Evaluating Telehealth

What Congress Needs to Know

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EXECUTIVE SUMMARY

Why We Did This Report

Telehealth — the use of remote audio and/or video technologies to provide health care services — has been promoted as having the potential to provide more cost-effective treatments, support patient self-management, increase patient convenience and compliance, and alleviate access problems, particularly in underserved areas such as rural communities. Prior to the COVID-19 pandemic, various legal, regulatory, and logistical barriers — such as limited public and private insurance coverage; inadequate broadband coverage in some areas; lack of cross-state licensure; and patient characteristics that impede telehealth adoption such as age, computer literacy, and education — limited the expansion of telehealth. Many of these barriers were relaxed or eliminated during the pandemic.

Congress is currently debating whether to permanently or temporarily extend flexibilities for telehealth services that it enacted during the pandemic. States and localities are also considering extensions of pandemic-era flexibilities. This paper provides lawmakers with the information they need in considering the future of telehealth. It reviews the evidence from before, during, and after the pandemic to see how telehealth has been utilized and how its adoption affects access to, as well as the cost and quality of, health care.

What We Found

Telehealth usage rose rapidly early in the pandemic, partially offsetting a steep drop in in-person visits. But in-person visits quickly rebounded and telehealth utilization dropped off. Both types of visits have returned to nearly pre-pandemic levels in most fields of medicine. Total telehealth utilization remains above pre-pandemic levels. However, this is primarily due to mental and behavioral telehealth services, which more than offset the decline in in-person visits early in the pandemic and remained much higher than pre-pandemic levels. Overall mental health claims jumped during the pandemic and have remained well above pre-pandemic levels.

Despite the expectation that telehealth would be particularly important in rural areas and across state lines, it was more heavily utilized in urban areas and rarely for interstate services — with the possible exception of mental health and substance abuse treatments.

The evidence on whether telehealth delivers quality equivalent to in-person care is limited, with subjective measures often substituting for objective outcomes. Telehealth appears most useful and accurate in areas of medicine where physical examination is less important, such as mental and behavioral health.

Telehealth quality is likely non-inferior to in-person care in most other medical areas, particularly when used for follow-up visits of established patients rather than initial consultations. However, there was troubling evidence of overprescription of antibiotics for inappropriate indications at telehealth visits. This could increase side effects and population-wide antibiotic resistance.

While patients largely seemed satisfied with telehealth, some physicians worried they could not conduct adequate physical examinations via telehealth. Many physicians also believed that in-person visits offered a better personal connection and improved physician-patient relationship compared to telehealth.

Despite claims that telehealth would cut costs, increased telehealth availability and utilization likely increased health care spending. Telehealth can decrease patients' and providers' travel costs and time. Yet several pre-pandemic studies suggest that telehealth usage largely supplements rather than replaces in-person services, which would increase costs. Unfortunately, there is limited information from during the pandemic on telehealth payment rates, the additive versus substitutive effect of telehealth versus in-person services, and downstream spending for different types of telehealth services. What is available suggests that the total number of outpatient visits probably increased as in-person visits generally returned to pre-pandemic levels and as telehealth visits rose and then declined but remained elevated over pre-pandemic levels.

Over time, the number of consistent telehealth users appeared to be small, and they used large amounts of telehealth services. Patients who continued to utilize telehealth generated more claims per person as time went on, a finding that was particularly strong for mental health services. Most of the overall increase in claims was in mental health services, where claims nearly doubled between 2019 and 2023, an increase that is entirely attributable to expanded telehealth claims.

Fraud, waste, and abuse in telehealth increased with the increased use of telehealth during the pandemic. But no studies indicate that telehealth is uniquely vulnerable to fraud, waste, and abuse or that these occur more commonly in telehealth than in in-person services.

Why It Matters

Increased access to telehealth played an important role as an alternative source of care in the opening months of the pandemic when in-person visits were limited by official regulations and by patients' reluctance to risk in-person contacts. It will likely be an important safety valve for care in future emergencies and for providing access to highly specialized services that are available in just a few places.

Nevertheless, outside of mental and behavioral health (including for substance use disorders), telehealth did not continue to be heavily utilized — even during a period of unprecedented regulatory permissiveness. This suggests that patients and providers do not find telehealth as attractive relative to in-person care as many policymakers had predicted. Cost effectiveness remains an open question. And there are lingering questions regarding the quality of telehealth versus standard in-person visits in many areas of medicine.

Policy Suggestions

Congress and state and local governments should resolve the questions raised in this paper before greenlighting a permanent expansion of telehealth in government programs that could trigger increased and possibly wasteful spending.

While the proposals currently under consideration in Congress are aimed at extending telehealth flexibilities for Medicare, they have broader policy implications. Private insurers and state Medicaid programs often follow Medicare's lead on coverage policies. Congress should direct CMS or another agency to determine if the increase in telehealth utilization, which has been particularly large and persistent for mental health services, represents costly overutilization or is meeting previously unmet needs while providing health-enhancing services at a reasonable cost.

Congress has already made many of the measures taken to facilitate mental and behavioral telehealth services permanent but should be prepared to revisit permanent authorization if investigations document wasteful overutilization. It should not make telehealth flexibilities outside of mental health permanent until the risks of overutilization, increased costs, and decreased quality can be properly assessed and ruled out.

Temporary extensions should be coupled with requirements to conduct research into the quality and cost effectiveness of telehealth and strict controls to limit fraud, waste, and abuse. Private insurers which bear the risk of overutilization and increased costs — including Medicare Advantage plans — will remain free to provide access to telehealth and could provide important information on telehealth quality and costs.

INTRODUCTION

Telehealth or telemedicine is the use of remote audio and/or video technologies as a substitute for or adjunct to an in-person encounter between a patient and a health care professional.[1] Telehealth has been promoted as having the potential to provide more cost-effective treatments, support patient self-management, increase patient convenience and compliance, and alleviate access problems to medical care in general, and especially specialist care, in underserved areas such as rural communities.[2] The claims of the American Telemedicine Association are typical:

> Telehealth effectively connects individuals and their healthcare providers when in-person care is not necessary or not possible.... [I]t has been consistently shown to be a safe and quality care modality.... Telehealth and virtual care can increase access to care for rural communities, underserved and vulnerable patient populations, and to individuals unable to secure in-person care.... Telehealth also improves efficiencies, helps to reduce costs, and enables healthcare providers and hospital systems to do more good for more people.[3]

Yet the evidence to support these claims is far from clear or convincing.

Barriers to expanding telehealth have included limited public and private insurance coverage and reimbursement for telehealth services; inadequate broadband coverage in some areas; lack of cross-state licensure; and patient characteristics that impede telehealth adoption such as age, computer literacy, and education.[4] Policy issues include dealing with interstate

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1 Medicare defines *telehealth* as "certain medical or health services that you get from your doctor or other health care provider ... who's located elsewhere (or in the U.S.) using audio and video communications technology (or audio-only telehealth services in some cases), like your phone or a computer" (Medicare.gov, "Telehealth," https://www.medicare.gov/coverage/telehealth). It describes telemedicine in broader terms as "the exchange of medical information from one site to another through electronic communication to improve a patient's health" ("Medicare Telemedicine Snapshot — December 2021 FAQ's," https://www.cms.gov/files/document/medicare-telemedicine-snapshot-faqs.pdf). The Federal Communications Commission, in contrast, defines *telemedicine* "as using telecommunications technologies to support the delivery of all kinds of medical, diagnostic and treatment-related services usually by doctors," while "Telehealth is similar to telemedicine but includes a wider variety of *remote healthcare services beyond the doctor-patient relationship*. It often involves services provided by nurses, pharmacists or social workers" (Federal Communications Commission, "Telehealth, Telemedicine, and Telecare: What's What?," https://www.fcc.gov/general/telehealth-telemedicine-and-telecare-whats-what.

A 2012 workshop on Telehealth by the Institute of Medicine used the terms *telehealth* and *telemedicine* interchangeably. See Board on Health Care Services, Institute of Medicine, *The Role of Telehealth in an Evolving Health Care Environment: Workshop Summary* (National Academies Press, 2012), https://www.ncbi.nlm.nih.gov/books/NBK207150/.

For this paper, the terms will be used interchangeably, although *telehealth* will be the primary term.

2 "Telehealth has the ability to increase access to physicians, specialist, and other healthcare services for patients in rural, frontier, and underserved areas.... Patients benefit by being able to receive care close to home, either primary care or from specialist" (Windy Alonso et al., "Telehealth in Rural America," National Rural Health Association, 2019, https://www.ruralhealth.us/getmedia/f84308bb-408b-4452-becb-61426ed82fb5/2019-NRHA-Policy-Document-Telehealth-In-Rural-America.pdf.

3 American Telehealth Association, "Telehealth: Defining 21st Century Care," https://www.americantelemed.org/resource/why-telemedicine/.

4 Clemens Scott Kruse et al., "Evaluating Barriers to Adopting Telemedicine Worldwide: A Systematic Review," *Journal of Telemedicine and Telecare* 24, no. 1 (January 2018): 4-12, https://journals.sagepub.com/doi/10.1177/1357633X16674087.

credentialing, privileging, prescribing, and malpractice liability as well as requirements for written informed consent and data security and privacy issues.

During the COVID-19 pandemic public health emergency (PHE), the perceived benefits of avoiding in-person care through telehealth resulted in measures to alleviate many but not all of these barriers. But as the pandemic waned and the PHE ended in May 2023, many of these measures ended or were scheduled to expire. Without congressional action, the statutory restrictions on geography, site of service and practitioner type that existed prior to the pandemic will go back into effect on January 1, 2025. Medicare beneficiaries, for example, will once again need to be in rural areas and medical facilities to receive non-behavioral health services via telehealth.

Congress is currently debating whether to permanently or temporarily extend billing flexibilities for telehealth services that it enacted during the COVID-19 pandemic.[5] Similarly, every state in the nation has legislative and regulatory proposals to facilitate telehealth.[6]

This paper will examine the evidence Congress and other policymakers should consider in deciding on whether to extend pandemic-era telehealth flexibilities. The issues were neatly summarized in a 2018 Medicare Payment Advisory Commission (MedPAC) report to Congress:

> Advocates of telehealth services assert that these services can expand access to care, increase convenience to patients, improve quality, and reduce costs relative to in-person care. Others caution that telehealth services in their many forms may not succeed in accomplishing these aims in all cases and instead may act as a supplement to in-person services rather than a substitute, thereby increasing utilization and spending for payers and patients.[7]

The paper reviews the evidence from before, during, and after the pandemic to answer how telehealth services affect access to and utilization of health care, as well as its cost and quality.

The first section examines telehealth regulation prior to, during, and post pandemic. Pre-pandemic, restrictive insurance coverage rules and state limitations on providers' ability to

5 The House Energy and Commerce health subcommittee, for example, recently passed a temporary, two-year extension version of the Telehealth Modernization Act (H.R. 7623). Similarly, the Preserving Telehealth, Hospital and Ambulance Access Act (H.R. 8261) would extend Medicare flexibilities for two years.

