will influence people’s health behaviors, choices, expectations, or other aspects of health and health care provider systems, or how they will interact with providers’ electronic health record systems. In addition, it will be important to ensure quality of care and health outcomes as well as understanding the impact on health care spending.
 - **Affordability and payment models.** Traditional health care provider and payer systems have been experimenting with moving beyond fee-for-service payment models for years. Telehealth and other health-tech services could potentially accelerate this move to new payment models or different approaches to achieving affordability.
- **Consumer and provider preferences for in-person versus online services remain in flux.** Questions remain across many industries—including health care—about how much COVID-19 has permanently changed or revealed preferences for online service options. Long-term questions also exist about the extent to which providers and health care systems will remain willing and able to deliver care via telehealth, and how consumer preferences will evolve.



- **Ongoing health care workforce shortages raise ethical and capacity questions about how much telehealth might supplant, versus supplement, in-person care delivery.** Payers, providers, and policymakers will have to consider how much telehealth can be permitted to supplant in-person providers in places facing worker shortages (e.g., rural and underserved communities) versus how much telehealth should only be allowed to serve as a supplemental option. While telehealth is an important tool to meet these immediate needs, there are also real risks of telehealth becoming the only option for some people to access mental health providers, specialists, or other specialized services. This could happen if efforts to recruit providers to rural areas wane, health plan network adequacy standards are allowed to be met through telehealth-only providers, or if competition from non-local telehealth providers threatens the financial viability of existing brick-and-mortar providers.
- **The long-term impact of telehealth on patients' health outcomes remains unknown.** Telehealth shows promising results in improving access, equity, and engagement in health care, but the long-term impact on health care quality and outcomes remains to be seen. Ongoing and future studies will help fill in these knowledge gaps.

Telehealth has potential to improve equitable health care access, but the digital divide risks making some access disparities worse

Telehealth has the potential to increase Minnesotans' access to health care in ways that address limitations of the traditional care system, including:

- Greater access to racially and culturally diverse medical professionals, including professionals who are concordant or culturally competent with patients on race, ethnicity, gender identity, language, or other identities. Maximizing this telehealth opportunity could include allowing diverse providers from other states to treat patients in Minnesota. To the extent that expanding access involves providers from outside Minnesota, current practices for interstate licensing may need to be revisited and revised.
- Greater access to specialists and more provider choice, especially for those in rural areas or underserved communities with provider shortages.
- Greater access to care for people with transportation barriers or who have limited access to paid sick leave.

Although telehealth shows promise for supporting greater and more equitable access to health care, it should not be seen as the only solution to important and ongoing problems of provider shortages, insufficient availability of paid time off to attend health care appointments, the ongoing need for access to in-person care, or other barriers to health care. Further, these telehealth opportunities are only available to people with access to the digital connections, tools, and skills needed to fully access telehealth services. Without digital equity, the advancement of telehealth services alone may create even greater gaps between health care opportunities for those with online access and those without. It is important to keep in mind that while digital equity is a necessary component of equitable access to telehealth, broader issues stemming from other barriers to accessing health care, such as the complexity of health care coverage and policies, will require more work to make access truly equitable.

More research is needed to better understand the evolving practice of telehealth and its impact on Minnesotans' health

This preliminary report summarizes what MDH has learned so far about the evolving landscape of telehealth and its impact on Minnesotans. Studying this topic amidst an ongoing public health emergency includes many challenges and limitations; the very fluid nature of, and fast-paced changes driving, health care and technology adds to the complexity of this, or any, telehealth study.

As this study continues in 2023, MDH will continue to collect and compile information about telehealth and its impacts. The use of telehealth will not reach a “steady state” during the coming year; health systems are also changing in multiple ways, and it is not clear to what extent or for which conditions or situations providers will continue to offer telehealth. Clinical standards regarding how and when to deliver what services via telehealth also continue to evolve. Further, even though there are many positive aspects of telehealth, having telehealth available as **one** option for providing or receiving appropriate, high-quality health care should not be taken to mean that it would be acceptable or desirable for telehealth to be the **only** option for care for some Minnesotans. Patient preference for how they access health care, and the ongoing need for access to in-person services, must be a key consideration.

Ultimately, MDH’s final report in 2024 will include conclusions and recommendations to address the Legislature’s key questions. Continued research in 2023 will leverage additional quantitative research, literature review, community engagement, and stakeholder interviews and engagement to focus on answering the key questions in the legislation.

Ongoing engagement with the Technical Advisory Group (TAG) of assembled experts and MDH’s broad reach of staff expertise, as well as consultation with the Minnesota Departments of Commerce and Human Services, will supplement MDH’s research. MDH expects to establish a holistic picture of Minnesotans’ post-pandemic telehealth usage, needs, satisfaction, and current expectations through these methods. We also expect to offer a clearer understanding of the variables and expectations that could influence future payment parity policy.

Taken together, the MDH study is designed to provide actionable information to inform and address the policy questions regarding telehealth and its evolving role in health care.

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References

- Artiga, S., Hinton, E. (2018). *Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity*. Henry J. Kaiser Family Foundation Issue Brief. <https://files.kff.org/attachment/issue-brief-beyond-health-care>
- Bashshur, R. L., Shannon, G. W., Bashshur, N., & Yellowlees, P. M. (2016). The empirical evidence for telemedicine interventions in mental disorders. *Telemedicine Journal and E-Health*, 22(2), 87–113. <https://doi.org/10.1089/tmj.2015.0206>
- Batastini, A.B., Paprzycki, P, Jones, A.C.T, MacLean, N. (2021) Are videoconferenced mental and behavioral health services just as good as in-person? A meta-analysis of a fast-growing practice. *Clinical Psychology Review*. 83, 101944. <http://10.1016/j.cpr.2020.101944>
- Baughman, D.J., Jabbarpour, Y., Westfall, J.M., Jetty, A., Zain, A., Baughman, K., Pollak, B., Waheed, A. (2022) Comparison of Quality Performance Measures for Patients Receiving In-Person vs Telemedicine Primary Care in a Large Integrated Health System. *JAMA Network Open*, 5(9):e2233267. doi:[10.1001/jamanetworkopen.2022.33267](https://doi.org/10.1001/jamanetworkopen.2022.33267)
- Beschloss, A., Van Ramshorst, R., Bachireddy, C., Chen, C., Ostrovsky, A. (2022). New Coding Modifier Offers Opportunity To Investigate Audio-Only Telehealth. *Health Affairs Forefront*. DOI: [10.1377/forefront.20221117.43940](https://doi.org/10.1377/forefront.20221117.43940)
- Blue Cross and Blue Shield of Minnesota. (2021). Embracing Virtual Care- 2020 Trends and the Path Forward. *Blue Cross and Blue Shield of Minnesota*. <https://www.bluecrossmn.com/sites/default/files/DAM/2022-02/BlueCrossMN-Embracing-Virtual-Care-whitepaper.pdf>
- Chongmelaxme, B., Lee, S., Dhippayom, T., Saokaew, S., Chaiyakunapruk, N., Dilokthornsakul, P. (2019) The effects of telemedicine on asthma control and patients' quality of life in adults: a systematic review and meta-analysis. *J Allergy Clin Immunol Pract*, 7(1):199-216.e11. doi:[10.1016/j.jaip.2018.07.015](https://doi.org/10.1016/j.jaip.2018.07.015)
- Curfman, A., Hackell, J., Herendeen, N., Alexander, J., Marcin, J., Moskowitz W., Bodnar, C., Simon, H., McSwain, S.D. (2022) Telehealth: Opportunities to Improve Access, Quality, and Cost in Pediatric Care. *Pediatric Telehealth Best Practices*, 149(3), 145–156. <https://doi.org/10.1542/9781610026291-part03-ch14>.
- Dernbach, B. (2022, October 21) CenturyLink offers slower internet service to Black and brown neighborhoods in Minneapolis, new report claims. *Sahan Journal*. <https://sahanjournal.com/business-work/century-link-internet-speed-minneapolis-redlining-black-brown-broadband/>

Hood, C., Gennuso, K.P., Swain, G.R., Caitlin, B.B. (2016). County Health Rankings: Relationships Between Determinant Factors and Health Outcomes. *Am J Prev Med*, 50 (2), 129-153.

<https://doi.org/10.1016/j.amepre.2015.08.024>

Jelinek, R., Pandita, D., Linzer, M., Engoang, J. B. B. N., & Rodin, H. (2022). An Evidence-Based Roadmap for the Provision of More Equitable Telemedicine. *Appl Clin Inform*, 13(3), 612-620.

<https://pubmed.ncbi.nlm.nih.gov/35675839/>

Jones, C. M., Shoff, C., Hodges, K., Blanco, C., Losby, J. L., Ling, S. M., & Compton, W. M. (2022). Receipt of telehealth services, receipt and retention of medications for opioid use disorder, and medically treated overdose among Medicare beneficiaries before and during the COVID-19 pandemic. *JAMA psychiatry*, 79(10), 981-992. [http:// doi:10.1001/jamapsychiatry.2022.2284](http://doi:10.1001/jamapsychiatry.2022.2284)

[http:// doi:10.1001/jamapsychiatry.2022.2284](http://doi:10.1001/jamapsychiatry.2022.2284)

Karimi, M., Lee, E. C., Couture, S. J., Gonzales, A., Grigorescu, V., Smith, S. R., De Lew, N. & Sommers, B. D. (2022). *National Survey Trends in Telehealth Use in 2021: Disparities in Utilization and Audio vs. Video Services*. Office of the Assistant Secretary for Planning and Evaluation.

<https://aspe.hhs.gov/reports/hps-analysis-telehealth-use-2021>

Lazur, B., Sobolik, L., & King, V. (2020). Telebehavioral health: An effective alternative to in-person care. https://www.milbank.org/wp-content/uploads/2020/10/TeleBH_B_6.pdf

Minnesota All Payer Claims Database (MN APCD), Minnesota Department of Health. (2022). Analysis of 2019 - 2021 Data from the Minnesota All Payer Claims Database.

<https://www.health.state.mn.us/data/apcd/index.html>.

Minnesota Health Access Survey (MNHA), Minnesota Department of Health. (2021). Analysis of 2021 Data from the Minnesota Health Access Survey.

<https://www.health.state.mn.us/data/economics/hasurvey/index.html>

Minnesota Health Care Workforce Survey, Minnesota Department of Health. (2022). Analysis of 2021 Data from Minnesota's Health Care Workforce Survey.

<https://www.health.state.mn.us/data/workforce/index.html>

Minnesota Health Information Technology (HIT) Ambulatory Clinics Survey, Minnesota Department of Health. (2022). Analysis of 2020 Data from the Minnesota Health Information Technology Survey.

<https://www.health.state.mn.us/data/hcquality/measure/docs/hit22.pdf>

Minnesota Department of Human Services. (2023). Assessing Telehealth Utilization and Experiences among Medical Assistance (MA) Enrollees in Minnesota (*under review*). Minnesota Department of Human Services Behavioral Health Division.

National Digital Inclusion Alliance. (2022). *The Words Behind Our Work: The Source for Definitions of Digital Inclusion Terms*. <https://www.digitalinclusion.org/definitions/>

Reed, M., Huang, J., Graetz, I., Muely, E., Millman, A., & Lee, C. (2021). Treatment and Follow-up Care Associated With Patient-Scheduled Primary Care Telemedicine and In-Person Visits in a Large Integrated Health System. *JAMA network open*, 4(11), e2132793.