6 Center for Connected Health Policy, "Telehealth Legislation and Regulation," https://www.cchpca.org/pending-legislation/.

7 MedPAC, "Mandated Report: Telehealth Services and the Medicare Program," in *Report to the Congress: Medicare Payment Policy*, March 2018, https://www.medpac.gov/wp-content/uploads/import_data/scrape_files/docs/default-source/reports/mar18_medpac_ch16_sec.pdf.

practice across state lines impaired the adoption of telehealth. When the COVID-19 pandemic began in March 2020, federal and state governments introduced flexibilities and insurers relaxed limitations to facilitate telehealth utilization. Many flexibilities ended when the PHE expired in May 2023. Others were extended to the end of 2024, at which point they will expire. The major exception is that many of the changes for mental health telehealth services coverage under Medicare were made permanent.

The next section looks at telehealth utilization. There was an initial sharp decline in total outpatient visits early in the pandemic from a precipitous drop in in-person visits that was only partially offset by increased telehealth visits. The exception to this was mental health telehealth services, which rose quickly enough to offset the decline in in-person visits. In-person visits began to recover within months and telehealth utilization began to decline with both returning to nearly pre-pandemic levels in most fields of medicine. However, telehealth use remained much higher than pre-pandemic levels in mental and behavioral health care. Overall mental health claims (a medical procedure or service billed to an insurer) increased substantially during the pandemic and have remained well above pre-pandemic levels.

The following section focuses on telehealth adoption in rural versus urban areas. Contrary to expectations, during the period of pandemic flexibilities, telehealth was more likely to be utilized in urban than rural areas, although the evidence for mental health services is less clear. In addition, the evidence indicates that telehealth usage across state lines — something that would presumably facilitate telehealth utilization in more rural areas — was surprisingly low and primarily substituted for decreased in-person visits near state borders.

Whether telehealth delivers equivalent quality as in-person care is examined next. The evidence is mixed. Telehealth quality is often as good as in-person visits, with some variability depending on the problem being addressed and the medical specialty involved. Telehealth appears most useful and accurate in fields where physical examination is less important, such as mental and behavioral health. Patients largely seemed to be satisfied with telehealth. But many physicians did not feel they were able to conduct adequate clinical examinations via telehealth. Many physicians also experienced a better personal connection and improved physician-patient relationship with in-person visits.

Claims that telehealth will reduce spending are not supported by the available evidence. Telehealth could lower spending if it substitutes for in-person services at lower payment rates or if it reduces the use of downstream services including more expensive care such as emergency department (ED) visits, hospitalizations, and hospital readmissions. Conversely, telehealth could increase spending if telehealth services increase the total number of

services delivered and/or increase the use of downstream services. While there is a paucity of good evidence, what is available suggests that the total number of outpatient visits is likely increased as compared to pre-pandemic levels. In-person visits have generally returned to and sometimes exceeded pre-pandemic levels. Telehealth visits have declined from pandemic peaks but overall remain elevated. While telehealth visits have returned to near pre-pandemic levels in many specialties, both telehealth and overall utilization remain elevated in mental health.

The penultimate section examines the potential for fraud, waste, and abuse in telehealth. While these increased during the pandemic, there is nothing to indicate that telehealth is uniquely vulnerable to fraud, waste, and abuse or that it occurs more commonly in telehealth than with in-person visits.

Finally, the paper discusses what Congress should do. Congress has already made many of the flexibilities permanent for mental and behavioral health services. But many other flexibilities have ended or will expire at the end of 2024. Outside of mental and behavioral health, telehealth was not as heavily utilized as expected — even during a period of unprecedented regulatory flexibility — suggesting limited patient and provider enthusiasm. Determining the quality of telehealth services outside of mental health is needed. It will also be important to determine if the persistent increased utilization of telehealth for mental health, which has led to an overall increase in utilization of mental health services, represents costly overutilization or a meeting of a previously unmet need.

Congress should resist making telehealth flexibilities permanent in government programs until there is more evidence on these questions. But Congress should consider temporary extensions of telehealth flexibilities provided they are coupled with a research agenda to obtain good evidence about the quality and cost-effectiveness of telehealth. Until the evidence is in, patients and their providers should have the freedom to choose telehealth services.

TELEHEALTH REGULATION

Video technologies were first used to facilitate expert consultations on medical cases in the 1960s,[8] and audio-only communications (phone consultations) were available even earlier The most commonly used approaches in telehealth currently include synchronous (in real-time or live) communications between providers and patients such as video or audio only,

8 World Health Organization, *Telemedicine: Opportunities and Developments in Member States*, 2010, p. 9, https://iris.who.int/bitstream/handle/10665/44497/9789241564144_eng.pdf.

asynchronous communications (video or audio collected for later provider analysis), and remote monitoring (collection of medical information and status using electronic monitoring for provider review).

Prior to the COVID-19 pandemic, Medicaid coverage of telehealth services varied from state to state, because the Medicaid program did not bar state coverage of telehealth services. All states covered teleradiology, 49 covered mental health telehealth, and 36 covered various other home-based telehealth services.[9]

Similarly, prior to the pandemic, regulation of telehealth in private health insurance plans generally occurred at the state level. There were no federal requirements that private health insurance plans offer telehealth coverage, nor were there prohibitions on such coverage. Telehealth coverage in private plans, therefore, varied greatly.[10]

Medicare though, was a different story. In the traditional Medicare fee-for-service (FFS) program, payment for telehealth services was severely restricted based on the location of the patient (the originating site[11]), the location of the provider (the distant site[12]), and the types of providers and services provided.

Section 1834(m) of the Social Security Act[13] for example, sets out payment and coverage policies for Medicare telehealth services. It restricts the delivery of telehealth services to patients in certain rural areas (geographic site restrictions) and to patients in certain physical locations such as hospitals and physicians' offices (originating site restrictions). Patients could generally not access telehealth from their homes. Section 1834(m)(4)(E) limits payment for telehealth services to physicians and a limited set of non-physician practitioners under the Medicare physician fee schedule. The Centers for Medicare and Medicaid Services (CMS) had interpreted the Section 1834(m) description of telehealth services as "services that are furnished via a telecommunications system" to only cover video telehealth, excluding audio-only communications. Medicare typically paid providers less for a service provided via telehealth than for that service provided in-person.

Medicare Advantage (MA) plans historically had more flexibility to offer telehealth than traditional FFS Medicare. This flexibility was expanded by a new rule in April 2019 allowing

9 Reed V. Tuckson et al., "Telehealth," *New England Journal of Medicine* 377, no. 16 (2017): 1585-1592, https://www.nejm.org/doi/full/10.1056/nejmsr1503323.

10 Katherine M. Kehres, Congressional Research Service, Federal Telehealth Flexibilities in Private Health Insurance During the COVID-19 Public Health Emergency: In Brief, CRS Report R47424, February 13, 2023. https://crsreports.congress.gov/product/pdf/R/R47424

11 42 U.S.C. §1395m(m)(4)(C).

12 42 U.S.C. §1395m(m)(4)(A).

13 42 U.S.C. §1395m.

plans to offer additional telehealth benefits in plan year 2020 as "basic benefits" and therefore not subject to the general requirement that plans give the federal government a "rebate" for costs projected in the annual bid to be spent on "supplemental benefits."[14] The extent of telehealth adoption by MA plans prior to the pandemic is unknown, but it was not a universal offering across plans. It appears that there was an increase in MA plans' coverage of telehealth due to the new rule, as 58.1 percent offered new telehealth benefits in the 2020 benefits year.[15] Overall, 57.4 percent of MA plans offered some sort of telehealth benefits in 2020, and these plans enrolled 70.6 percent of MA enrollees. This coverage expansion grew with the pandemic: Coverage of some telehealth benefits increased to 94.0 percent of plans in 2021, covering 94.1 percent of enrollees.[16]

When the COVID-19 pandemic began in early 2020, a PHE was declared. Person to person contacts were restricted and policymakers took steps to limit elective in-person health care services to preserve emergency capacity. Congress enacted several laws and regulatory actions were taken to ease telehealth restrictions during the PHE: CMS allowed Medicare beneficiaries from any geographic location to access telehealth services from their homes; the Department of Health and Human Services (HHS) waived enforcement of the Health Insurance Portability and Accountability Act (HIPAA) privacy and security, rules against covered health care providers who utilize remote communications technologies[17]; the Drug Enforcement Agency loosened requirements on e-prescribing of controlled substances; and CMS instituted payment parity for in-person and telehealth services. MA plans were required to cover all telehealth services covered under Medicare FFS, and CMS allowed MA plans to expand coverage of telehealth services.[18] Various federal requirements were loosened in order to facilitate greater coverage of and reduced cost-sharing for telehealth services in private plans during the PHE.[19]

14 CMS, "CMS Finalizes Policies to Bring Innovative Telehealth Benefit to Medicare Advantage," press release, April 5, 2019, https://www.cms.gov/newsroom/press-releases/cms-finalizes-policies-bring-innovative-telehealth-benefit-medicare-advantage.

15 Sungchul Park et al., "Telehealth Benefits Offered by Medicare Advantage Plans in 2020" *Medical Care* 59, no. 1 (January 2021):53-57, https://pubmed.ncbi.nlm.nih.gov/32925464/.

16 Sungchul Park et al., "Adoption of Telehealth Benefits by Medicare Advantage Plans in 2020 and 2021," *Journal of General Internal Medicine* 37 (2022): 686-688, https://pmc.ncbi.nlm.nih.gov/articles/PMC7837334/.

17 HHS, "HHS Fact Sheet: Telehealth Flexibilities and Resources and the COVID-19 Public Health Emergency," May 10, 2023, https://www.hhs.gov/about/news/2023/05/10/hhs-fact-sheet-telehealth-flexibilities-resources-covid-19-public-health-emergency.html.

18 CMS, "Telehealth for Providers: What You Need to Know," revised May 2023, p. 25, https://www.cms.gov/files/document/telehealth-toolkit-providers.pdf.

19 These included: easing federal requirements that prohibited midyear changes in benefits or cost sharing in individual and group health insurance plans to allow private plans to increase coverage or reduce cost-sharing for telehealth services as long as they were consistent with state laws; allowing certain employers to offer telehealth only coverage to employees who are not eligible for other group health plans offered by the employer; allowing telehealth coverage pre-deductible for catastrophic plans in the non-group market; allowing pre-deductible coverage of telehealth by Health Savings Account-qualified High Deducible Health Plans; providing that the cost-free Covid-19 testing requirements apply to telehealth services. Most of these flexibilities were enacted via agency guidance and all, with he exception of the pre-deductible coverage in HSA plans as required by the Coronavirus Aid, Relief, and Economic Security Act (CARES Act; P.L. 116-136), ended when the PHE ended.