<https://doi.org/10.1001/jamanetworkopen.2021.32793>

Research Triangle Institute (RTI) International. (2017). *Using telehealth to identify and manage mental health and substance use disorders in rural areas*. Office of the Assistant Secretary for Planning and Evaluation. <https://aspe.hhs.gov/system/files/pdf/260286/RuralTele.pdf>

SDK Communications. (2023, January). Ramsey County Connectivity Blueprint.

<https://www.ramseycounty.us/your-government/projects-initiatives/ramsey-connected-computer-internet-resources/connectivity-blueprint>

Tang, M., Chernew, M. E., & Mehrotra, A. (2022). How Emerging Telehealth Models Challenge Policymaking. *The Milbank quarterly*, 100(3), 650–672. <https://doi.org/10.1111/1468-0009.12584>

Totten, A.M., Womack, D.M., Eden, K.B., McDonagh, M.S., Griffin, J.C., Grusing, S., Hersh, W.R. (2016) Telehealth: Mapping the Evidence for Patient Outcomes From Systematic Reviews. Technical Brief No. 26. (Prepared by the Pacific Northwest Evidence-based Practice Center under Contract No. 290-2015-00009-I.) <https://pubmed.ncbi.nlm.nih.gov/27536752/>

United States Census Bureau. (2022). 2017-2021 American Community Survey 5-year Public Use QuickFacts. <https://www.census.gov/quickfacts/fact/table/MN#>

United States Office of Inspector General. (2022). *Special Fraud Alert: OIG Alerts Practitioners To Exercise Caution When Entering Into Arrangements With Purported Telemedicine Companies*. <https://oig.hhs.gov/documents/root/1045/sfa-telefraud.pdf>

United States Department of Health & Human Services. (2022, November 28). Press Release: *HHS Proposes New Protections to Increase Care Coordination and Confidentiality for Patients With Substance Use Challenges*. <https://www.hhs.gov/about/news/2022/11/28/hhs-proposes-new-protections-increase-care-coordination-confidentiality-patients-substance-use-challenges.html>

Wilder Research. (2023, January). Impact of Telehealth Expansion: A Qualitative Study of Service Recipients, Providers, and Payers.

<https://www.health.state.mn.us/data/economics/telehealth/approach.html>.

Yin, L., Sankin, A. (2022, October 19). Still Loading: Dollars to Megabites, You May be Paying 400 Times As Much As Your Neighbor for Internet Service. *The Markup*. <https://themarkup.org/still-loading/2022/10/19/dollars-to-megabits-you-may-be-paying-400-times-as-much-as-your-neighbor-for-internet-service>

Yu, J., Mink, P., Huckfeldt, P., Gildemeister, S., Abraham, J. (2018) Population-level estimates of telemedicine service provision using an all-payer claims database. *Health Affairs*, 37(12), 1931-1939. <https://doi.org/10.1377/hlthaff.2018.05116>

Zhang, W., Cheng, B., Zhu, W., Huang, X., Shen, C. (2021) Effect of telemedicine on quality of care in patients with coexisting hypertension and diabetes: a systematic review and meta-analysis. *Telemed J E Health*, 27(6):603-614. doi:[10.1089/tmj.2020.0122](https://doi.org/10.1089/tmj.2020.0122)

Appendices

Appendix A: Laws of Minnesota 2021: The Minnesota Study of Telehealth Expansion and Payment Parity

Sec. 27. STUDIES OF TELEHEALTH EXPANSION AND PAYMENT PARITY.

(a) The commissioner of health, in consultation with the commissioners of human services and commerce, shall study the impact of telehealth expansion and payment parity under this article on the coverage and provision of health care services under private sector health insurance.

(b) The commissioner of human services, in consultation with the commissioners of health and commerce, shall study the impact of telehealth expansion and payment parity under this article on the coverage and provision of health care services under public health care programs.

(c) The studies required under paragraphs (a) and (b) must review and make recommendations relating to:

(1) the impact of telehealth expansion and payment parity on access to health care services, quality of care, health outcomes, patient satisfaction, and value-based payments and innovation in health care delivery;

(2) the impact of telehealth expansion and payment parity on reducing health care disparities and providing equitable access to health care services for underserved communities;

(3) whether audio-only communication as a permitted option for delivering services (i) supports equitable access to health care services, including behavioral health services, for the elderly, rural communities, and communities of color, and (ii) eliminates barriers to care for vulnerable and underserved populations without reducing the quality of care, worsening health outcomes, or decreasing satisfaction with care;

(4) the services and populations, if any, for which increased access to telehealth improves or negatively impacts health outcomes;

(5) the extent to which services provided through telehealth:

(i) substitute for an in-person visit;

(ii) are services that were previously not billed or reimbursed; or

(iii) are in addition to or are duplicative of services that the patient has received or will receive as part of an in-person visit;

(6) the effect of telehealth expansion and payment parity on public and private sector health care costs, including health insurance premiums; and

(7) the impact of telehealth expansion and payment parity, especially in rural areas, on patient access to, and the availability of, in-person care, including specialty care.

(d) In addition, the studies must report:

(1) the criteria payers used during the study period to determine which patients were medically appropriate to be served through telehealth, and which categories of service were medically appropriate to be delivered through telehealth, including but not limited to the use of audio-only communication; and

(2) the methods payers used to ensure that patients were allowed to choose to receive a service through telehealth or in person during the study period.

(e) When conducting the studies, the commissioners shall consult with public program enrollees and other patients, providers, communities impacted by telehealth expansion and payment parity, and other stakeholders. Notwithstanding Minnesota Statutes, section 62U.04, subdivision 11, the commissioners may use data available under that section to conduct the studies and may consult with experts in payment policy and health care delivery. Health plan companies shall submit information requested by the commissioners for purposes of the studies in the form and manner specified by the commissioners.

(f) The commissioners shall present a preliminary report to the chairs and ranking minority members of the legislative committees with jurisdiction over health and human services policy and finance and commerce by January 15, 2023. The preliminary report must include qualitative and any available quantitative findings, and recommendations on whether audio-only communication should be allowed as a telehealth option beyond June 30, 2023. The commissioners shall present a final report to the chairs and ranking minority members of these specified legislative committees by January

Impact of Telehealth Expansion

**A QUALITATIVE STUDY OF SERVICE RECIPIENTS, PROVIDERS, AND PAYERS
CONDUCTED BY WILDER RESEARCH**

12/21/2022

Executive summary

Background

Telehealth utilization increased significantly and rapidly across the U.S. in 2020 due to the COVID-19 pandemic. Because of this sudden, widespread adoption of telehealth services, it is important to understand how these services are being used and experienced in order to inform future decision-making. To contribute to this understanding, the Minnesota Department of Health (MDH) contracted with Wilder Research (Wilder) in 2022 to fulfill a legislative requirement to conduct a qualitative study of telehealth (i.e., health care via video or telephone) utilization and experiences among privately insured Minnesotans, as well as the providers and payers who support their care. This report captures the findings from this study to inform telehealth policy and practice in Minnesota.

Wilder Research used a mixed methods approach to complete this study, including 30 interviews with service recipients, 20 interviews with health care providers, and individual and group interviews with 16 leaders representing five payer organizations.

Overall, respondents believe telehealth has increased access to care

- When asked about changes to access, all provider respondents believed that access to care has improved as a result of the expansion of telehealth. Specifically, over half of providers (55%) mentioned increased availability of specialist visits.
- In addition, nearly one-quarter of service recipients (23%) reported that telehealth has enabled them to see health care providers (especially mental health providers and specialty providers) whom they would otherwise have been unable to see.
- Study participants identified specific ways in which telehealth expanded access to care for service recipients, including:
- Reducing the length of appointments, including wait times (77% of service recipients)
 - Preventing issues related to time off work (75% of providers) and/or child care (50% of providers)
 - Simplifying scheduling (37% of service recipients) and scheduling appointments sooner (27% of service recipients)
 - Removing barriers associated with transportation (30% of service recipients), including during inclement weather (40% of providers) and for providers located far from patients (30% of service recipients)
 - Accessing care when in-person visits pose health and safety risks, such as exposure to COVID (27% of service recipients)

Telehealth allows service recipients in greater Minnesota to gain access to a wider range of specialists and service recipients can spend less time traveling to their nearest clinic. However, providers and service recipients emphasized challenges associated with broadband access in greater Minnesota specifically.

- However, telehealth did also pose some new challenges, specifically around technology and connectivity issues (60% of service recipients).
 - Several respondents reported that they encountered more technology issues when they first started using telehealth and they were willing to work through them to access care via telehealth.

- Most providers felt that telehealth resulted in an overall reduction in disparities in access to health care (65%). However, half of providers (50%) did not feel that access to telehealth itself is equitable, mostly due to disparities in access to broadband, digital literacy, and comfort using technology. Some identified audio-only care as an option to address these gaps.

Providers identified that audio-only care can address technology challenges including offering more equitable access to telehealth care in general and as a back-up when technology issues arise with audio-video appointments.

Compared to in-person care, respondents believe the quality of telehealth is comparable or better

- The majority of providers felt that the quality of care provided between telehealth and in-person modalities was the same (60%) and/or enhanced (70%), depending on the situation. They identified enhancements such as:
 - Having an opportunity to see patients in their home environment (35%)
 - Increased engagement among their patients (70%) and follow-through with health care (70%)
- Nearly half of the providers interviewed (45%) mentioned that they could do most of their visits using telehealth. Specifically, providers pointed to a number of conditions or situations that were particularly well-suited to telehealth visits, including:
 - Chronic illness such as diabetes, hypertension, or asthma (65%)
 - Mental health care (65%)
 - Follow-up care, such as from a procedure or new treatment plan (55%)
 - Medication management (35%)
 - Established patients (35%)
- Similarly, many payers agreed that telehealth could act as a substitute for in-person care, particularly in behavioral health services.
- However, more than one-third of service recipients (40%) mentioned that telehealth was not appropriate or ideal for certain types of visits or needs, particularly for physical exams or when a visual is needed for diagnosis.
- Overall, payers indicated that telehealth has allowed health care delivery to be innovative, especially through telehealth for preventative services and tele-monitoring, involving patients wearing monitoring devices in their home while providers monitor those devices in a different physical space. Providers echoed the benefit of telemonitoring.

Overall, respondents are satisfied with telehealth

- All service recipients (100%) and most providers (90%) reported that they were satisfied with telehealth.
- Half of service recipients (50%) also stated that their satisfaction was the same for telehealth and in-person care.
- The majority of service recipients (63%) received telehealth services through both video and audio-only connections, and the remainder (37%) received telehealth services exclusively via video.

Of those who participated via both video and audio, 44% said they were equally satisfied by video and audio-only care, stating that the two delivery mechanisms were “about the same.”

- The vast majority of service recipients (90%) said that they generally have a choice between telehealth and in-person care when making appointments. In all, 83% of respondents said they are satisfied with their ability to choose between telehealth and in-person services.

Payment for telehealth

- Nearly all payers shared that they follow the guidelines that the Centers for Medicare & Medicaid Services (CMS) put out to help determine which types of services or patients are appropriate for telehealth. CMS guidelines also typically outline services that are reimbursable through telehealth.
- Overall, payers expressed hesitancy around any government or statutory mandates on payment parity. Payers want to have the ability to be more creative and innovative in how they pay and they do not want to be limited by strict payment parity.
- However, all providers interviewed said that all types of appointments should be reimbursed at the same rate. The key reason cited was that they should be reimbursed based on their expertise and the service provided (85%); some also noted that the time they spend on a telehealth visit is the same as an in-person visit (30%).