Federal Telehealth Flexibilities in Private Health Insurance, CRS Report R47424

Some of the changes for mental health telehealth services coverage under Medicare became permanent[20]:

- Geographic site restrictions to rural areas were eliminated for behavioral/mental telehealth services, and Medicare patients are now able to receive these telehealth services in their homes.[21]
- Behavioral/mental telehealth services can continue to be delivered using audio-only communication platforms.
- Federally Qualified Health Centers and Rural Health Clinics can serve as distant site providers for behavioral/mental telehealth services.
- Payment parity for telehealth and in-person behavioral health services.[22]

But many changes for non-behavioral/mental telehealth services were phased out when the PHE ended on May 11, 2023. HHS phased out its enforcement discretion and began to reapply the HIPPA Rules for providing telehealth communications in a private and secure manner.[23] CMS phased out Medicare payment parity between in-person and telehealth visits and started to pay the lower facility rate for all telehealth services except when patients receive services from their homes.

Other changes for non-behavioral/mental telehealth services were extended beyond the PHE, but only through December 31, 2024.[24] These flexibilities will end unless Congress acts.[25]

States' approaches to regulation of Medicaid and private insurance plans varied. All 50 states and Washington, DC, expanded telehealth access for Medicaid beneficiaries, with various states waiving restrictions on distant and originating sites; increasing the provider types that can provide telehealth; and expanding telehealth access for specific services, including behavioral health, pediatric services, reproductive and maternal health services, services for beneficiaries with COVID-19, dentistry services, speech therapy, physical therapy, and

20 HHS, "Telehealth Policy Changes After the COVID-19 Public Health Emergency," https://telehealth.hhs.gov/providers/telehealth-policy/policy-changes-after-the-covid-19-public-health-emergency. This occurred pursuant to the Consolidated Appropriations Act, 2021, as implemented under the calendar year 2022 Medicare Physician Fee Schedule. CMS, "Calendar Year (CY) 2022 Medicare Physician Fee Schedule Final Rule," November 2, 2021, https://www.cms.gov/newsroom/fact-sheets/calendar-year-cy-2022-medicare-physician-fee-schedule-final-rule.

21 "For behavioral or mental telehealth, all patients can continue to get telehealth wherever they're located, with no originating site requirements or geographic location restrictions" (CMS, Medicare Learning Network, "Telehealth Services," April 2024, p. 2, https://www.cms.gov/files/document/mln901705-telehealth-services.pdf).

22 Consolidated Appropriations Act, 2021, https://www.congress.gov/bill/116th-congress/house-bill/133/text.

23 HHS, "HHS Fact Sheet: Telehealth Flexibilities."

24 Consolidated Appropriated Act of 2023, H.R. 2617, §4113, https://www.congress.gov/117/bills/hr2617/BILLS-117hr2617enr.pdf#page=1440.

25 CMS's calendar year 2024 Medicare Physician Fee Schedule rule, released on November 2, 2023, noted that "while the CAA, 2023, does extend certain COVID-19 PHE flexibilities, including allowing the beneficiary's home to serve as an originating site, such flexibilities are only extended through the end of CY 2024."

occupational therapy.[26] For private insurance, many states mandated that fully insured private plans cover and reimburse for telemedicine services at rates equal to in-person services. Many of these changes were phased out with the end of the PHE.

Provision of telehealth across state lines implicates several important considerations, including state licensure, insurance regulations, and malpractice coverage. Prior to the pandemic, providers could furnish services and prescribe for patients only within their states of licensure.

During the pandemic, all 50 states and Washington, DC implemented licensure flexibilities to allow clinicians to perform telehealth across state lines, and many relaxed restrictions around online prescribing and written consent. Most states have allowed those flexibilities to expire.[27] This means that a clinician licensed in one state is prohibited from consulting or following up with an out-of-state patient via video or phone unless the clinician is also licensed in the patient's state.

This may matter less than many suppose. As will be discussed below, even with the regulatory flexibilities and increased utilization of telehealth during the pandemic, interstate telehealth accounts for only a small percentage of all telehealth services and a tiny proportion of total outpatient care in the United States.

Moreover, many states have eased licensing barriers. Thirty-seven states plus Washington, DC and Guam have entered into the Interstate Medical Licensure Compact, which allows physicians to obtain licenses to practice in multiple member states through an expedited process.[28] Physicians who are already licensed in one Compact state, complete a single application to receive licenses from each additional Compact state in which they intend to practice.[29] Eight states have created special telehealth licenses that are easier for out-of-state doctors to obtain, and another eight states, including Florida and Arizona, require only that an out-of-state physician register with, or receive a waiver from, the state medical board to practice telehealth.[30]

26 Madeline Guth and Elizabeth Hinton, "State Efforts to Expand Medicaid Coverage and Access to Telehealth in Response to COVID-19," KFF, June 22, 2020, https://www.kff.org/report-section/state-efforts-to-expand-medicaid-coverage-access-to-telehealth-in-response-to-covid-19-issue-brief/.

27 Alliance for Connected Care, "COVID-19 State Telehealth and Licensure Expansion Dashboard," last updated December 16, 2022, https://connectwithcare.org/state-telehealth-and-licensure-expansion-covid-19-chart/.

28 Interstate Medical Licensure Compact. https://imlcc.com/information-for-physicians/

29 Interstate Medical Licensure Compact.

30 Caleb Trotter, "In 30 States, You Can't Use Telehealth with Out-of-State Doctors," Pacific Legal Foundation, December 13, 2023, https://pacificlegal.org/30-states-telehealth-rules/.

TELEHEALTH USAGE

Telehealth usage can be assessed as a percentage of providers who utilize it, as a percentage of patients who utilize it, or as a percentage of total visits and services. By every measure, telehealth utilization was low prior to the pandemic and jumped with the onset of the pandemic as in-person visits were restricted and barriers to telehealth were eased. In addition, telehealth became more attractive due to peoples' voluntary actions — such as staying home and avoiding close contacts — to diminish the risk of contracting COVID-19.[31] But the sharp increase in telehealth utilization was relatively short-lived. Telehealth visits began a rapid decline as in-person visits rebounded. By spring of 2021 through to the spring of 2024, telehealth visits had declined to roughly 5 percent or less of all visits (with monthly variations). This is higher than the pre-pandemic period, when 1 percent or less of services were provided by telehealth, but it represents an almost two-thirds decrease from the peak usage period of April 2020. Moreover, while telehealth utilization remains above pre-pandemic levels, it is concentrated in just a few medical specialty areas.

Pre-Pandemic

The AMA's Physician Practice Benchmark Survey, a nationally representative survey of physicians, found that in 2016, 15.4 percent of physicians worked in practices that used telemedicine for some interactions between physicians and patients. Usage varied across specialties, with radiologists (39.5 percent), psychiatrists (27.8 percent), and cardiologists (24.1 percent) having the highest use. Usage also varied by practice size: Physicians in larger practices (26.5 percent) or employed by hospitals (27.6 percent) were significantly more likely to utilize telehealth than small (8.2 percent) or solo practices (8.9 percent).[32]

During the pre-pandemic period, when Medicare telehealth coverage was restrictive, Medicare FFS telehealth visits per beneficiary increased 79 percent between 2014 and 2016. Yet just 0.3 percent of Medicare FFS Part B beneficiaries used telehealth, and it accounted for only 0.4 percent of Medicare FFS spending.[33] Just 0.1 percent of Medicare primary care visits were provided via telehealth in February 2020.[34]

31 Tomas Philipson, "Economic Epidemiology and Infectious Diseases," *Handbook of Health Economics* 1 (2000): 1761-1799, https://econpapers.repec.org/bookchap/eeeheachp/1-33.htm. See also Casey B. Mulligan et al., "Some Basic Economics of COVID-19 Policy," *Chicago Booth Review*, April 27, 2020, https://www.chicagobooth.edu/review/some-basic-economics-covid-19-policy.

32 Carol K. Kane and Kurt Gillis, "The Use of Telemedicine by Physicians: Still the Exception Rather Than the Rule," *Health Affairs* 37, no. 12 (December 2018), https://www.healthaffairs.org/doi/10.1377/hlthaff.2018.05077.

33 MedPAC, "Mandated Report: Telehealth Services and the Medicare Program," p. 485.

34 Arielle Bosworth et al., *Medicare Beneficiary Use of Telehealth Visits: Early Data from the Start of COVID-19 Pandemic*, HHS, Office of the Assistant Secretary for Planning and Evaluation, July 28, 2020, https://aspe.hhs.gov/sites/default/files/private/pdf/263866/hp-issue-brief-medicare-telehealth.pdf.

Telehealth usage was also low in other federal health programs. In FY2018, the Veterans Administration (VA) provided 2.29 million telehealth episodes of care to 782,000 veteran patients (8 percent of the more than 9.3 million veterans enrolled in VA care).[35] In 2015, roughly 0.3 percent of the Department of Defense system for active-duty members and its TRICARE system for military families and retired service members (25,000 individuals) received care through telehealth. The most commonly used telehealth services were behavioral health/psychiatry services (80 percent of all telehealth encounters), followed by dermatology, cardiology, and pediatric services.[36]

Prior to the pandemic, coverage of telehealth by commercial insurance plans was variable. Most plans covered some form of telehealth service — usually one or two services — but few covered a comprehensive set of services. Most plans reported that less than 1 percent of their plan enrollees used some form of telehealth service.[37]

Pandemic and Post-Pandemic

Telehealth usage rose rapidly during the initial months of the pandemic. Among people younger than 65 enrolled in private, employer-sponsored insurance (ESI) plans, just 0.7 percent used telehealth services during 2019. Nearly one in five (19.6 percent) used telehealth during the first pandemic year, 2020. The share of those using telehealth fell to 16.2 percent in 2021. Adults ages 50-64 were most likely to use telehealth in 2020 but saw the largest drop in use in 2021 so that the percentage share of telehealth users in their age group that year trailed the percentages in the 35 to 44 and the 45 to 54 age groups.[38]

Telehealth claims per individual with ESI were highest among younger adults and decreased with increasing age. And, while the number of telehealth users (people who used telehealth at least once) fell from 2020 to 2021, the average number of telehealth claims per user grew across all age groups, suggesting a smaller number of more avid users.[39]

The U.S. Government Accountability Office (GAO) examined Medicaid data from five selected states (Arizona, California, Maine, Mississippi, and Missouri) in the 12 months before the beginning of the pandemic in March 2020 and the 12 months after. In the first pandemic year, 32.5 million telehealth services were delivered to about 4.9 million Medicaid beneficiaries in

35 Victoria L. Elliott, *Department of Veterans Affairs (VA): A Primer on Telehealth*, Congressional Research Service, July 26, 2019, https://crsreports.congress.gov/product/pdf/R/R45834.

36 Government Accountability Office, *Health Care: Telehealth and Remote Patient Monitoring Use in Medicare and Selected Federal Programs*, April 2017, https://www.gao.gov/assets/gao-17-365.pdf.

37 MedPAC, "Mandated Report: Telehealth Services and the Medicare Program."

38 Beth Carter et al., "Pandemic-Era Trends in Telehealth Use Among Americans with Private Health Insurance," AARP/NORC, May 22, 2024, https://www.aarp.org/pri/topics/health/coverage-access/pandemic-era-trends-telehealth-private-health-insurance/.