Because some patients only have access to audio-only care, providers emphasized that this type of care must continue to be reimbursed in order to support more equitable access to care.

- Service recipients commented only on the desire for continued insurance coverage of all types of visits.

Conclusions and study participant recommendations

- **Continue to make both telehealth and in-person care available.** Nearly one-quarter of service recipients (23%) and more than half of providers (60%) emphasized that telehealth should continue to be available in Minnesota moving forward. Providers felt strongly that Minnesota should invest in telehealth for the long term, citing accessibility and disparity reduction as key benefits.
- **Support expansion of broadband throughout the state to ensure authentic choice.** More than one-quarter of service recipients (27%), the majority of whom were from greater Minnesota (63%), highlighted the importance of ensuring access to broadband, as well as cellular service, across the state.
- **Provide clarity about payment for services.** Payers expressed hesitation around enacting or extending formal payment parity policies. However, most providers interviewed believe payment parity should remain in place, and audio-only care should continue to be reimbursed. Service recipients did not speak directly to payment. Given these different perspectives, it will be important to make thoughtful, inclusive decisions about payment parity for the long term and to clearly communicate those decisions.
- **Develop guidelines for telehealth best practices.** Because health systems had to quickly ramp up capacity for telehealth after the pandemic started, many were forced to develop such platforms without having full policies in place. Therefore, it would be beneficial to develop guidelines and educational materials around best practices in telehealth.
- **Promote telehealth as a quality option for patients.** Providers also recommended that the benefits and availability of telehealth, including the most appropriate types of services for telehealth, be more widely promoted to service recipients.

Conduct additional research on the clinical effectiveness of telehealth. Even though many payers identified benefits regarding increased access to telehealth services, they expressed some concerns about the quality of care from telehealth. They shared the need for a better understanding of the impacts telehealth has on the quality of care to inform future decisions around telehealth.

Background

Telehealth utilization increased significantly and rapidly across the U.S. in 2020 due to the COVID-19 pandemic. Because of this sudden, widespread adoption of telehealth services, it is important to understand how these services are being used and experienced in order to inform future decision-making. To contribute to this understanding, the Minnesota Department of Health (MDH) contracted with Wilder Research (Wilder) in 2022 to fulfill a legislative requirement to conduct a qualitative study of telehealth (i.e., health care via video or telephone) utilization and experiences among privately insured Minnesotans, as well as the providers and payers who support their care. This report captures the findings from this study to inform telehealth policy and practice in Minnesota.

Legislation

According to the Minnesota Legislature (Section 1. Minnesota Statutes 2021 Supplement, section 62A.673, subdivision 2), “‘Telehealth’ means the delivery of health care services or consultations through the use of real time two-way interactive audio and visual communications to provide or support health care delivery and facilitate the assessment, diagnosis, consultation, treatment, education, and care management of a patient's health care. Telehealth includes the application of secure video conferencing, store-and-forward technology, and synchronous interactions between a patient located at an originating site and a health care provider located at a distant site. Until July 1, 2023, telehealth also includes audio-only communication between a health care provider and a patient... Telehealth does not include communication between health care providers that consists solely of a telephone conversation, e-mail, or facsimile transmission. Telehealth does not include communication between a health care provider and a patient that consists solely of an e-mail or facsimile transmission. Telehealth does not include telemonitoring services...”

In 2021, the Minnesota Legislature passed a requirement that the Minnesota Department of Health and Minnesota Department of Human Services, in consultation with the Department of Commerce, collectively conduct a study of the impact of telehealth expansion and payment parity (Minnesota Session Laws, 2021). Specifically, the study was required to assess the impact of telehealth on access to health care services, quality of care, health outcomes, and patient satisfaction, with an emphasis on equitable access to care for underserved communities and the effectiveness of audio-only care. MDH took the lead on studying several aspects of telehealth care, including collecting qualitative information from Minnesotans with private insurance and the providers and payers who serve them. Clinical outcomes, including symptom reduction or improvements in functioning, were not assessed in the current qualitative study. MDH is conducting additional research beyond this qualitative study, and will continue to consult with the Minnesota departments of Human Services (DHS) and Commerce to ensure a collaborative and informed set of legislative recommendations.

Methods overview

MDH contracted with Wilder Research to collaboratively fulfill the requirements of the legislative mandate to gather qualitative data to better understand telehealth experiences of individuals served through telehealth, as well as providers and payers. Wilder Research used a mixed methods approach to complete this study, including the following:

- **Interviews with service recipients.** Wilder Research conducted virtual interviews with individuals between August and October 2022 to gather detailed, nuanced information about service recipients' experiences with telehealth, including how telehealth affected their perceptions of access to and quality of the care they received. In order to be eligible to participate in an interview, individuals had to be age 18-65, live in Minnesota, have used telehealth in the past 18 months, and have private insurance. Wilder Research completed interviews with 19 individuals in the seven-county Twin Cities metropolitan area and 11 individuals in greater Minnesota, including five individuals in rural areas.
- **Interviews with providers.** To better understand how providers experience telehealth, Wilder Research conducted virtual interviews with a sample of 20 health care providers who have experience providing care via telehealth. Interviews were conducted in October 2022. Of the 20 individuals interviewed, 14 respondents provide primary care, two provide behavioral health care, and four provide specialty care (e.g., OBGYN/midwife or physical therapy). Nine of these individuals provide care in the Twin Cities metro area and 11 provide care in greater Minnesota. All 11 of the greater Minnesota providers serve rural areas, though four are based in a metro area outside of the Twin Cities, and seven are based in rural communities.
- **Individual and group interviews with payers.** To better understand how payers perceive telehealth, including the value and perceived quality of telehealth services, Wilder Research conducted virtual interviews between August and September 2022 with a sample of 16 individuals representing five of the most prominent payer organizations in Minnesota. In many cases, individuals from the same organization chose to participate in an interview together, though some respondents chose individual interviews instead.

Individuals were recruited for interviews through multiple channels, including: letters sent to providers and payers from MDH, social media posts, collaboration with partner agencies, and outreach through MDH and Wilder Research staff networks.

Data from the interviews were analyzed using an open-coding method to identify key themes. Throughout this report, themes from interviews are described if at least five service recipients and/or three providers discussed the idea. Given the relatively small number of payers participating in this study, and the mix of individual and group interviews used, all key points from payers are described in this report.

Counts of the number of individuals who mentioned a theme are listed in this report, but these should be treated as estimates. Due to the nature of interviews, a person may not mention a concept, but that idea may still be relevant to them.

Limitations

There are several limitations of this study that need to be considered. These limitations require caution when generalizing or extrapolating from the study findings. The key limitations include:

- While this study collected some information specific to the audio-only telehealth format, many of the findings relate to telehealth generally.
- The current study was unable to assess clinical outcomes (e.g., symptom reduction) or improvements in functioning.
- The study team had a great deal of difficulty recruiting service recipients and providers from rural areas. Therefore, we are unable to disaggregate data by rural versus urban geographies and instead have chosen to report by metro and greater Minnesota geographies. Some respondents in the greater Minnesota groups are from urban areas outside of the 7-county Twin Cities metro area (such as Duluth or Rochester).

- Participation in the interviews, particularly with service recipients, may have been biased toward enrollees who have consistent access to a reliable device and internet.
- Because the focus of this study was on gathering qualitative data to gain greater depth of information, rather than breadth, the data should not be considered representative, particularly with regard to service recipients and providers, for whom the individuals we engaged are a small proportion of all individuals receiving or providing telehealth services.

Findings

Access to care

Telehealth increased access to care

When asked about changes to access, all provider respondents believed that **access to care has improved** as a result of the expansion of telehealth.

Virtual care has been a wonderful addition to what we can offer our patients, allowing us to meet them where they are instead of compelling them to have to come into our spaces for the care that they need. –Provider

What patients are telling me is that to them it feels more comfortable and accessible to be able to have the option to have telehealth. It takes away a lot of our no-show rate as far as transportation concerns because we do not have transportation in rural areas unless it's provided by somebody's insurance company. A lot of them were either missing appointments or not being able to schedule at all because they could not get themselves to the clinic. –Provider

Telehealth also increased access to care for service recipients by enabling them to **see health care providers, especially mental health providers and specialty providers, whom they would otherwise have been unable to see**. In all, seven respondents (23%) reported this scenario, and six of these were located in greater Minnesota. Specifically, nearly one-third of service recipients (n=9; 30%) reported that telehealth allowed them to access to providers located far away from them. This benefit was noted by service recipients in greater Minnesota in particular, with nearly half of these respondents mentioning it (n=5; 45%).

My therapist...would be someone I would've been really adrift without this past eight months. And she was only really accepting telehealth appointments. –Service recipient

We moved from the metro...to southern Minnesota, so metro to rural, and I was able to keep many of my same providers. For sure, [my] mental health provider. –Service recipient

I was able to see providers that were further away, and I also had the ability to see a specialist that...I wouldn't have to take a whole day off work [to see]. –Service recipient

If I want to just go to a clinic or something...I live eight miles from the closest town. They're not open all the time...It's just not literally physically accessible that much out here. And especially those visits that are in the dead of winter. I was grateful to not have to drive an hour and 20 minutes to my doctor. –Service recipient

It increased access because I was able to get some care that I wouldn't have otherwise been able to get in my area at all...the three closest hospitals to me do not have prenatal care.

–Service recipient

Similarly, many payers also shared that telehealth helps increase access to services and providers. Specifically, given the shortage of providers in behavioral health services, telehealth allows greater access to a large number of providers in the field, particularly in for residents in greater Minnesota.

Behavioral health is just the easiest because you can do some of those therapies and with considerable access issues, just with the workforce and the rural nature of where we're at on the Western side of the state. And this really gives us, I would say, the leeway or just the ability to think critically and creatively. –Payer

Providers also mentioned that telehealth **increased availability of specialist visits**. Just over half of provider respondents (n=11; 55%) talked about the benefit that service recipients derive from being able to schedule a specialist visit using telehealth. Providers described that, for many service recipients, telehealth provides a key access point to specialists who might otherwise be inaccessible to them, especially when taking into account the long wait times for appointments with certain specialties. Providers in greater Minnesota spoke to this as well, noting that service recipients outside of the Twin Cities may not have the resources to attend an in-person specialist visit that requires travel.

Now we have a psychiatric nurse practitioner available two days a week. That person's located elsewhere, but when they are available here, they are the highest licensure of mental health care available in the county. So that's been an important advantage. –Provider

Virtual consults in the hospitals need to stay. We have a number of rural hospitals that just don't have the degree of specialists that we have in our metro hospitals, particularly the U, but with tele-ICU and tele-consultation to specialists, we've been able to keep more patients in their community, and that's huge for patients to be able to be close to family and supports. And it keeps the beds in the tertiary care centers available for patients who really need the hands on tertiary care, not send people on an ambulance ride just so a specialist can walk in the room and talk to them. –Provider

And so, this allows people to get access to those types of providers in their home in a much more timely and convenient fashion to get most of what they need. There's still limitations, but I think it's critical to improve access. –Provider

I don't think we've lost providers in rural areas due to the availability of telehealth. I think if anything, we've been more creative about utilizing some of our other specialties via telehealth. For instance, I am doing a lot more referrals for a specially trained perinatal mental health specialist for patients with postpartum depression, just because our own mental health care services here in [rural community] are beyond capacity. And so, that's been a nice feature for patients. Not only having someone who has that specific expertise, which is sometimes hard to find, but also getting them in faster really makes the big difference. Because sometimes if they're waiting three months to be seen by a therapist, because that's your waiting list, you've lost them and they're not going to continue with that care. So at least we can connect them to someone who maybe could see them in the next two weeks. That's a big deal. –Provider

In addition, more than a quarter of service recipients (n=8; 27%) reported that they were often able to **schedule appointments sooner** through telehealth than they would have been able to do using in-person care. This benefit was especially notable when respondents wanted to see a specialist or to access care particularly quickly due to an urgent medical issue. However, seeing a provider sooner via telehealth also made accessing care in general more convenient. Respondents did indicate that a downside of quicker access through virtual care is that the appointment might not always be with a service recipient's preferred provider, but they acknowledged that this was the tradeoff of getting an appointment sooner.

I know, even right now, one of my providers that I've been seeing, to see them in person was going to be out like six months whereas if I saw them [through] telehealth, it was like two months. So I was able to see them a lot quicker if I saw them via telehealth versus if I wanted to wait and see them in person. –Service recipient

Getting in to be able to [be] seen quicker when I have a few things going on that I've been working with the doctor on, so getting into the specialist sooner. It was more convenient to be able to get into telehealth first and then follow-up with a person-to-person visit, but it definitely opens the access. –Service recipient

In our town, our clinic is so small, you can just never get an urgent care appointment or a right away appointment. So, that's helped us to get care when there wasn't anything available. –Service recipient

Telehealth reduced a number of barriers to care

Providers and service recipients also referred to several barriers to care that were reduced with access to telehealth.

Overall, **scheduling for telehealth was simplified** and made more flexible for service recipients (n=11; 37%). A number of service recipients mentioned the benefit of being able to more easily coordinate telehealth appointments with their work hours by, for example, scheduling appointments over their lunch hours, between meetings, or outside of standard business hours. Respondents also noted that they were sometimes able to schedule telehealth appointments on short notice to avoid urgent care visits or to take care of minor symptoms for which they might not otherwise take the time to obtain care.

Well, I think telehealth helped me to be able to go and see a physician while I was on break and I didn't have to then take off work time or do travel or all of those things or take PTO. –Service recipient

What might happen is sometimes I might have an appointment for Wednesday and then I'll go to my boss and then she'd be like, 'Oh, sorry, we have three people who are not going to be here'...So telehealth makes it flexible because sometimes if I can't do it during my work hours, I could even do it at five in the afternoon. –Service recipient

One of the biggest challenges for me, my entire adult life, has been coordinating schedules, so needing to go to work and then needing to commute to go to an appointment. And I feel like just having so many barriers to get to an appointment, I would be like, 'Well, that's okay. I'll just wait it out to see if whatever symptom I'm experiencing will go away on its own.' But now I'm like, 'Hey, I can just click on my phone a couple of buttons and then get an

appointment a couple of days later and do it from the comfort of my home.'

–Service recipient

In addition to offering more flexible scheduling, telehealth **reduced the amount of time required** of service recipients for visits. A large majority of service recipients (n=23; 77%) reported that telehealth required less time than in-person care—including time spent travelling, finding parking, and waiting in the waiting room. This was especially the case for recipients in greater Minnesota, nearly all of whom (n=10; 91%) noted that telehealth required less time than in-person care.

Mostly it saves the time of commuting to an office and waiting. –Service recipient

With myself, personally, I do mental health [appointments] every other week [through] telehealth, and...if I had to drive there because it's an hour and a half away...I probably would just go maybe once a month just again because of the time and expense. –Service recipient

I would say it has made it more accessible, just because with my work schedule, I've been able to connect with more providers than I would have if I would've had to go in person, just because then I don't have to drive somewhere. Whereas if I had to go in person that wouldn't have happened.

–Service recipient

Relatedly, providers noticed this improvement as well, with several (n=15; 75%) mentioning that telehealth helped service recipients who frequently had difficulty with taking time off work to make it to appointments. For service recipients with this barrier, providers noted that telehealth made it easier to schedule appointments that fit within typical work hours, and that service recipients did not have to take as much time away from work (which may be particularly challenging for people working hourly). Some providers also recalled instances in which they were able to connect with service recipients who they might typically see in person, but may travel for work or spend winters elsewhere (n=4; 20%). For these service recipients, providers identified that telehealth visits provided important continuity of care.

The notion of taking two hours or a half day away from an hourly job where your job is at risk and your financial stability is jeopardized by seeking medical care. You can't afford to do that.

Those patients now can go into a break room or go out to their car or jump on a video or phone with their clinician and have it only take the amount of time that it needs for that kind of a visit. –Provider

Service recipients also mentioned that telehealth visits removed barriers related to **transportation**, including the cost of gas and parking (n=9; 30%). Providers also touched on the benefit of not having service recipients travel to appointments during inclement weather, such as winter storms (n=8; 40%). Providers both within and outside of the Twin Cities also brought up transportation (or lack thereof) as a reduced barrier (n=15; 75%), though with different emphases. For providers in greater Minnesota, it was more common that they talked about the cost of gas or distance to travel (36% of providers from greater Minnesota). However, metro-area providers more often noted challenges associated with not having a car or issues related to traffic and parking (67% of metro-area providers).

I think for complex conditions, for patients who need specialty care, that's actually a huge win for expansion of access in rural spaces for those, especially that specialty access and being

able to bring the care to the patient instead of having the patient make a sometimes lengthy drive to the Twin Cities to get it. –Provider

The transportation piece. That has been helpful just because we only have one car. And so if we can reduce the driving plus the cost, because the cost of transportation has gone way up. Sometimes these clinics are not close by. –Service recipient

No travel, no parking, no having to navigate whether it is personal transportation options or hiring an option or getting to public transportation. I don't have any of that to worry about it. –Service recipient

I think now, going forward, [telehealth] can be a tool to help us better manage patients who have transportation barriers, or in the middle of winter. I have patients who will tell me, year in and year out, in October, 'I'll see you when the snow is off the ground.' And if you're healthy, that's fine. But if you just had a stroke, a heart attack, your A1C is 9.13, you may not be able to go from October to March without seeing me...When telehealth becomes a tool that we can use, and not a tool we have to use, I think it will improve our quality of care. And I think we're at that point now where it's kind of a transition. I can see that we're maybe already getting to the point where telehealth could be a way to decrease disparities instead of increase them. –Provider

Finally, providers identified that telehealth helped to reduce challenges related to **child care** (n=10; 50%). For many service recipients, not having appropriate child care may mean limited access to in-person visits. This was likely exacerbated during the pandemic, when patients were not allowed to bring others to appointments. Some providers further specified that service recipients with lower socioeconomic status were more likely to be affected by this challenge.

It's also very helpful for folks with the very hectic lifestyle, [with] little kids at home. Frequent no-shows for in-person appointments where we're able to actually talk to those folks more often with the telemedicine, because they can just pick up the phone where they are. They don't have to haul kids to the clinic or manage the behaviors in the exam room. So I do feel like for a subset of patients, this telemedicine has been a godsend. –Provider

Service recipients (n=8; 27%) also noted that telehealth makes care more accessible when **in-person care carries health/safety risks**, such as those related to COVID. This was especially important for respondents who needed mental health services when COVID restrictions were in place. Respondents also appreciated the peace of mind of just knowing that a telehealth option was available if needed so that they and their family wouldn't be exposed to COVID. Some respondents discussed using telehealth especially in cases where they felt like they might be able to forego in-person care—i.e., where no physical exam was needed—in order to avoid potential COVID exposure at a clinic or doctor's office. Providers also suggested that allowing service recipients to opt for telehealth meant that they could keep viral spread low during seasonal surges in illness.

It's definitely helped, especially with the pandemic. I mean, that's really when I started with telehealth and [it] really provided a way to safely meet with a provider. I know I had really been struggling, so having access to that and having access specifically to a therapist via telehealth was very, very impactful. –Service recipient

I know at least for probably the first nine months to 12 months of the pandemic, I did not feel comfortable going in person to the doctor's office...having that option to not have to put myself or my family at risk was a huge deal. –Service recipient

Because of COVID I didn't want to go in. And...it was something that I felt it was more of a question-answer type of visit, not really something where I needed to be physically examined. –Service recipient

And every time we have a peak, every time there's another surge in the winter? Boom. We're back to doing a bunch of video visits again. I think having the flexibility is so important. –Provider

Telehealth introduced new challenges

While themes from providers and service recipients indicate increased access to care, both groups noted certain challenges that arose along with the expansion of telehealth. These issues are largely focused on technology for and understanding of telehealth.

The most significant barrier that has emerged with the expansion of telehealth appears to be **technology and connectivity**. Providers noted a lack of access to sufficient broadband to engage in video visits, for both metro (n=5; 25%) and greater Minnesota (n=13; 65%) service recipients. Further, some said that many service recipients who reside in remote areas do not even have sufficient cellular phone service for an audio-only visit. Alongside the experience with video visits, providers also noted that they have needed to pivot to an audio-only visit if video isn't working well (n=6; 30%). This may happen for a variety of reasons, but most commonly due to the service recipient having trouble navigating the platform or insufficient broadband strength.

If the patient gets there, but then the audio quality isn't sufficient to have a good experience or the video quality isn't sufficient to have a good video experience, we just abandon ship and call them. We'll do a little bit of troubleshooting if we can, but if it's coming up pretty quickly that it's not going to be a good experience and we should just pivot to audio, then that's what we do. –Provider

If someone's freezing or has to turn their camera off, then folks over 65 especially are much more comfortable with the phone call in those cases and don't want to waste time or waste the provider's time kind of fussing around with technology. –Provider

One of my biggest challenges, particularly in rural Minnesota, is there are several places that just don't have broadband or great cellular access. And unfortunately, just as a provider that does outreach in these areas and travels through these areas, it disparately impacts tribal communities. So Red Lake, Cass Lake, Leech Lake, there are parts where you are driving through those areas and there is no cell phone service at all. And until that's addressed, we're never really going to have equity, even with telehealth capabilities. So we've got to find ways to address that. –Provider

Among service recipients, nearly one-third (n=9; 30%) mentioned encountering difficulties with technology during telehealth visits, and many also indicated that technological issues were the primary way that telehealth fell short of expectations (n=8; 27%). Some respondents encountered glitches with software applications (e.g., video links that wouldn't work) and others reported occasional issues with internet connectivity, whether on their end or

the provider's. Other issues noted by respondents included power outages, lack of platform continuity across providers, and difficulty getting online medical charts (i.e., MyChart) set up.

Several respondents reported that they encountered more tech issues when they first started using telehealth and that the technological issues had lessened over time. Respondents also indicated that the technology issues were generally not significant and that they were willing to work through them to access care via telehealth.