39 Carter et al., "Pandemic-Era Trends."

the five states, compared with 2.1 million services to about 455,000 beneficiaries in the prior year. The numbers ranged from less than 1 million telehealth services in Mississippi and in Missouri (25.4 percent and 19.9 percent, respectively, of beneficiaries received at least one of their services via telehealth) to 21.3 million services in California (41.4 percent of beneficiaries received at least one service via telehealth). The most common telehealth services delivered were evaluation and management (E&M) services and mental and behavioral health services.[40]

Telehealth services delivered for Medicaid beneficiaries in each of the five selected states peaked in April 2020.[41] The number of beneficiaries receiving non-telehealth services had precipitously declined between March and April 2020 but rapidly rebounded in the ensuing months. In addition, telehealth use was more common in urban areas than in rural areas throughout the pandemic study year.[42]

GAO had similar findings for Medicare patients in the five selected states. Telehealth increased tenfold from about 5 million services pre-pandemic (April to December 2019) to more than 53 million services (April to December 2020) after Medicare issued the various waivers to expand access to telehealth. Medicare spending on telehealth increased at a similar rate, rising from more than $306 million pre-pandemic to about $3.7 billion over the same period in 2020. Usage patterns were similar to Medicaid: Telehealth services peaked in April 2020, while non-telehealth services declined precipitously between March and April 2020 and rapidly rebounded thereafter. Mental and behavioral health services were the most used services, and the increase was sustained throughout the year. Other types of telehealth services increased initially in April but then declined over the year.[43] The Congressional Budget Office (CBO) has confirmed this pattern over 2020-2023. The percentage of Medicare Part B beneficiaries who received telehealth services just prior to the pandemic at the beginning of 2020 was 5 percent. It jumped to over 30 percent in the second quarter of 2020 and then rapidly declined to just over 20 percent in the third quarter of 2020. Since then, there has been a more or less continual decline to approximately 10 percent by the second quarter of 2023, where it held steady through the end of year[44] (see Figure 1).

40 GAO, *Medicaid: CMS Should Assess Effect of Increased Telehealth Use on Beneficiaries' Quality of Care*, March 2022, p. 12, https://www.gao.gov/assets/gao-22-104700.pdf.

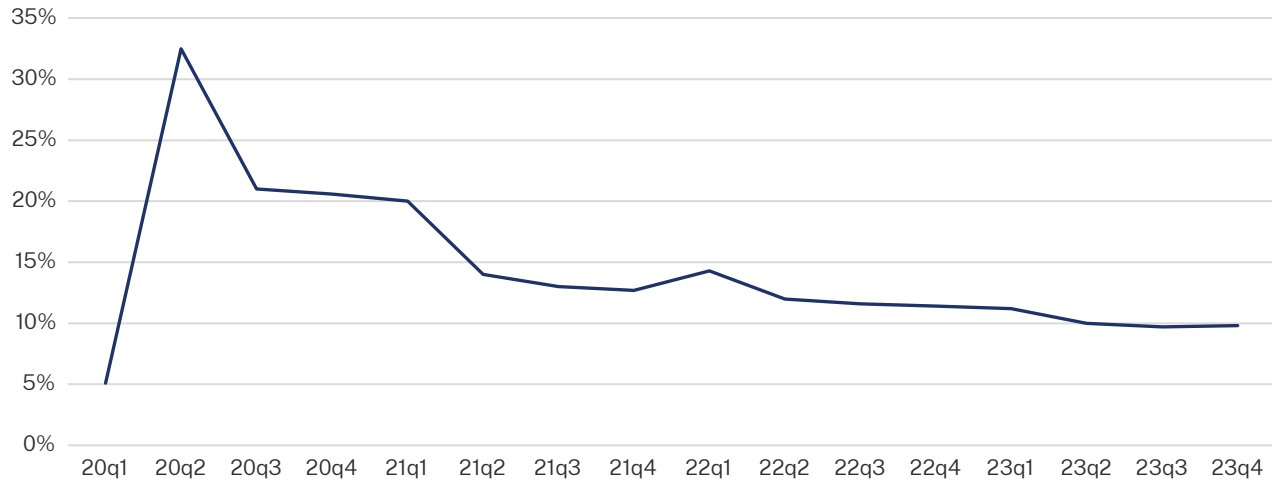
41 GAO, *Medicaid*, Figure 2.

42 GAO, *Medicaid*, Figures 4-8.

43 GAO, *Medicare Telehealth: Actions Needed to Strengthen Oversight and Help Providers Educate Patients on Privacy and Security Risks*, September 2022, pp. 12-14, https://www.gao.gov/assets/d22104454.pdf.

44 Michael Cohen, "Medicare's Coverage of Telehealth: Considerations from the Congressional Budget Office," presentation at the 2024 Academy Health Annual Research Meeting, July 1, 2024, https://www.cbo.gov/system/files/2024-06/60458-Telehealth.pdf.

Figure 1: Percentage of Medicare Part B Beneficiares Who Received Telehealth Services, 2020 to 2023



SOURCE: Michael Cohen, Congressional Budget Office, Medicare's Coverage of Telehealth: Considerations From the Congressional Budget Office, Presentation at the 2024 Academy Health Annual Research Meeting, July 1, 2024. https://www.cbo.gov/system/files/2024-06/60458-Telehealth.pdf

There was no difference in reported rates of telehealth use between beneficiaries in Medicare FFS and MA.[45]

Telehealth as a percentage of total claims follows a similar pattern. A study of 36.6 million working-age individuals with Blue Cross–Blue Shield insurance found a dramatic increase in telehealth usage during the first four pandemic months. Total ambulatory contacts decreased by 18 percent between March-June 2019 and March-June 2020. In-person visits declined by 37 percent but were partially offset by telehealth visits, which jumped from 0.3 percent of 2019 visits to 23.6 percent of visits in 2020.[46]

The FAIRHealth national database of commercial claims including both private and MA claims data (but excluding Medicare FFS and Medicaid) reported a similar temporal pattern. Telehealth ranged from roughly 0.1-0.2 percent of all claims in 2019. Following small increases in January 2020 (0.24 percent) and February 2020 (0.38 percent), telehealth claims jumped to 11.07 percent of claims in March 2020 and peaked at 13.00 percent in April 2020. They declined by a third to 8.69 percent in May 2020 and continued downward. Over the following year and a half, telehealth as a percentage of claims ranged from 4.3 percent to 7 percent, with monthly changes in utilization roughly corresponding to the course of the

45 Wyatt Koma et al., "Medicare and Telehealth: Coverage and Use During the COVID-19 Pandemic and Options for the Future," KFF, May 19, 2021, https://www.kff.org/medicare/issue-brief/medicare-and-telehealth-coverage-and-use-during-the-covid-19-pandemic-and-options-for-the-future/.

46 Jonathan P. Weiner et al., "In-Person and Telehealth Ambulatory Contacts and Costs in a Large US Insured Cohort Before and During the COVID-19 Pandemic," JAMA Network Open 4, no. 3 (2021), https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2777779.

pandemic and the number of COVID-19 cases. In December 2021, telehealth accounted for 4.9 percent of claims.[47] With some small monthly variations, this percentage has remained roughly constant even as the pandemic has abated: The percentage of FAIRHealth claims provided by telehealth was 4.82 percent in May 2024.[48]

Several factors were associated with increased observed telehealth uptake. The relative risk ratios (RRRs) associated with telehealth versus in-person ambulatory visits during the March-June 2020 period (see Figure 2)[49] shows that telehealth usage was correlated with higher COVID-19 prevalence at the time (panel A); numbers of patients' underlying chronic conditions (panel B); particular diagnoses, especially behavioral or neurological disorders (panel C); and with more urban areas (RRR increased as population density increased from rural to large metropolitan areas) (panel D).[50]

The relaxation of barriers to utilizing telehealth during the pandemic, including compensation for telephone-only visits, did little to change the types of patients most likely to use telehealth services in the early pandemic period. As in the pre-pandemic period, telehealth users were more likely to be White, younger, wealthier, and more urban dwelling.[51] And, among telehealth users, African American, publicly insured, and older patients were less likely to use video telehealth (as opposed to audio only) than White, commercially insured, and younger patients.[52]

However, these results changed somewhat over time. Data from the National Health Interview Survey (NHIS) — a nationally representative household survey of the U.S. civilian noninstitutionalized population conducted by the CDC's National Center for Health Statistics — show that in 2021, White adults (39.2 percent) were still more likely than Black adults (33.1 percent) or Hispanics (32.8 percent) to have used telemedicine (of any type) in the past 12 months, as were people with the highest incomes and people in urban areas. But the age distribution changed, with the percentage of adults who had used telehealth during 2021 consistently increasing with age, with the lowest use (29.4 percent) in the 18-29 age group

47 FAIR Health, "The Evolution of Telehealth During the COVID-19 Pandemic: A Multiyear Retrospective of FAIR Health's Monthly Telehealth Regional Tracker," June 14, 2022, https://s3.amazonaws.com/media2.fairhealth.org/brief/asset/The%20Evolution%20of%20 Telehealth%20during%20the%20COVID-19%20Pandemic-A%20FAIR%20Health%20Brief.pdf.

48 FAIR Health, "Monthly Telehealth Regional Tracker, May 2024," https://s3.amazonaws.com/media2.fairhealth.org/infographic/telehealth/may-2024-national-telehealth.pdf.

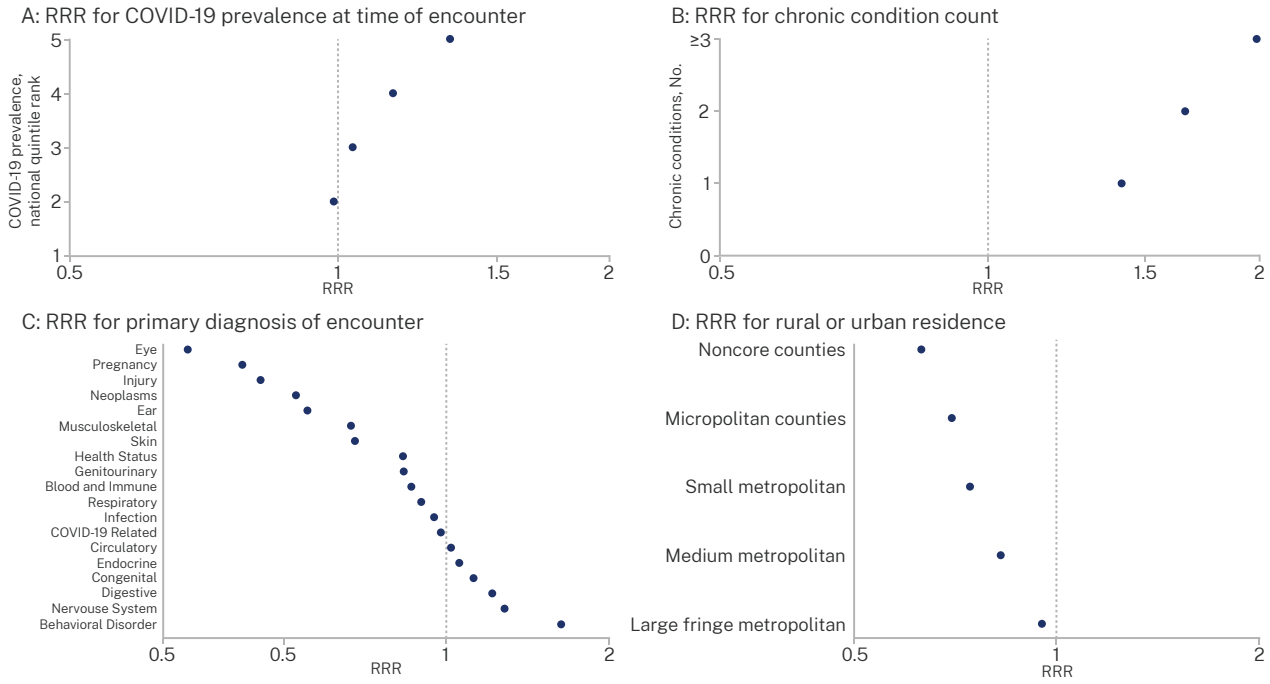
49 The relative risk ratios in Figure 2 measure higher (>1.0), lower (<1.0), or equal (1.0) likelihood of a telehealth visit compared with patients within the benchmark reference category, holding constant other variables.