When I was starting at first, the connection problem [was a challenge]. And then I didn't know that I had to get MyChart set up and all that. So the first initial meeting for the whole telehealth thing was chaotic for me, because I wasn't told that I have to download MyChart. So the first initial meeting...was very stressful...But after that it went smooth. –Service recipient

In the sense that there's not a continuous platform. Maybe Essentia in Lakeside, Duluth has it this way. Maybe the Nicollet has it that way. You're always kind of trying to figure how to run the card, and that's how it feels like. What is the platform? I would say the least comfortable thing of any virtual appointment that I've experienced is the uncertainty and no continuity in the initial access. –Service recipient

I think really for me, it's only been the connection errors, just dropping midway, or when I've had to do group sessions, I think there would [be] a lot more connection issues. –Service recipient

Where they have a software that just does not seem to work with other people's software. So, if doctor's offices had... it's like they had their own... non-meshing 'doctor appointment program' instead of Hangout, or Google meet or Zoom or whatever all the other ones are. I can understand wanting to have patient privacy to be enforced and doctor patient stuff, but that was pretty disappointing. –Service recipient

There have been times when we've had...connection issues, just with my provider that I do mental health with...and that has made it hard sometimes when it's you know, glitchy or we can't really hear each other. So a couple times, we've actually hung up and just done a phone call. But I feel like that's gotten better in the last year. I think that was more at the beginning. –Service recipient

In addition to mentioning technological barriers, more than one-third of service recipients (n=12; 40%) mentioned that telehealth wasn't appropriate or ideal for **certain types of visits or needs**. For example, telehealth might not be ideal when a visual of symptoms (e.g., a rash) is required for diagnosis, even if telehealth is presented as an option for the visit type. In other cases, physical exams and screenings (e.g., pap smears) cannot be done via telehealth and patients have consequently foregone care due to COVID-related health and safety concerns or because in-person care wasn't being offered due to COVID restrictions. Additionally, respondents noted that it's not always clear that telehealth isn't appropriate until an appointment is underway and it is determined that an in-person visit is necessary, resulting in a patient having to do two visits instead of one.

I think there's just those situations where it's more helpful if a doctor can examine you in person. There's limitations on what they can do for telehealth. –Service recipient

I feel like, especially if you're trying to diagnose something, you can see things better than a camera would if your camera is dirty or if you don't have good lighting or maybe there's bumps on...a rash. So not that it affected my care, but I think it could have. –Service recipient

How do you have a physical by telehealth?...I haven't had a physical or a pap smear.

–Service recipient

Telehealth reduces disparities, but lacks true equitable access

Most providers felt that **telehealth resulted in an overall reduction in disparities in access to health care** (n=13; 65%). This belief was further evidenced by a handful of provider anecdotes regarding improved outcomes.¹

However, several providers noted examples of how telehealth may not adequately support individuals with a primary language other than English (n=9; 45%). These included:

- Patient portals being offered in English only
- Not having appropriate infrastructure or processes for service recipients who request an interpreter
- An acknowledgement that some health systems work better than others when it comes to supporting service recipients who primarily speak a language other than English

Language, if the language they speak is other than English, is a huge barrier. Like I said, we don't have a way to get an interpreter any longer on the video, so if it's a video visit, I just call an interpreter on my speaker phone and hold it, and then it's really clunky. That's really not fun for anyone. –Provider

Provider opinions on equitable access to telehealth itself were mixed, with less agreement than stated above regarding disparity reduction. Many did express that, overall, access was equitable (n=7; 35%), while some were not sure (n=3, 15%). Among those who felt it was not equitable (n=10; 50%), they observed **disparities in broadband access, digital literacy, and comfort with using technology**. Providers identified that these disparities are particularly salient for patients with a lower socioeconomic status, elderly patients, and patients living in remote locations. A few providers (n=3; 15%) specified that audio-only care is especially important for service recipients in remote locations (and who may only have access to a land line).

People of lower socioeconomic status and the elderly are much more likely to need phone visits instead of video visits. Which is another huge concern about the potential loss of phone visits being fully covered visits, because it's going to adversely impact people who already are at high risk of poor health outcomes. –Provider

It's a whole lot cheaper to allow that family to have broadband so they can do telehealth visits so they can get their medicines than it is to pay for insulin and glucose meters and all that kind of stuff. So if that same type of credence was given to the mental health problem as a physical health problem, then I think that we would have a whole lot happier people, but it would also be more equitable for the people who really need it because telehealth absolutely needs to find its home in mental health. It has to. And chronic care, yes. But mental health, well, let's face it, mental health impacts chronic care. Chronic care is probably a result of mental health so they all go hand in hand. –Provider

So people who are younger, people who have iPhones and are savvy with technology who can go online on their MyChart app and schedule it, it's easy for them. But I had a guy the other

¹ See *Care delivery and outcomes* section

day who couldn't pick up the phone in the ER because he's hard of hearing and he couldn't hear what the person was saying to get let into the ER. –Provider

Due to a concern for availability of health care in greater Minnesota, providers were asked whether or not the expansion of telehealth impacted the availability of in-person care in rural areas. While some providers expressed that they did not have any opinion nor information about this, all those who responded to the question (n=10; 100%) did not feel that in-person care had been affected.

Care delivery and outcomes

Increased patient engagement through telehealth

A number of providers commented that a key benefit of telehealth visits has been an **increased level of engagement** among their patients (n=14; 70%) and follow-through with health care (n=14; 70%). When telehealth was an option, providers felt that service recipients were more likely to schedule appointments when they needed to, and on a more appropriate timeline. Overall, providers felt that service recipients connected more with them than they did prior to the expansion of telehealth, and providers perceived this as a positive outcome.

I am seeing more follow-through with visits, which means we get through treatment plans and complete goals more probably than we did before because people are actually continuing and showing up. They are reducing those barriers to showing up to your visit. So, we can actually complete a treatment plan better. So, that's one way that I've seen changes in a positive way. – Provider

I think they're a little bit more consistent with their appointments... especially the mental health appointments. Because as primary care in a rural setting we manage a lot of depression and anxiety. We just don't have enough behavioral health practitioners to do that. So I think that's kept it more consistent, where typically that population, it tends to get lost in followup. –Provider

If I'm a diabetic and it would actually be good for my health if I interacted with my clinician three times a year instead of the once a year, to manage my chronic disease, and now I've removed some of the barriers to make it easier for me to do that, is that a good thing? I think it's hard to quantify that value to patients when maybe it wasn't a measurable barrier, but yet, I think it's true and telehealth has allowed us to expand that reach and to make it easier for patients to connect with us. –Provider

Service recipients echoed the sentiments of providers on increased engagement, with nearly one quarter (n=7; 23%) talking about the utility of telehealth for taking care of simple appointments, such as follow-up care and other straightforward services that they might otherwise have gone without. Respondents talked about getting follow-ups to lab work via telehealth, checking symptoms that they would have typically waited out, and completing simple check-ins or reassessments.

We had, for example, allergist appointments. We did some things in person at the lab, you have to, to give a blood sample. But they can talk to you about it via the online platform, which would save you another trip. –Service recipient

I think I might not have even reported that I had COVID. But being able to actually see on camera...see me and agree to prescribing Paxlovid...I might not have pursued anything beyond just staying at home, treating myself. –Service recipient

Telehealth tends to work best for specific types of care or patients

Providers pointed to a number of conditions or situations that were particularly well-suited to telehealth visits, including:

- Chronic illness such as diabetes, hypertension, or asthma (n=13; 65%)
- Mental health care (n=13; 65%)
- Follow-up care, such as from a procedure or new treatment plan (n=11; 55%)
- Medication management (n=7; 35%)
- Care for established patients (n=7; 35%)

In these instances, providers are focusing their care for service recipients on aspects of **education, monitoring, and prevention**; therefore, conducting a physical examination with the patient is not necessary to provide quality care.

For a lot of things, it's interpreting data. It's having the conversation about what their experience is, what their symptoms are...[it] doesn't require an in-person exchange to provide that very high-quality care experience for patients with chronic diseases. And that's also true for behavioral health. Care for things like anxiety and depression, it lends itself beautifully to virtual care and having a very high quality experience.

–Provider

The pandemic really accelerated our ability to provide telehealth, which was one of those silver linings. I think it was most significant in the behavioral health department. That was something that worked really well and brought in patients who weren't maybe comfortable coming in person or who had issues with transportation in our very dispersed community that has no public transportation. Folks who had issues with daycare or caregiving in general. So that was really important. –Provider

Chronic disease management like diabetes has been great where my patient can tell me what their glucose readings are, I'm able to make medication changes. It has been great for asthma and for people with a home blood pressure cuff. It's been great for high blood pressure management as long as I know the renal function is okay, they don't need their labs to be rechecked. Again, there's appropriate things to do with telehealth and there are inappropriate conditions, but for chronic concerns and mental health concerns, it has been great. –Provider

A lot of wellness is asking, are you due for your screenings? Should you be on a cholesterol medication? What's your blood pressure? Do you have diabetes? How can we prevent diabetes? That's what it really is. So I think that we could utilize telemedicine more, and my hunch is that as time progresses, it will become more and more popular and video limitations will become less and less, and we will be using it more. –Provider

Nearly half of the providers interviewed (n=9; 45%) also mentioned that they could do **most of their visits using telehealth** and direct their patients to go in for labs separately, which are often easier to schedule or can be done on the weekend. Some also felt that this eased the burden of coordinating appointments together.

We have lab only appointments available on the weekend. So people can do labs at different times. Our pharmacy will do vitals on the weekends. So trying to be more flexible to help folks out.

–Provider

A lot of the time we can also help the patient schedule nurse appointments, lab appointments, being able to just be on the phone and get the care coordination out of the way to streamline the service is huge for a lot of our patients. –Provider

If I'm seeing people with lots of labs done in the clinic, that will require discussion to follow up on that, but we don't need to repeat that. Having the ability to chat over the phone and go through what those labs mean, what's the next step, that's been really helpful too. And then the COVID treatment, if the patient doesn't have red flag symptoms, they need antiviral medication and you don't want to bring them to the clinic to expose people if they don't need the level of care to be seen in-person. I think it's wonderful to be able to call them, go over the medication-assisted treatment regulations, go over what to monitor for, and send the medication over. A lot of things can be very streamlined. –Provider

Two providers with specialties related to caring for pregnant people also described aspects of **pre- and post-natal care** that can and should be adapted for telehealth. These providers suggested that doing so would further enhance the care for pregnant people, especially those from BIPOC communities, who are impacted by significant disparities in infant and maternal care.

I would say [telehealth] has had a positive impact on the disparities around maternal mortality. That's probably one of the largest disparities that I deal with day to day. I mean, the country's dealing with, right? Maternal mortality is out of control in the United States, and it's really driven by Black people because their rate of death and severe morbidity is so, so, so inappropriately high all over the country. And we know that what is killing people in relation to their pregnancy are things that happen in the postpartum period. They're clotting disorders, infections, bleeding, preeclampsia, and then mental health problems, suicide, substance use, things like that. And I'm not a very dramatic person, but I mean, this is what the state of the evidence is. People die in the postpartum period if it's related to pregnancy, and it happens quickly, and it happens before that six-week period. So I think we are addressing that disparity. –Provider

Traditionally, everyone's seen at six weeks postpartum for a checkup, but we've known for many years that that's actually not when we should be seeing people for the first time. Really, one to two weeks is when you really should see people. And so my service, the nurse midwife service, is doing a virtual visit, or scheduling 100% of our patients who birth with us for a virtual visit, within two weeks. To me, it's the benefit of the pandemic. It let us be able to offer care that we've needed to do but we didn't have a way to operationalize and didn't have clinic space to do. And then that's been great for them because they don't have to come into the clinic with a one-week-old baby. –Provider

Many providers, regardless of discipline, emphasized the importance of telehealth for **mental health care** and strongly encouraged its continued use. Some providers noted that the ability to conduct therapy using telehealth was especially critical in our current circumstances (in an ongoing pandemic) and with certain populations. Two providers who largely see youth and adolescents experiencing depression or anxiety noted that they may be

much more willing to engage in therapy if telehealth is offered and telehealth provides the ability to participate in patient care that wasn't previously possible.

[Telehealth] is just another way to meet patients where they're at and help provide the care that they need now. I like teens. And so being able to see teens with their mental health problems, which are just huge right now, it's very gratifying to be able to be available and to help. –

Provider

The other thing I love about telehealth is that I've been able to attend a lot more [Individual Education Program] meetings and team conferences than I ever could before because it would require me to leave clinic, and that would be less patient time. So now I can schedule it in and just hop on to the team appointments. I feel like we have a very holistic approach on how we manage our kids here. And so being a part of that IEP team or that discharge planning or any of those things that require you to be involved, you can do it quite easily now with the telehealth options. And you can bill for those services, so why not be a part of that? –Provider

Similarly, many payers seemed to agree that telehealth could act a substitute for in-person care in behavioral health services. Payers have observed a relatively high and sustained rate of telehealth use for behavioral health care.

Behavioral health is the best example and this is where we've seen both a significant increase in behavioral health services delivered via telehealth during the pandemic and, by far and away, the largest sustained continuation of telehealth services. –Payer

Telehealth is comparable to in-person care, with some unique benefits

Service recipients tended to have the **same quality expectations** for telehealth and in-person care (n=9; 30%). Respondents explained that that they expect to have their health history reviewed, to receive the same information, and to have the same level of trust with their providers whether they receive care in-person or through telehealth.

I would expect the same sort of quality of treatment from telehealth as in person. –Service recipient

I hold pretty much to the same standard for both. Although, I do have some grace for the fact that...technology doesn't always like to do what we want it to do. –Service recipient

A smaller group of respondents (n=6; 20%) did report having **different quality expectations** for telehealth and in-person care. For example, respondents noted that they would expect a telehealth visit to be less in-depth than an in-person visit but that a telehealth visit would be more likely to start on time.

I think my expectation for telehealth is that it's a little bit more efficient and quicker and it tends to be really fast, like maybe 15 minutes for most of my appointments, and there's not a whole lot of waiting. I feel like when I come in person, I expect to have some type of wait, even if I have an appointment. –Service recipient

Because providers described providing care during telehealth visits that was largely discussion-based (n=4; 20%), they perceived **little difference between in-person and telehealth care, when used appropriately**. During such visits, providers might be engaging in health education or supporting a patient in their medical decision-making. The majority of providers felt that the quality of care provided was the same (n=12; 60%) and/or enhanced (n=14; 70%), depending on the situation. Referencing improvements, providers often attributed this to increased

engagement.² Just a few (n=3; 15%) noted a lower quality of care; in these instances, providers described cases in which they might be able to “catch” other health concerns that are not brought up verbally during a visit.

I can provide the same level of quality and, I would argue in some cases, an even better experience to my patient. The medical judgment, the years I spent in school and training to provide safe, effective, high-quality care for whatever the disease may be, isn't diminished by the fact that I'm doing it via video as opposed to sitting in front of somebody. –Provider

So much of what we do is conversation and interpretation of data.

It doesn't matter if I can see you or not see you. –Provider

Providers expressed another tertiary benefit to telehealth as compared to in-person care; because most of their telehealth visits were conducted via video, they had an opportunity to **see patients in their home environment** (n=7; 35%). This was particularly valuable for providers who were speaking with a patient about their mental health concerns (e.g., depression or anxiety). They also described an appreciation or enjoyment derived from getting to know their patients better or get a better picture of who they are as a whole person.

Providers can see patients at home. Patients can be a lot more relaxed and there's a lot more insight that the providers get about how the patients are doing. – Provider

Providers can see where a patient is sitting at home. They can sometimes see what their setup is for an elderly patient who maybe has mobility issues. It's much easier for the spouse to join in and chat. So they feel like they get just a better picture of the whole person. And there are some situations too, especially with children where kids are a lot more relaxed if they're doing something over telehealth, especially screenings, and they can get a much better feel for how the child interacts with family members, speaks, does skills. –Provider

Telehealth has allowed for innovations in care delivery

Overall, payers indicated that telehealth has allowed them to be innovative, particularly on ways telehealth services can be delivered. For instance, they shared that there are increasingly more providers using telehealth not just for emergency or urgent care, but also for **preventative services**. In addition, one respondent identified that telehealth has allowed for different **acute care models**.

I think as we've progressed with telehealth over the last couple of years, we've seen a shift from telehealth being only, or mainly, used for emergent or urgent care needs to a preventative space. And that's where we've spent probably the majority of this past year focusing on creating some options for our members that based on whatever obstacles they have going on, be it time, travel, preference, whatever it might be, that we can get them in for a video visit and focus really on management of their chronic conditions and preventative services. – Payer

I think probably innovation might be a strong word, but I think that there's pockets of it within telehealth delivery. We have certainly seen increase in more acute care Hospital at

² See *Care delivery and outcomes; Increased patient engagement* section.

Home type models that are not wholly telehealth delivered, but are augmented or enabled by telehealth supplementation. I think what we have seen is, in acceleration, in the innovation, in those spaces, out of necessity. So, I think overall we see it as a positive towards moving or enabling innovation in health care delivery. –Payer

Many payers shared that they noticed more providers using **tele-monitoring** in their practice when it is appropriate. Tele-monitoring allows patients to wear monitoring devices in their home while providers monitor those devices in a different physical space. This set-up still allows providers to reach out to their patients when something goes wrong or an alarm goes off. Additionally, providers shared that some provider systems are also developing capacities to take blood pressure at home or have their patients' oxygen levels checked. These capacities were previously only available in person. Providers echoed this benefit, noting that when patients are able to use devices such as blood pressure cuffs at home, they can provide care that is equal to or better than in-person care.

The other type of telemedicine I wanted to comment on that we're seeing more and more of with our providers is just the tele-monitoring...They have all these devices now the patient wears in their home, and then the provider just monitors that, and when something goes wrong, an alarm goes off and they reach out. –Payer

Since we got blood pressure cuffs at clinic, that's been very, very helpful. We're trying to get blood pressure cuffs in the hands of every one of our hypertensive patients. –Provider

Within my field, there's new technologies that can do electronic fetal monitoring. For instance, a non-stress test that normally a patient would have to come into the office for monitoring a high risk pregnancy that can be done via telehealth, using continuous glucose monitoring and uploading your values and getting them sent in to your provider, that can be done. I think looking at expanding access to those technologies needs to be a part of this as well. And I don't know if anyone has talked about that, but there's been a lot of advancements over the past couple years, and I think we're going to continue to see more. –Provider

Clear care delivery guidelines are needed

While many health systems were able to begin providing telehealth very quickly after the start of the pandemic, some providers noted that additional work is needed to smooth out this method of care delivery. Providers discussed a **need for education and clinical practice guidelines in order to make the best use of telehealth** and for it to be used in the optimal circumstances. Specifically, providers suggested that service recipients receive education around how telehealth works, and when to use it, as well as promotion of telehealth generally (n=9; 45%). Providers also indicated that health systems need more thorough education (n=8; 40%), including **developing and implementing best practices for telehealth**, such as clear guidelines about how and when to use telehealth versus in-person care.

I feel like things will improve as telemedicine gains more traction and institutions develop more protocolized way of telling people what's appropriate and encouraging and educating the scheduling staff. –Provider

I think [it's] been part of our journey to figure out what lends itself well to good virtual care and what are things that are not as appropriate for virtual care and how do we educate our patients and how do we educate our clinicians? I think that's just part of the learning curve with a new modality for giving and receiving care that, I mean, two plus years into it, we're

pretty good at it at this point, but that's certainly been part of our journey is to figure out how do we highlight and promote virtual care for the right type of conditions and make that available and visible to our patients as part of their scheduling experience even. –Provider

It's not only a learning thing for us, but also a learning process for patients. I think they're doing a much better job now of utilizing telehealth services appropriately than they did initially. – Provider

Put it in the curriculum for health care, and that comes from our Board of Nursing and our Board of Medical Practice and those that approve those curriculums, those are where that needs to come, and that's a policy thing. –Provider

Satisfaction with telehealth

Overall high levels of satisfaction

All service recipients (n=30; 100%) reported that they were satisfied with telehealth, with half expressing a high level of satisfaction. Half of respondents (n=15; 50%) also stated that their satisfaction was the same for telehealth and in-person care.

More than one-third of service recipients (n=12; 40%) attributed their satisfaction with telehealth to its convenience, speaking about the ability to schedule around other obligations, see providers located outside their geographic area, and receive care without the burden of traveling and sitting in a waiting room. Respondents (n=9; 30%) also mentioned that they were satisfied with telehealth when there was a resolution to the reason for the visit (i.e., when they felt that their questions were being addressed).

So, I think my expectations [for telehealth] were a little low, and I would even say that I was aiming for a five from a scale of zero to 10, and I've come out at 9, 10 being the highest.– Service recipient

If they're professional, and they're good at what they do, and they tell me what the diagnosis is, I'm not gonna question it, whether it's in person or on the video. –Service recipient

I have to schedule things around my meetings and other work-related things and have that flexibility. So I think that just...added to my satisfaction with [telehealth].

–Service recipient

I'm making an appointment because...there's something that's bugging me or something that's not right. Or something that needs to be fixed. So that's why I'm scheduling [an] appointment...what satisfaction I'm looking for is a resolution or a solution. –Service recipient

Service recipients reported that telehealth providers met their expectations by listening, answering questions, and “getting to the bottom of the patient’s need” (n=8; 27%). Respondents talked about gaining information and having a plan or next steps. Service recipients (n=7; 23%) also emphasized the importance of telehealth providers making care feel personal and giving their full attention to the patient. Here respondents spoke about providers being engaged with the visit—knowing why the patient is there, knowing the relevant history, and making an effort to understand the patient’s concerns.

We talked about what's going on. We talked about ways in which a new medication can help. We talked about my next visit would be coming in person to get my blood drawn, things like that...I was able to talk to someone and I was able to at least move forward with something.

–Service recipient

Mostly they've been able to address whatever issue I've had through that telehealth visit, whether it is a question or a discussion or conversation. I think that's where they have met my needs. –

Service recipient

My mental health telehealth visits, it almost feels like an in-person visit because of how personable she makes it...I can tell that I always have her full attention for those 45 minutes that we have. –Service recipient

It's got to be somebody that listens, understands, hears, has that empathetic understanding, good emotional intelligence. –Service recipient

The majority of service recipients (n=19; 63%) received telehealth services through both video and audio-only connections, and the remainder (n=11; 37%) received telehealth services exclusively via video. Of those who participated via both video and audio, 44% (n=8) said they were equally satisfied by video and audio-only care, stating that the two delivery mechanisms were “about the same.” Seven respondents (39%) stated that they were more satisfied by video services, noting, for example, that they liked to see the facial expressions of the clinician they were working with. Three said that it depended on the visit type whether video or audio would be more satisfactory, with audio being satisfactory for more informational exchanges, as when receiving test results. Just one service recipient preferred audio-only altogether, describing fatigue from being on video calls.

They [video and audio-only] were the same, yeah. I was happy. –Service recipient

I think they're better with video because there's that connection with a physical person, and you feel like they may be able to visually just kind of diagnose you as, as they're talking. There's an extra level there. It's, it's different than calling a credit card company. –Service recipient

Sometimes I just wish it would be audio-only. I would be more satisfied if it was audio-only so there wasn't that expectation to be on a video platform. Or even if they said, 'Hey, this platform is a video, but you don't have to have your camera on the whole time,' or something like that, even if they had that caveat. I think people are so excited, 'Oh, you can do it via video,' but not everyone wants to be on a video. I think there's a fatigue of being on video calls. So it would be nice not to have to be on it.