50 Weiner et al., "In-Person and Telehealth Ambulatory Contacts."

51 Julia Shaver, The State of Telehealth Before and After the COVID-19 Pandemic," *Primary Care* 49, no. 4 (December 2022): 517-530. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9035352/.

52 Connor Drake et al., "Understanding Telemedicine's 'New Normal': Variations in Telemedicine Use by Specialty Line and Patient Demographics," *Telemedicine and e-Health* 28, no. 1 (2022): 51-59, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8785715/.

Figure 2: Adjusted Relative Risk Ratios (RRRs) Associated With Telehealth vs In-Person Ambulatory Visits During 2020 COVID-19 Study Period



NOTE: Figure adapted from Weiner et al. In-Person and Telehealth Ambulatory Contacts and Costs in a Large US Insured Cohort Before and During the COVID-19 Pandemic.

and the highest (43.3 percent) for those 65 and older.[53] And the Assistant Secretary for Planning and Evaluation (ASPE), using data of telehealth utilization later in the pandemic (April 14, 2021 through August 8, 2022) from the Census Bureau's Household Pulse Survey, reported additional evolution in telehealth usage. Hispanics, Blacks, or people reporting two or more races or other race had *higher* odds of using telehealth later in the pandemic than Whites did, although video telehealth as a share of all telehealth use remained lower among Black, Hispanic, and Asian individuals as compared with White individuals. Telehealth use was highest among those with *lower incomes* and declined as income rose. Individuals with Medicare and Medicaid were more likely to use telehealth than those with private insurance, while people without any health insurance were the least likely to use telehealth. Telehealth use declined but the likelihood of using telehealth continued, as in the NHIS/NCHS study, to be associated with increasing age — telehealth use rates were lowest among young adults

53 Jacqueline W. Lucas and Maria A. Villarroel, "Telemedicine Use Among Adults: United States, 2021," National Center for Health Statistics, October 2022, https://www.cdc.gov/nchs/products/databriefs/db445.htm.

ages 18-24 (17.6 percent) and increased with advancing age to peak among those 65 and older (24.6 percent).[54]

The shift toward older telehealth users might be explained by many physicians' early concerns that older, less tech savvy, patients have difficulty navigating the internet and the equipment needed to participate in telehealth. They reported that having to retrain or hire new staff to help older patients use telehealth was "was time consuming, costly, and frustrating."[55] Twenty-seven percent of patients 65 or older scheduled for a video visit had to convert to a phone-only visit due to technical difficulties, compared to just 10 percent of patients across all age groups.[56] But, as older people were provided with resources and education, they learned how to access digital health services more effectively and these problems decreased.[57]

Concentration in Mental and Behavioral Health Care

While telehealth utilization remains above pre-pandemic levels, it is concentrated in just a few specialty areas. Mental and behavioral health services, including addiction services, had the biggest and most persistent increase in telehealth utilization. This finding is consistent across multiple studies of different types of insurance coverage.

Physicians most likely to utilize telehealth in the first year of the pandemic were those treating patients who have chronic diseases in specific areas such as psychiatry, endocrinology, gastroenterology, rheumatology, nephrology, and cardiology. Physicians in dermatology, orthopedic surgery, and ophthalmology were least likely to report telemedicine use.[58]

IQVIA data from mid-April 2020 also showed variation by specialty. Telehealth adoption increased for psychiatry (60 percent of interactions), gastroenterology (49 percent), and neurology (41 percent), but was low for OB/GYN (12 percent) and hematology/oncology (8 percent).[59]

54 Euny C. Lee et al., *Updated National Survey Trends in Telehealth Utilization and Modality (2021-2022)*, HHS, Office of the Assistant Secretary for Planning and Evaluation, April 19, 2023, https://aspe.hhs.gov/sites/default/files/documents/7d6b4989431f4c70144f209622975116/household-pulse-survey-telehealth-covid-ib.pdf.

55 Elizabeth M. Goldberg et al., "Perspectives on Telehealth for Older Adults During the COVID-19 Pandemic Using the Quadruple Aim: Interviews with 48 Physicians," *BMC Geriatrics* 22, no. 188 (2022), https://bmcgeriatr.biomedcentral.com/articles/10.1186/s12877-022-02860-8.

56 Tanya Albert Henry, Senior Patients Happy with Telehealth and Want It as Care Option, American Medical Association, November 21, 2022, https://www.ama-assn.org/practice-management/digital/senior-patients-happy-telehealth-and-want-it-care-option.

57 Motti Haimi and Ruslan Sergienko, "Adoption and Use of Telemedicine and Digital Health Services Among Older Adults in Light of the COVID-19 Pandemic: Repeated Cross-Sectional Analysis," *JMIR Aging* 7 (2024), https://aging.jmir.org/2024/1/e52317/; Namkee G. Choi et al., "Telehealth Use Among Older Adults During COVID-19: Associations with Sociodemographic and Health Characteristics, Technology Device Ownership, and Technology Learning," *Journal of Applied Gerontology* 41, no. 3 (March 2022): 600-609, https://pmc.ncbi.nlm.nih.gov/articles/PMC8847316/.

58 Shaver, "The State of Telehealth."

59 IQVIA, "Monitoring the Impact of COVID-19 on the Pharmaceutical Market," data week ending April 24, 2020.

A study of six different specialties (dermatology, psychiatry, endocrinology, cardiology, orthopedics, and nonurgent primary care) in an integrated health care system, had similar findings. Prior to the pandemic, 99.97 percent of visits were in-person. From July to September 2020, 23 percent of visits were telehealth (half video and half telephone), with psychiatry reporting the highest levels of telehealth usage (98.3 percent), followed by endocrinology (64.9 percent), nonurgent primary care (20.8 percent), cardiology (10.0 percent), orthopedics (4.7 percent), and dermatology (3.2 percent).[60]

Unlike most specialties where telehealth utilization rose rapidly and then returned to nearly pre-pandemic levels, utilization in mental health and substance use disorders remained much higher than pre-pandemic levels. Commercial and public insurance claims demonstrate that the overall volume of services for mental health conditions was maintained at and ultimately surpassed pre-pandemic levels during the pandemic due to the increased availability and utilization of telehealth visits which replaced the drop in-person visits.[61]

As Figure 3 shows, telehealth represented 40 percent of mental health and substance use outpatient visits and 11 percent of other visits during March-August 2020. Over the next year, as in-person care returned and telehealth visits declined, telehealth use remained strong for mental health and substance use treatment, representing 36 percent of these outpatient visits during March-August 2021. Telehealth use for other indications dropped by half over the same period to represent 5 percent of other outpatient care visits.[62]

Multiple studies with varying time periods and different insurance coverages have confirmed that mental health was the predominant indication used for telehealth. Among those with ESI, mental health care was the most common service accessed through telehealth both before and during the first two years of the pandemic. As a share of total telehealth claims, mental health care was 41.2 percent in 2020 and increased to 52.3 percent in 2021.[63]

FAIRHealth claims during the first few years of the pandemic showed that mental health services were the most common type of telehealth service. Mental health conditions accounted for about a third of claims in 2019 but rapidly increased, regularly exceeding 50

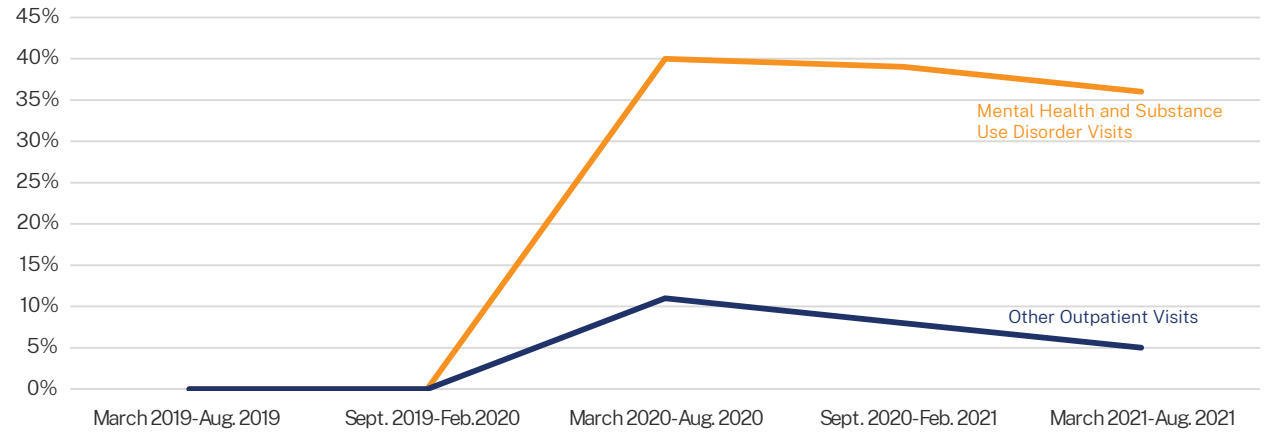
60 Drake et al., "Understanding Telemedicine's 'New Normal.'"

61 Jonathan Cantor et al., "Availability of Mental Telehealth Services in the US," *JAMA Health Forum* 5, no. 2 (2024), https://jamanetwork.com/journals/jama-health-forum/fullarticle/2814605.

62 Justin Lo et al., "Telehealth Has Played an Outsized Role Meeting Mental Health Needs During the COVID-19 Pandemic," KFF, March 15, 2022, https://www.kff.org/mental-health/issue-brief/telehealth-has-played-an-outsized-role-meeting-mental-health-needs-during-the-covid-19-pandemic/.