Even if that is the platform that you have, everything can be just audio as needed. –Service recipient

The majority of providers interviewed said that they are **overall satisfied with telehealth as part of their work** (n=18; 90%). Contributing factors to their satisfaction with telehealth included:

- Convenience and accessibility for their patient population
- Flexibility for their work schedule, including the ability to work remotely
- Avoiding burnout associated with medical professions, which some attributed to the clinic environment
- Freeing up space in the clinic and improving overall capacity for clinic support staff (e.g., medical assistants)

Part of my schedule was templated so that it can only be virtual care. Many of our clinicians have chosen to do that for a variety of reasons. In some of our areas, that's actually been a

way that we can see more patients because if we can shift our clinician resources offsite, that frees up capacity in our brick and mortar space to be able to bring patients in for in-person care.

–Provider

I think that is particularly compelling for women in medicine, women in the workforce in general. But in medicine in particular, because we see attrition of women, particularly in primary care, after they enter the workforce, which is something that we all need to care about because we are not producing doctors fast enough to keep up with the demand of a growing aging population. –Provider

I've seen it being helpful for my colleagues and myself just offering a little bit more variety of practice in reducing burnout and increasing sustainability of the work that we do, because the day in and day out of primary care grind and in our institution, the barriers we see of getting specialty access, a lot of the workload is on primary care and burnout is a real concern. And I see telehealth as really beneficial in providing some reprieve in the work that we do, that we still provide great care. –Provider

It cuts down on our reliance on our medical assistant, which we're short on medical assistants all the time, or it can take a while for the patient to get roomed and that can be a really big, frustrating point. –Provider

However, some providers expressed dissatisfaction with telehealth as part of their work overall (n=2; 10%), or noted that they personally prefer face-to-face visits, though they did not negate the value of telehealth (n=5; 25%).

In general, I'm not as keen on trying to connect with patients only by phone or video for a long period. I usually use it to fill in the times between and cut down on some of the in-person visits rather than entirely supplanting the in-person stuff. –Provider

From my perspective, I hate telehealth. I love seeing patients in person, I love the human contact, I love being able to see how they describe things. When I was doing telehealth for a week at a time, by Friday, I was about to go stir crazy. I could not do a large portion of my clinical practice as telehealth. I do it because I love my patients and there's a role for it. – Provider

There's a difference between standing in my office looking at the computer all day and actually talking to people and interacting. And I really feel bad for my patients who are now stuck in their basements doing all their work there. It's just not my preference. –Provider

Service recipients are satisfied with their ability to choose telehealth and payers are able to make options clear to service recipients

The vast majority of service recipients (n=27; 90%) said that they generally have a choice between telehealth and in-person care when making appointments, although some noted that this choice did not exist during the peak of COVID restrictions when only virtual care was available, and others noted cases where certain providers might only offer telehealth. Some also pointed out that sometimes the visit type influenced whether telehealth was presented as an option (i.e., via a screening tool). In all, 25 respondents (83%) said they are **satisfied with their ability to choose** between telehealth and in-person services.

Oh that's the easiest thing. Actually, if I do it online, I have to go to the portal for either one. So I have to consciously be like, 'Do I have time to travel or should I do a telehealth visit?' – Service recipient

Outside of having lab work done, I have had the opportunity to do virtual. –Service recipient

There'll be a screening tool. Maybe if it's for physical health, a symptom check, and then that will decipher if they need to see you in person or not. But it's been very easy to figure out.– Service recipient

I'm just happy that we can go in again and be safe if we want to. And the fact that I can choose and make it fit with my schedule more is great. –Service recipient

Payer were asked about how their health plan members find out that telehealth services are available under their plan in addition to in-person care. A few payers indicated that they have infrastructure and processes in place to communicate with patients about the telehealth options that service recipients can access. These processes can include readily available information on payer's websites or landing pages about telehealth services, patients directly reaching out to customer service lines, and/or working closely with employer groups to include what telehealth services are covered under their plans in their benefit packages.

They could call our customer service line and ask if it's covered. Some members, like our Medicare Advantage members, still get member documents from the plan. That is a requirement from CMS. And in there, it specifies telehealth is covered and at the same rate as it is in-person. There's a variety of ways for people to know what their coverage is. –Payer

So in our commercial space, we work really closely with our employer groups. So when a staff is on board, they would receive a document that highlights their benefit packages to include information that they can access services via telehealth. –Payer

Usually the big telehealth providers that we contract with include this [telehealth] information in their benefits packages. So they become aware of them upon enrollment. Doctor on Demand, for example, is just included as this is one of the telehealth providers that's in network. Although, I'd say it's also becoming more common for the health systems to include telehealth options on their landing pages and websites. –Payer

Payment for telehealth

Payers usually rely on specific criteria for services to be reimbursed through telehealth

Nearly all payers shared that they follow the guidelines that the Centers for Medicare & Medicaid Services (CMS) put out. CMS typically outlines services that are reimbursable through telehealth. These payers highlighted that the coverage for telehealth services was significantly broadened during the pandemic.

CMS tends to lead the way. CMS will typically outline services that are reimbursable through telehealth. –Payer

However, one payer shared that they sometimes let their providers/clinicians determine what services are appropriate for telehealth. Another payer talked about continually evaluating their membership to better understand the types of telehealth services they want to offer.

I would say from a medical economics perspective, we've just looked at and continue to evaluate our membership and where they utilize services and where their needs are. That has just allowed us to have some direction on what those types of services we would want to offer would be. So if we see an increased need in behavioral health, which we have, that's an area that we want to focus in. –Payer

Payers tend to see telehealth as a way to deliver care already covered

Nearly all payers noted that telehealth does not necessarily provide services that were previously not billed or reimbursed. Rather there are many telehealth services that used to be in person that can now be reimbursed through telehealth.

There are definitely services that used to just be in person that can now be reimbursed through telehealth, like primary care visits or preventive care visits. As far as new services that were never covered before, I do not have recollection of any specific brand new services that were not covered before. But we did expand what used to only be in person to also be virtual. Again, very public health emergency driven. –Payer

Most payers felt that premiums would not be impacted by provision or coverage of telehealth services. One of the reasons was that telehealth services would be covered and included in the payer's premium impact analysis and there are not any new services that were not previously billed. Additionally, payers believed that as long as there are regulatory frameworks around payment parity, there should not be many duplicated services and therefore the cost impacts would be limited from a premium perspective.

To the extent that there remains regulatory frameworks around paying at parity for audio-only telehealth and in-person visits, which exists currently and my belief that there's not a ton of duplicated services in that situation, I believe that the cost impacts would be limited from a premium perspective, as long as we don't see concerning behaviors in terms of fraud or those types of things from a billing perspective. And so I think the impact to the premium is likely small. –Payer

On the other hand, one payer mentioned that from a reimbursement rate standpoint, the premiums could decrease in the long term as long as the utilization rate doesn't go up too high and patients could get appropriate care virtually at the appropriate rate. This allows payers to provide better benefits.

[I]f we don't see an increase in overall utilization because of telehealth, then premiums should not be impacted. However, I think from a reimbursement rate long-term, if we can work to get appropriate care virtually at the appropriate rate, then, we are providing a better benefit in some cases, but then that may allow us to decrease premiums long-term. –Payer

Payers are hesitant to have payment parity policies in place

Overall, payers expressed hesitance on any government or statutory mandates on payment parity. Payers want to have the ability to be more creative and innovative in how they pay and they do not want to be limited by

strict payment parity. They expressed desires to work with providers to come up with appropriate reimbursement considering things like type of services, demographics of clients, and region of the state that the providers serve.

Many providers emphasized it should be results-driven and providers should design care delivery that drives the greatest value and not be incentivized by how it is paid.

We have no definitive position right now on statutory payment parity, but generally are hesitant on government and statutory mandate. That is just a general policy position overarching, but we do support sustainable and adequate reimbursement for virtual care. We acknowledge the importance that it plays, that everyone's highlighted in the room today that it needs to be supported. –Payer

I believe that we should have the ability to be more creative and innovative in how we pay so that we're not tied to the strict payment parity, same for same. We should be able to work with our providers and come up with what is the right way to reimburse for the demographic they serve, the part of the region of the state that they serve, because not everything is the same. And it should be results driven, outcomes driven. We have to make sure we're getting quality care and we want the providers to be able to design care delivery in a way that they can drive the greatest value and that it not be incented by how it's paid, but rather on how does it drive the best outcomes and then reward the outcomes with payment. –Payer

However, providers want payment parity

All providers interviewed said that comparable appointments should be reimbursed at the same rate regardless of whether they are delivered in-person or via telehealth. The key reason cited was that they **should be reimbursed based on their expertise and the service provided** (n=17; 85%); some also noted that the time they spend on a telehealth visit is the same as an in-person visit (n=6; 30%).

From a clinician perspective, the cognitive effort that I apply to a particular clinical situation, as it relates to what I'm hearing, what I'm learning, what I'm interpreting, the questions I'm answering and asking, the diagnostic stuff that I'm formulating, and the cognitive effort that I'm putting into formulating a treatment plan, and discussing it with a patient and counseling them about risks, benefit, side effects, alternatives, consequences, what if it doesn't get better, all that sort of thing, that doesn't change whether I'm in front of you or talking to you on the phone. – Provider

We're providing the same level of care. We're treating the same degree of illness. We're doing the same medical decision-making and that's what the billing and coding is based on. So if I spend 30 minutes on the phone with the patient, even though it's a phone visit and offer medical decision-making that's equivalent to an in person, I should get paid for that. Because health systems just can't afford to give away care...I'm fine with caveats that physicals and annual wellness visits need to be face to face. Because I think those have requirements for physical exam components that we can't do virtually. –Provider

Further, because some patients only have access to audio-only care, providers emphasized that this type of care must continue to be reimbursed in order to support more **equitable access** to care.³

[It's] about reducing barriers for our population who might not have the connectivity or might be quite elderly to be able to do appropriate telehealth via the phone, that should be paid for.

–Provider

We're doing a good job calling patients' phones if they don't show up for their video visits. So the majority of the time my no-show rate for telehealth is significantly lower compared to my no-show rate for in-person appointments because we're meeting people where they are talking about their needs, but the video visit is a challenge. Then it goes into, oh, we get reimbursed for face to face level of service with video visits, but when we convert it to telephone, I'm not providing a lower level of care, whereas the reimbursement significantly tanks from that perspective. –Provider

By not reimbursing for telephone visits, I think it excludes people in rural areas and will make the care gaps bigger because you're not being able to provide adequate services to those people.–

Provider

I think if [audio-only care] wasn't billed at the same rate, you just would have people not offering it, and then that would worsen disparities for people who can't get video to operate well.

–Provider

Service recipients want insurance coverage for telehealth continued

A few service recipients (n=5; 18%) noted that they wanted insurance to continue to cover telehealth moving forward. Respondents commented that they didn't want insurance companies to "revert back" to not covering telehealth, and they wanted to ensure that telehealth is **affordable through insurance**. Three respondents (10%) suggested lowering copays and other patient costs for telehealth services to reduce patient costs relative to in-person care.