63 Carter et al., "Pandemic-Era Trends."

Figure 3: Telehealth Surged For Mental Health And Substance Use Disorder With Pandemic



SOURCE: KFF and Epic Research analysis of Cosmos data. March 15, 2022

percent of telehealth claims in many months and approaching two-thirds of claims in some months during the first two pandemic years (64.2 percent in February 2022).[64]

Mental health conditions remained the most common telehealth diagnosis throughout the pandemic and thereafter. They accounted for 68.6 percent of FAIRHealth's telehealth claim lines in May 2024 — a large percentage of a much higher number of telehealth claims as compared to the pre-pandemic period.[65] No other diagnostic category exceeded 1.7 percent of telehealth claims. The most common mental health diagnoses were generalized anxiety disorder, major depressive disorder, adjustment disorder, attention deficit/hyperactivity disorder, and post-traumatic stress disorder. More than half of these telehealth *mental health* services are being delivered by social workers (who comprise 56 percent of the behavioral health workforce[66]), and these claims account for 35.7 percent of *all telehealth* claim lines.[67] The next four most common providers were psychiatrists (8.8 percent of all telehealth claims), family practice (8.4 percent), psychiatric nurses (8.4 percent), and psychologists (7.0 percent).

Overall mental health claims increased substantially during the pandemic and have remained well above pre-pandemic levels. As Figure 4 shows, this increase is entirely attributable to expanded telehealth claims. In-office claims dropped 46 percent from 2019 to 2020. They

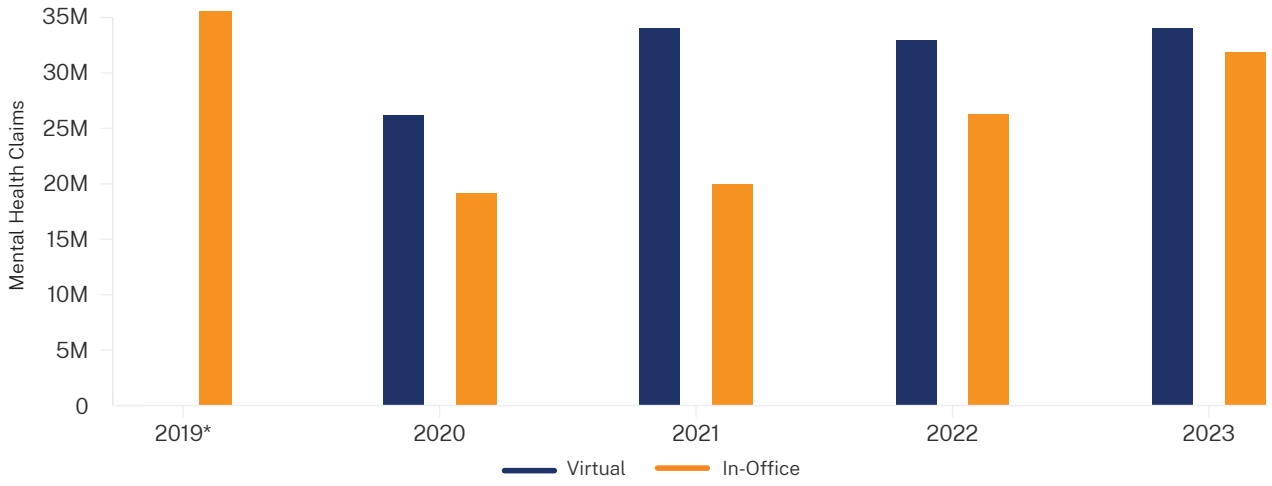
64 FAIR Health, "The Evolution of Telehealth."

65 FAIR Health, "Monthly Telehealth Regional Tracker, May 2024."

66 Health Resources and Services Administration, *Behavioral Health Workforce, 2023*, December 2023, Table 1, https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/Behavioral-Health-Workforce-Brief-2023.pdf.

67 FAIR Health, "Monthly Telehealth Regional Tracker, May 2024."

Figure 4: Virtual vs. In-Office Mental Health Claims



NOTE: Figure adapted from LexisNexis Risk Solutions Healthcare Insights, Mental Health Utilization Trends

have since rebounded, increasing 59 percent from 2021 to 2023, but remain (as of 2023) 10 percent lower than in 2019. At the same time, virtual (telehealth) claims skyrocketed between 2019 and 2020 and continued to rise in subsequent years. Mental health claims overall are up 83 percent from 2019 to 2023 and, even as the pandemic subsided, increased 11 percent between 2022 and 2023.[68]

Mental health care consumers were much more likely to use large amounts of telehealth than were other types of patients. The average number of claims per insured enrollee in 2021 was much higher for mental health care (9.7 claims) compared with primary care (2.9 claims) and other specialties (1.7 claims).[69]

A study of employer-based, privately insured adults over a slightly different time frame by Rand researchers documents the cost of this increased utilization of mental health services. They found that during the initial, acute phase of the pandemic (March 13, 2020, to December 17, 2020), mental health in-person visits decreased by 39.5 percent and mental health telehealth visits increased roughly tenfold (1019.3 percent), resulting in a 22.3 percent increase in overall utilization. Per capita expenditures were 29.5 percent higher during this period compared to the prior year. During the post-acute phase (December 18, 2020, to August 31, 2022), telehealth visits increased a little more and then stabilized, while in-person visits increased 2.2 percent each month over the period. By August 2022, in-person visits had

68 LexisNexis Risk Solutions Healthcare Insights, "Mental Health Utilization Trends," May 15, 2024. https://risk.lexisnexis.com/insights-resources/research/healthcare-insights-brief-mental-health-utilization-trends?trmid=HCCRM22.PRNTL.MHbrief24.WSLN-1202945

69 Carter et al., "Pandemic-Era Trends."

returned to 79.9 percent of pre-pandemic levels, and telehealth visits stayed elevated. Overall mental health service utilization was 38.8 percent higher than before the pandemic, and per capita spending was 53.7 percent higher.[70]

Urban vs. Rural

Almost 20 percent of the U.S. population lives in rural areas. Compared with their urban counterparts, residents of rural counties are more likely to be obese or overweight and have higher rates of cigarette smoking and chronic diseases such as hypertension. Rural, non-metropolitan counties generally have fewer health care providers per capita than urban areas do, and residents have to travel longer distances to access care.[71]

Telehealth has been touted as a way to improve access to care for patients in rural areas and reduce rural/urban disparities in care. That was a major reason why, before the pandemic, CMS targeted telemedicine reimbursement only for patients in rural counties or identified health professional shortage areas. Yet pre-pandemic studies showed that telehealth users were not more likely to be located within health care professional shortage areas or rural locations.[72] The same pattern held during the pandemic — telehealth was utilized more in urban than rural areas.

As was noted above, in a study of Medicaid patients during the first pandemic year, a larger percentage of beneficiaries living in urban areas received at least one of their services via telehealth than beneficiaries living in rural areas.[73] And the likelihood of increased telehealth uptake during the initial pandemic months (March-June 2020) when telehealth peaked, was inversely related to the how rural the area was (utilizing the six levels of urbanization[74]).[75]

There was no difference in the share of individuals with private, employer-provided insurance using telehealth between urban and rural enrollees in 2019. But in 2020, 20.6 percent of people with ESI living in urban areas used telehealth compared with 13.3 percent in rural areas. Telehealth use dropped in both areas in 2021, but the disparity (17.1 percent in urban

70 Jonathan H. Cantor et al., "Telehealth and In-Person Mental Health Service Utilization and Spending, 2019 to 2022," *JAMA Health Forum* 4, no. 8 (August 25, 2023), https://jamanetwork.com/journals/jama-health-forum/fullarticle/2808748.

71 Barbara Barton and Irim Azam, "National Healthcare Quality and Disparities Report: Chartbook on Rural Health Care," HHS, Agency for Healthcare Research and Quality, October 2017, https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqrdr/chartbooks/qdr-ruralhealthchartbook-update.pdf.

72 Lori Uscher-Pines et al,. "Access and Quality of Care in Direct-to-Consumer Telemedicine," *Telemedicine Journal and E-Health* 22, no. 4 (April 2016): 282-287, https://pubmed.ncbi.nlm.nih.gov/26488151/.

73 GAO, *Medicaid*, Figure 4.

74 The National Center for Health Statistics Urban-Rural Classification Scheme includes six urbanization categories that go from high to low population within the statistical area, including Large Central Metropolitan, Large Fringe Metropolitan, Medium Metropolitan, Small Metropolitan, Micropolitan Counties, and Noncore Counties.

Barton and Azam, "National Healthcare Quality and Disparities Report."

75 Weiner et al. In-Person and Telehealth Ambulatory Contacts and Costs in a Large US Insured Cohort Before and During the COVID-19 Pandemic.

areas, 10.5 in rural areas) persisted, and the number of telehealth claims per telehealth user rose steadily from 2019 to 2020 to 2021 in both areas.[76]

These findings were confirmed in a study comparing data from a network of safety-net clinics across 16 states during the first pandemic year (April 1, 2020–March 31, 2021) with the prior year. Before the pandemic, there was little difference in the percentage of total encounters conducted in-person compared to telehealth by rurality — telehealth as a percentage was uniformly low, with a bit more usage in the most rural areas (1.7 percent) compared to urban areas (0.5 percent). There was a spike in April 2020 in all areas so that 60 percent or more of encounters were conducted via telehealth. But usage rapidly declined, especially in more rural areas so that the proportions of visits received through telehealth were consistently lower among rural patients than among more urban patients throughout the pandemic year: 53 percent of health care encounters in urban areas were conducted via telehealth versus 30 percent in the most rural areas. The telehealth utilization figures in this study are higher than the studies cited above, a finding that may be explained by a different study population: safety-net clinics. But by the end of the year (March 31, 2021), in-person encounters rebounded and exceeded 50 percent in all areas.[77]

Lower telehealth use in rural areas might be due to limited broadband availability, which makes accessing telehealth more difficult or impossible.[78] But broadband access should matter only for video visits, not telephone/audio-only visits.

To some extent, the greater use of telehealth services in urban areas during the pandemic compared to rural areas is not surprising. The loosening of regulations during the pandemic had greater impact in urban areas, relative to rural areas which already enjoyed more flexibility in the pre-pandemic period. Moreover, COVID-19 was more prevalent in urban areas, particularly in the earlier part of the pandemic, leading to greater demand for remote access. Nevertheless, during the period when it was easiest to obtain telehealth services, they were utilized more in urban areas, even as the pandemic subsided and in-person services rebounded.

An important exception may be telehealth for mental health services. Unlike other areas of medical care, telehealth use for mental health and substance use treatment was stronger in

76 Carter et al., "Pandemic-Era Trends."

77 Annie E. Larson et al., "Before and During Pandemic Telemedicine Use: An Analysis of Rural and Urban Safety-Net Clinics," *American Journal of Preventive Medicine* 63, no. 6 (December 2022), 1031-1036, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9462940/.

78 Coleman Drake et al., "The Limitations of Poor Broadband Internet Access for Telemedicine Use in Rural America: An Observational Study," *Annals of Internal Medicine* 171, no. 5 (September 3, 2019): 382-384, https://pubmed.ncbi.nlm.nih.gov/31108509/; Emily A. Vogels, Some Digital Divides Persist Between Rural, Urban and Suburban America," Pew Research Center, August 19, 2021, https://www.pewresearch.org/short-reads/2021/08/19/some-digital-divides-persist-between-rural-urban-and-suburban-america/.

rural areas than urban areas. During March-August 2021, the share of outpatient visits for mental health and substance use disorder delivered by telehealth was 55 percent in rural areas and 35 percent in urban areas.[79] But a nationwide study of the VA health care system over a longer period after the pandemic onset (March 16, 2020, to December 15, 2021) found that telehealth utilization, as measured by mean monthly primary care visits per 1,000 patients, increased more in urban than rural VA health care systems for both primary care visits and mental health visits. While rural VA health care systems had greater telemedicine use than urban systems before the pandemic, this switched after the onset of the pandemic so that urban systems had higher odds of telehealth use for both types of visits.[80]

Across State Borders

A likely prerequisite for telehealth utilization in rural areas would be the ability to practice telehealth across state lines. Prior to the pandemic, this was limited by state licensing requirements and insurance regulations. The relaxation of these barriers during the pandemic provided an opportunity to see if interstate telehealth utilization would change.

Telehealth across state lines accounts for only a small percentage of all telehealth services and a tiny proportion of total outpatient care in the United States. Even during the period of pandemic licensure waivers and federal and state flexibilities, interstate telehealth represented about 5 percent of all telehealth visits and less than 1 percent of all outpatient visits for Medicare FFS beneficiaries. While interstate telehealth was important for Washington, DC and a few states such as Wyoming and North Dakota in which 20 percent or more of telehealth visits occurred with out-of-state clinicians, it represented less than 1 percent of telehealth visits in 26 states. In addition, most of the interstate telehealth visits occurred between a patient and clinician located in an adjacent state, usually within a few miles of the state border, suggesting that the telehealth visit was substituting for in-person visits where, in normal times, travel for in-person services was not especially difficult or costly.[81]

QUALITY

When compared to telehealth, in-person visits should allow physicians to conduct more extensive physical examinations, more easily observe patient movements and responses and,

79 Lo et al., "Telehealth Has Played an Outsized Role."

80 Lucinda B. Leung et al., "Rates of Primary Care and Integrated Mental Health Telemedicine Visits Between Rural and Urban Veterans Affairs Beneficiaries Before and After the Onset of the COVID-19 Pandemic," *JAMA Network Open* 6, no. 3 (2023): e231864, https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2802089.

81 Chad Ellimoottil, "Takeaways from 2 Key Studies on Interstate Telehealth Use Among Medicare Fee-for-Service Beneficiaries," *JAMA Health Forum* 3, no. 9 (2022), https://jamanetwork.com/journals/jama-health-forum/fullarticle/2796411.

perhaps, lead to superior communication and a better physician-patient relationship. The questions are: 1) Do any of these purported advantages make a difference? 2) Does telehealth provide equal quality care? and 3) Does the quality of telehealth services vary across different areas of medicine?

The evidence regarding the quality of telehealth services is mixed. Much of the evidence relies on surveys of patient and physician opinions rather than objective outcome measures. In these more subjective studies, patients seem more enthusiastic about the perceived quality of telehealth than physicians do. Physicians seem more concerned with the inability to perform a physical examination and possible negative impacts on the physician-patient relationship.

Prior to the pandemic, commercial plans had not found strong evidence that telehealth services reduce costs or improve outcomes, and cost was not a significant consideration in commercial insurers' adoption of telehealth services. Most plans introduced telehealth as part of competition with other plans.[82]

GAO found that while CMS had identified potential quality concerns around telehealth — including risks of harm to patients and provision of services that were not medically necessary — CMS did not collect, assess, or report information about the quality of telehealth services in either the Medicare or Medicaid programs.[83]

In a pre-pandemic study of the 4 million members of the Kaiser Permanente Northern California integrated health care network, patients were given the option of making in-person office visits, video visits, or telephone (audio) visits. Eighty-six percent selected office visits and 14 percent selected telehealth, equally split between video and telephone visits. There were higher rates of medication prescriptions and ordering of imaging and laboratory tests for the in-person visits but no evidence of overordering or overprescribing. Following the initial, patient-selected visits, there was a small increase in office visits in the subsequent seven days following telehealth visits than after in-person primary care visits. Rates of subsequent emergency visits and hospitalizations were low, and there was no statistically significant difference between in-person and telehealth primary care visits.[84] The findings suggest that patients in an integrated network with preexisting relationships with their physicians generally preferred in-office visits, could safely select the type of visit they preferred, and were pretty good at assessing the acuity of their needs, as indicated by selecting office visits

82 MedPAC, "Mandated Report: Telehealth Services and the Medicare Program."

83 GAO, "Telehealth in the Pandemic — How Has It Changed Health Care Delivery in Medicaid and Medicare?," September 29, 2022, https://www.gao.gov/blog/telehealth-pandemic-how-has-it-changed-health-care-delivery-medicaid-and-medicare.

84 Mary Reed et al., "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, no. 11 (November 1, 2021), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8596201/.

when more medications and testing were indicated. The small increase in subsequent office visits following telehealth visits does raise some concerns regarding overall utilization.

The quality of telehealth visits likely varies depending on the type of problem and the medical specialty involved. A 2016 review by the Agency for Healthcare Research and Quality found that telehealth could produce positive health outcomes when utilized for communication and counseling or remote monitoring for patients with certain chronic conditions such as cardiovascular and respiratory diseases and for psychotherapy. But there was insufficient evidence to evaluate telehealth for other uses.[85]

However, studies claiming that telehealth outcomes for chronic diseases were as good as or better than in-person visits must be viewed with caution. The types and intensity of interventions vary drastically from study to study, and the overall quality of evidence is low due to "potential bias in study design, heterogeneity in subgroups, imprecision of results or small effect sizes (due to small sample sizes), publication bias, and underreporting of relevant information, such as the treatment of dropout or missing data."[86]

A study of video visits compared to in-person visits for acute, nonurgent conditions in commercially insured patients found that costs for the video visits were lower than the in-person sites. This was largely due to lower utilization of laboratory and imaging testing at the video visits. There was no difference in utilization of follow-up care, suggesting that there was an adequate clinical resolution of the problems in both groups. (The study did not consider how telehealth would affect overall utilization by potentially increasing the number of people who access care or the number of visits.) However, video visits had significantly higher rates of antibiotic prescriptions than did in-person sites of care overall, including for conditions for which clinical guidelines typically do not recommend antibiotics as a first line of treatment.[87] Other studies have confirmed the inappropriate overprescription of antibiotics for acute respiratory infections such as bronchitis in telehealth, along with a lower likelihood of receiving appropriate diagnostic testing — such as a strep test — in evaluating patients with pharyngitis.[88] This overuse of antibiotics likely stems from the inability or disinclination to do testing at video visits and could lead to an increase in side effects of the medicines and population-wide antibiotic resistance.

85 Annette M. Totten et al., *Telehealth: Mapping the Evidence for Patient Outcomes from Systematic Reviews* (Agency for Healthcare Research and Quality, 2016), https://www.ncbi.nlm.nih.gov/books/NBK379320/.

86 Shaver, "The State of Telehealth."

87 Aliza S. Gordon et al., "Virtual Visits for Acute, Nonurgent Care: A Claims Analysis of Episode-Level Utilization," *Journal of Medical Internet Research* 19, no. 2 (February 2017), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5336603/.

88 Uscher-Pines et al., "Access and Quality of Care in Direct-to-Consumer Telemedicine."

A study in the first four months of the pandemic (March to June 2020) comparing whether diagnoses made by video telemedicine consultation for a new medical problem agreed with diagnoses made at follow-up, in-person outpatient visits for the same clinical problem in the same specialty within a 90-day window, found that the provisional diagnosis established at video visits matched the in-person clinician's diagnosis in 86.9 percent of cases. But there was a significant difference in concordance between cases seen in specialty care (88.4 percent) and primary care (81.3 percent). And diagnostic concordance varied among medical specialties, ranging from 77.3 percent for otorhinolaryngology to 96.0 percent for psychiatry and psychology. This seemed consistent with the observation that there was a significant decrease in diagnostic concordance when the method of establishing the in-person diagnosis necessitated confirmatory pathology, hands-on physical examination, or neurological testing as opposed to diagnoses based upon clinical opinion.[89]

The ability of telehealth to generate accurate diagnoses is consistent with multiple older studies showing that obtaining a medical history is the most important element in making accurate diagnoses.[90] One study found that the history provided sufficient information to establish an accurate initial diagnosis in 83 percent of cases, while the physical examination and laboratory investigations were each the primary diagnostic tool in only 9 percent of new cases.[91] Similarly, a subsequent study reported that the history led to the final diagnosis in 76 percent of cases, while the physical examination and laboratory investigations led to the final diagnosis in 12 percent and 11 percent of cases, respectively.[92] Nevertheless, in both studies, the physical examination and testing were helpful in excluding other diagnostic possibilities and in increasing the physicians' confidence in the diagnoses they had ascertained from the history. The percentages cited in the earlier studies may have changed as imaging and laboratory studies have become more sophisticated, but the primacy of the history — especially in certain fields — remains.

In fields such as mental and behavioral health — where physical examinations are rarely, if ever, performed and laboratory and imaging studies are seldom used — it is not surprising that telehealth has been so widely used and provided accurate diagnoses. These findings seem to be confirmed by a meta-analysis of empirical studies of the effectiveness of mental health

89 Bart M. Demaerschalk et al., "Assessment of Clinician Diagnostic Concordance with Video Telemedicine in the Integrated Multispecialty Practice at Mayo Clinic During the Beginning of COVID-19 Pandemic from March to June 2020," *JAMA Network Open* 5, no. 9 (2022), https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2795871.

90 *History* in this setting is a broad term. It encompasses eliciting patients' chief complaints — what issues or events convinced them to seek medical attention — as well as the medicines they take, the treatments and surgeries they have had, and their family and personal histories of medical problems and conditions.

91 J. R. Hampton et al., "Relative Contributions of History-Taking, Physical Examination, and Laboratory Investigation to Diagnosis and Management of Medical Outpatients," *British Medical Journal* 486, no. 2 (1975): 486-489, https://www.bmj.com/content/2/5969/486.

92 M. C. Peterson et al., "Contributions of the History, Physical Examination, and Laboratory Investigation in Making Medical Diagnoses," *Western Journal of Medicine* 156, no. 2 (February 1992): 163-165, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1003190/.

services in veterans. It found telehealth was roughly as effective as services provided face to face.[93]

Similarly, a review of studies of telemedicine use in nonmalignant and malignant hematology found similar or improved outcomes for telemedicine as measured by satisfaction; communication among patients, families, and health care providers; and health outcomes compared to face-to-face encounters in both pediatric and adult populations.[94] Hematology is a field where the results of laboratory tests and the patient's recitation of how they feel are far more important than physical examinations, especially on follow-up visits for patients with established diagnoses.

Switching to telehealth for heart failure patients during the pandemic did not increase mortality or the need for subsequent acute care, such as ED visits or hospitalization.[95] Heart failure patients are often frail and may have difficulty attending in-person visits. Telehealth could be an important resource, especially because physical examinations are less important for follow-up visits of patients with previously established heart failure diagnoses.