Just making sure it's accessible insurance-wise, and that people have the option to choose. I feel like that's been very important...Just making sure that it's included in insurance, it's affordable, so people have the option for what works best for them. –Service recipient

That is also, of course, going to require and ensure that all of the various health insurance providers and that sort of thing are going to pay for that. I remember when my insurance didn't, when I had the opportunity to go to telehealth when I first started seeing the provider who was an hour and a half way, my insurance didn't pay for telehealth at that point. I had to be there in person. –Service recipient

³ See *Access to care; equitable access* section.

I mean, honestly...if people are going to opt more for telehealth...at least for questions or whatever, I would say, can they lower the copay? Because I was like, really, it was probably like \$10 a minute is what it came down to. –Service recipient

Okay, here's the biggest thing, I think...Right now, the telehealth appointments we've had cost the same as going in. Now I know the doctor's training is not any different for telehealth than it is for the patient they see physically there. However, for the patient to have to pay a fee when they didn't actually go there, I think there ought to be a way that it makes it a little bit less complicated for the patient, the patient has less outlay in general. –Service recipient

Priority research areas

Themes related to care in greater Minnesota as well as those concerning audio-only care were of particular interest to MDH, and have been highlighted here in addition to being included in the corresponding sections above.

Greater Minnesota

- Telehealth allows service recipients in greater Minnesota to gain access to a wider range of specialists and service recipients can spend less time traveling to their nearest clinic; however, lack of sufficient broadband poses a significant challenge.

Audio-only care

- Providers feel that it is critical for audio-only care to be billed at the same rate as video visits in order to provide equitable access and care.
- Audio-only care is particularly important for service recipients in greater Minnesota who may not have access to the broadband needed for a video visit.
- Service recipients expressed equal amounts of satisfaction with video and audio-only care.

Respondent recommendations

Continue to make both telehealth and in-person care available

Nearly one-quarter of service recipients (n=7; 23%) and more than half of providers (n= 12; 60%) emphasized that **telehealth should continue to be available** in Minnesota moving forward. Service recipients further recommended that health systems should not revert to offering only in-person visits. In fact, respondents want telehealth to be available for as many services as possible, framing telehealth as “essential.”

I think continuing just to make it accessible for as many appointment types as it makes sense for. I know, obviously, you can't do a mammogram remotely through telehealth. There are things you have to do in person, but I think whenever possible, having the option for a telehealth visit, especially for ongoing care that doesn't require hands-on assessment, it's absolutely essential. Without it, I will not be able to get the care I need. –Service recipient

However, a few service recipients (n=3; 10%) emphasized that telehealth should not expand to the point that it displaces in-person care, but rather in-person care should also continue to be available.

Here's one issue I would be worried about if telehealth were to expand more is that in-person care might suffer...I mean think about Amazon and think about...how everyone buys from Amazon and then in-person stores fall apart. What my concern would be is that if we put too much emphasis on this to the detriment of the in-person, there might be communities that don't have equal access to medical care that way. So I would just be very careful to make sure that there's a balance, that there's not too much of a reliance on [telehealth]. –Service recipient

Providers felt strongly that Minnesota should invest in telehealth for the long term, citing accessibility and disparity reduction as key benefits. This includes investing in home medical devices that can further support telehealth visits. For some providers, access to such devices (e.g., blood pressure cuffs) were made available as a result of a grant or pandemic-related funding, while others had service recipients who purchased devices on their own or using their health plan. These providers suggested that investment in expansion of devices for key populations could further improve equity and access to quality care.

Policymakers [should] get behind this 100% and fight for the continued access to this type of care on behalf of our patients, on behalf of our clinicians and caregivers, and on behalf of our health care system. I think it is an absolute truth that virtual care can and will improve the health of Minnesotans and reduce barriers to care for some of our patients, especially our most fragile patients in need of care. I hope that our policymakers will fight fiercely for it. –Provider

Investment in that sort of new technology like remote monitoring equipment that I think could be really useful in rural populations, but is going to be a big push to implement. I would love to see the state have a broader plan for how to make that impactful in rural areas as health care is shrinking in rural areas. –Provider

Support expansion of broadband throughout the state

More than one-quarter of service recipients (n=8; 27%), most of whom (n=5; 63%) were from greater Minnesota, highlighted the importance of ensuring access to broadband, as well as cellular service, across the state. Even in cases where respondents themselves had adequate broadband, they expressed concern for others in the broader community from an equity perspective.

In addition, access to sufficient broadband was the challenge most commonly cited by providers (n=16; 80%), regardless of location. They noted that ensuring broadband access across the state was critical for the future success of telehealth (n=8; 40%), particularly those located in rural communities and who may lack access to a range of specialists.

And sometimes connectivity is hard. So I don't know. I am in a place where there is good services, but even sometimes calls or videos have been hard to see or just things are not working that day...I mean, that's a big issue in Minnesota, just access to better broadband and better service for phones. –Service recipient

I think that broadly, telehealth is an incredible way to improve access to health care. I think that there are a lot of infrastructure things that need to be improved to ensure that it is accessible to everyone, to make sure that it is accessible to everybody. That's going to be making sure that there's good internet access out in some of these rural areas where folks

really need to be able to have better access to a provider, but they also don't have really good internet or cell phone data access. –Service recipient

Provide clarity about payment for services

During the pandemic, health systems were able to approach telehealth with flexibility because of the public health emergency and other temporary telehealth provisions. Providers expressed concern about what telehealth would look like if and when those policies expire. A key factor playing into this concern for providers is the criteria for payment, and many noted that clarity around reimbursement and continued payment parity was important to them (n=9; 45%). Given that payers tend to be concerned about potentially rigid payment parity policies and providers want to see policies in place that ensure payment parity, it will be important to make thoughtful decisions about parity for the long-term and to communicate those decisions clearly.

Develop guidelines for telehealth best practices

Because health systems had to quickly ramp up capacity for telehealth after the pandemic started, many were forced to develop such platforms without having full policies in place. Developing guidelines for best practices would provide the necessary information for both providers and service recipients regarding how and when to use telehealth in place of in-person visits.⁴ Providers also recommended that educational materials be developed for a range of service types. For example, one provider noted that education about conducting telehealth visits should be included in medical degree programs, particularly for those in nursing fields.

Another guideline that providers called out is regarding licensure. Many providers expressed appreciation that provision of telehealth services across state lines was opened up as a result of the public health emergency. However, they felt concerned about the future of this key health policy. Notably, some commented on the linkages between the availability of telehealth regardless of location and equitable access. This is particularly true of those located in rural areas near state borders, for whom the nearest clinic or needed specialist may be across the border.

One of the things I would really like to see going forward in the future of telehealth care is not requiring physical location and state boundaries. When we get to the point where the public health emergency ends and we can't practice across state lines, I won't be able to see [certain service recipients] anymore because they have to be physically located in Minnesota. And I understand the need for state licensure, but I think the definition of what qualifies as a Minnesota patient could be changed. So for example, all of my patients have cancer treatment care plans at Mayo Clinic in Minnesota. I would like that to be enough so that they can see me, and they don't have to drive or fly eight to 10 hours, when they could just click into their computer. So I would like to see, if a patient has established care at a medical institution, then their physical location doesn't matter. –Provider

Patient care is number one, we need to be able to use the people we have in the workforce to provide services to those people who need it, regardless of location. Especially if we can

⁴ See *Care delivery and outcomes; Clear care delivery guidelines* section.

provide telehealth, it doesn't make sense to me why a state line changes that. That patient is no less important to me than one that is on this side of the line. –Provider

Currently I'm credentialed in Wisconsin, Minnesota, and North Dakota, but I have patients who, all of a sudden I'm doing a telehealth visit, and they're in a sundress on the beach in Florida. And I'm like, technically I'm not credentialed in Florida... We should be able to provide care in more places in order to make telehealth care more seamless because our patients don't just live in one place and it really limits the number of providers who can provide care to certain patients, because it's very burdensome for everyone to be credentialed and have to pay for credentialing every year to every state in the United States. –Provider

Promote telehealth as a quality option for patients

Providers who commented on the need for easily available guidelines and education around telehealth best practices also recommended that telehealth be more widely promoted to service recipients. Specifically, they suggested that promotion be centered on the unique benefits of telehealth visits, such as ease of access and flexibility with scheduling. Promotion should also focus on educating service recipients about the types of visits that are best suited to being conducted via telehealth. Materials could be tailored to different audiences, and may be broad enough to appeal to the general public, as well as specific to certain health systems.

Conduct additional research on the clinical effectiveness of telehealth

Even though many payers identified benefits regarding increased access to telehealth services, they expressed some concerns about the quality of care from telehealth. They expressed a need for a better understanding of the impacts of telehealth on the quality of care in order to better inform future decisions around telehealth.

I also believe that we do not currently have a way to really look at the outcomes. Are we deriving better outcomes leveraging telehealth or just the same outcomes?... This is one of the things we really want to understand. –Payer

I do think that there's a component of, how do we ensure that we're getting the quality of care that we would expect as more care is delivered through telehealth models? And I think the best approach to that is through research of what's going on. I worry that we get too involved and we stifle innovation by limiting what we believe should be delivered in a telehealth model. And there's got to be a balance here. –Payer

Concluding remarks

In summary, all respondent groups from this study had largely positive perspectives of the expansion of telehealth, most notably its ability to reach service recipients who experience significant barriers to accessing care. Telehealth has the capacity to relieve barriers that affect low-income households in particular (see *Access to care*), and to enhance care for individuals living in rural areas of the state.

It is important to acknowledge that at the time of this study, telehealth as a mode of care is still in a rapid state of change as health systems and service recipients adapt to changes in the state of the pandemic. In order to more

fully understand the values and challenges associated with telehealth, the research questions explored in this study should be revisited in the future to determine the degree of change.

While this study learned valuable information from service recipients, providers, and payers regarding their experiences and perspectives of telehealth, there is more to understand. Further research might consider the following questions that would deepen the current understanding of the impacts of telehealth:

- How pervasive is the issue of lack of connectivity?
 - What percentage of households in Minnesota have access to broadband? To a sufficient cellular signal?
- How can adults with low digital literacy be supported to successfully engage with telehealth?
- How can service recipients with certain chronic illnesses be supplied with appropriate home medical devices (e.g., blood pressure cuffs) to better facilitate telehealth visits?
- What are the best approaches to integrating education regarding telehealth practice into the training that providers receive?
 - Which aspects of telehealth practice are critical for successful care?

Appendix C: List of MDH Divisions/Programs Represented at Listening Sessions

- Health Promotion & Chronic Disease – Diabetes Unit
- Health Promotion & Chronic Disease – Injury & Violence Prevention
- Health Promotion & Chronic Disease – Center for Health Promotion
- Health Promotion and Chronic Disease – Chronic Disease & Environmental Epidemiology
- Health Promotion and Chronic Disease – Cancer Control/ Sage Program
- Health Policy- Office of Rural Health and Primary Care
- Health Policy – Managed Care Systems
- Health Policy – Center for Health Information Policy and Transformation
- Health Policy – Health Care Homes
- Health Policy – Health Economics Program
- Health Regulation – Licensing
- Child & Family Health – Breastfeeding Unit
- Child & Family Health – Nutrition and Clinical Services
- Child & Family Health – Child and Adolescent Health
- COVID-19 Response – Test to Treat Telehealth Program
- COVID-19 Response – Test to Treat Telehealth Program
- Infectious Disease Epidemiology, Prevention & Control- Refugee Health Unit
- Office of Legislative Relations
- Center for Health Equity
- Office of American Indian Health

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