Which type of telehealth is used may have some impact. In the mental health study in veterans, videoconferencing was more effective than telephone for depression and post-traumatic stress.[96] A systematic literature review of studies in multiple areas of medicine, found that video consultations typically took longer than telephone consultations and resulted in fewer medication errors, greater diagnostic accuracy, and improved decision-making accuracy when compared to telephone visits. Yet there was little difference in patient outcomes, mortality, or satisfaction.[97]

Multiple studies from the pandemic have found no significant difference in patient satisfaction between telehealth and in-person visits and that patients were less likely to be no-shows for telehealth visits.[98] But the picture was less clear for health care providers, particularly in relation to assessments of quality of care.

93 Michael J. McClellan et al., "The Effectiveness of Telepsychology with Veterans: A Meta-Analysis of Services Delivered by Videoconference and Phone," *Psychological Services* 19, no. 2 (May 2022): 294-304, https://pubmed.ncbi.nlm.nih.gov/33539135/.

94 Aashaka C. Shah et al., "Telemedicine in Malignant and Nonmalignant Hematology: Systematic Review of Pediatric and Adult Studies," *JMIR Mhealth and Uhealth* 9, no. 7 (July 2021), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8299344/.

95 Yasser Sammour et al., "Outpatient Management of Heart Failure During the COVID-19 Pandemic After Adoption of a Telehealth Model," *JACC: Heart Failure* 9, no. 12 (December 2021): 916-924, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8494054/.

96 McClellan et al., "The Effectiveness of Telepsychology with Veterans."

97 Kathy L. Rush et al., "Videoconference Compared to Telephone in Healthcare Delivery: A Systematic Review," *International Journal of Medical Informatics* 118 (October 2018): 44-53, https://pubmed.ncbi.nlm.nih.gov/30153920/.

98 Juan J. Andino et al., "Overview of Telehealth in the United States Since the COVID-19 Public Health Emergency: A Narrative Review," *MHealth* 9 (July 30, 2023), https://mhealth.amegroups.org/article/view/115704/html; see also, Karl Y. Bilimoria et al., "Comparison of Patient Experience with Telehealth vs. In-Person Visits Before and During the COVID-19 Pandemic," *Joint Commission Journal on Quality and Patient Safety* 47, no. 8 (August 2021): 533-536, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7844377/; Naina Sinha Gregory et al., "The Feasibility, Acceptability, and Usability of Telehealth Visits," *Frontiers in Medicine* 10 (July 18, 2023) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10394377/.

A study of follow-up video visits for established patients in five clinical specialties (psychiatry, neurology, cardiology, oncology, and primary care) completed shortly before the pandemic in a well-established telehealth program at the Massachusetts General Hospital, found that 62.6 percent of patients and 59.0 percent of clinicians reported no difference in "the overall quality of the visit" between the video and in-person office visits. Yet while few (12.6 percent patients; 4.9 percent providers) thought the video visit provided superior quality, 21.7 percent of patients and 34.4 percent of clinicians thought the office visit was better. While a small majority of patients (59.1 percent) and clinicians (50.8 percent) thought there was no difference in the personal patient-provider connection between video and office visits, 32.7 percent of patients and 45.9 percent of physicians thought the "the personal connection felt during the visit" was better in the office visit. Importantly, the clinicians in this study — psychologists and psychiatrists (34 percent), neurologists (38 percent), cardiologists (10 percent), oncologists (2 percent), and primary care clinicians (16 percent) — were generally in specialty areas with high telehealth uptake during and after the pandemic.[99]

Studies from during the pandemic also showed a significant proportion of providers with concerns about the quality of telehealth visits and the impact on the patient-provider relationship. While nearly all were comfortable in one study using the telehealth equipment, most (79 percent) did not think the video visit was as good as an in-person visit, and a majority (61 percent) did not feel they were able to conduct adequate clinical examinations. About a third expressed concerns with impaired patient-provider relationships.[100] In a different study, most physicians had little difficulty navigating telehealth, and 63 percent agreed that the quality of care delivered using telemedicine was comparable to face-to-face visits. Yet only about half believed their patients found telemedicine easy to navigate or that their patients found telemedicine quality comparable to face-to-face visits. While nearly all the physicians (88 percent) were open to using telemedicine routinely in the future for follow-up visits, they were less enthusiastic about telemedicine for initial consultations (68 percent), and only 42 percent prefer telemedicine over face-to-face visits.[101] A study of radiation oncologists at a prestigious cancer center used the same survey questions developed for the pre-pandemic Massachusetts General Hospital telehealth study described above. Just under half of the physicians rated the overall visit quality for initial evaluations — consultations and radiation treatment planning — to be no different between telemedicine and in-office visits (47 percent). A roughly equal percentage (45 percent) rated quality better for in-office visits, and only 8

99 Karen Donelon et al., "Patient and Clinician Experiences with Telehealth for Patient Follow-Up Care," *American Journal of Managed Care* 25, no. 1 (January 2019), https://www.ajmc.com/view/patient-and-clinician-experiences-with-telehealth-for-patient-followup-care.

100 Salim Saiyed et al., "Physician Perspective and Key Satisfaction Indicators with Rapid Telehealth Adoption During the Coronavirus Disease 2019 Pandemic," *Telemedicine and e-Health* 27, no. 11 (November 8, 2021), https://www.liebertpub.com/doi/full/10.1089/tmj.2020.0492.

101 Timothy D. Malouff et al., "Physician Satisfaction with Telemedicine During the COVID-19 Pandemic: The Mayo Clinic Florida Experience," *Mayo Clinic Proceedings: Innovations, Quality and Outcomes* 5, no. 4 (August 2021): 771-782, https://www.mcpiqojournal.org/article/S2542-4548(21)00102-8/fulltext.

percent preferred telemedicine. Two-thirds thought office visits provided a better personal connection to the patient, with the remainder reporting no difference. No physicians thought telehealth provided better personal connection. Nevertheless, 71 percent reported no difference in their confidence that they were treating patients' cancers appropriately with telemedicine as compared to in-office. The remainder had more treatment confidence with in-office visits.[102]

A different group of radiation oncologists — a specialty where physicians often have little or no patient contact after the initial treatment planning — cautioned that the physical examination remains a critical component of follow-up care, especially when evaluating for adverse effects of therapy.[103]

The fact that telehealth mental and behavioral services may have been the one area where rural utilization was higher than urban utilization raises the question of how good these services were. Mental health providers in a rural district of the United Kingdom reported that telehealth had greatly improved patients' access to care and that they were generally satisfied with its effectiveness in terms of clinical objectives or outcomes. More than two-thirds however, thought patients' ability to use and observe non-verbal communication was worse in telehealth.[104]

A systematic review of the literature found only six randomized controlled trials of telehealth for mental health problems in rural areas. The review reported that all the studies demonstrated that telemental health services improved mental health symptoms for two to 13 months. However, the studies utilized control groups of "usual" or "standard" care or educational programs and did not directly compare telehealth patients to patients who received in-person visits.[105]

TELEHEALTH'S IMPACT ON UTILIZATION AND COST

One telehealth expert stated, "Claims that telehealth will reduce spending are problematic. They are supported by neither theory nor robust evidence." Because the goal of telehealth is

102 Helen Zhang et al., "Radiation Oncologist Perceptions of Telemedicine from Consultation to Treatment Planning: A Mixed-Methods Study," *International Journal of Radiation Oncology, Biology, Physics* 108, no. 2 (October 1, 2020), 421-429, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7462757/.

103 Tobias Finazzi et al., "'Connection Failed': A Word of Caution on Telemedicine in Radiation Oncology," *International Journal of Radiation Oncology, Biology, Physics* 108, no. 2, 435-437, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7462966/.

104 David Nelson et al., "Mental Health Professionals and Telehealth in a Rural Setting: A Cross Sectional Survey," *BMC Health Services Research* 23, no. 1 (February 2023) 27;23(1):200. https://pmc.ncbi.nlm.nih.gov/articles/PMC9970689/.

105 Jun Watanabe et al., "Telemental Health in Rural Areas: A Systematic Review," *Journal of Rural Medicine* 18, no. 2 (April 2023): 50-54, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10079469/.

to improve access, it will generally lead to increased utilization and "[m]ore use almost always leads to more spending." As a result, "most telehealth services will increase costs."[106]

Yet telehealth could be justified by focusing on value. For example, does it provide cost-effective services that improve health at a reasonable cost?[107] Telehealth can accomplish this by providing health-enhancing services that would not otherwise be obtainable, by substituting telehealth that is higher quality or equal quality but less costly for in-person services, or as a supplement to in-person services, such as telephone check-ins or remote patient monitoring, that provides increased health benefits that exceed added costs.

Telehealth could lower spending if it substitutes for in-person services at lower payment rates or if it reduces the use of downstream services by facilitating more timely access to care and reducing use of more expensive care in the future. It might generate savings by diverting patients from more costly care settings, such as ED visits and in-person specialist visits. Remote patient monitoring could confer savings by improving supervision of patients' chronic and post-acute conditions, averting clinical deterioration, and reducing the need for more serious and costly care such as hospital admissions and readmissions.

Conversely, telehealth could increase spending if telehealth services increase the total number of services delivered and/or increase the use of downstream services and spending.

A systematic review prior to the pandemic by the Agency for Healthcare Research and Quality found little evidence regarding the effect of telehealth on health care costs and utilization.[108] The lack of standardized clinical care settings for telehealth along with the multitude of interventions and technical methods that can be used make conducting research and generalizing findings difficult.[109]

An Australian pre-pandemic literature review of the cost saving potential of various telehealth modalities found that 50 percent of the cost-effectiveness and 32 percent of the cost-utility studies reviewed demonstrated that telehealth decreased costs with equal or improved outcomes. The major source of savings was reduced health-system-funded travel (patient or clinician). In the remaining studies, telehealth increased costs but also resulted in improved care.[110]

106 Lori Uscher-Pines and Ateev Mehrotra, "The Effect of Telehealth on Spending — Reframing the Debate," *Journal of the American Medical Association*, August 21, 2024, https://jamanetwork.com/journals/jama/fullarticle/2822565.

107 Ushcer-Pines and Mehrotra, "The Effect of Telehealth on Spending."

108 Totten et al., *Telehealth*.

109 Tuckson et al., "Telehealth."

110 Centaine L. Snoswell et al., "Determining If Telehealth Can Reduce Health System Costs: Scoping Review," *Journal of Medical Internet Research* 22, no. 10 (October 2020), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7605980/.

MedPAC found that among Medicare Part B FFS enrollees prior to the pandemic, telehealth usage appeared to supplement rather than replace in-person claims. Telehealth users in 2016 used non-telehealth E&M physician services at the same rate as non-telehealth users but added, on average, 1.6 telehealth E&M claims. For the minority of patients who were telehealth users, these additional telehealth claims accounted for 24 percent of all their E&M claims.[111]

A few studies have indicated that telehealth is associated with a reduction in expensive downstream health care utilization, but it was unclear what savings were generated. A year-long study of telehealth-based consultations between 911 patients and Emergency Medical Service physicians, to evaluate and triage the necessity for patient transport to a hospital emergency department via ambulance or other means of transport, found a 6.7 percent absolute reduction in potentially medically unnecessary ED visits and a 50 percent reduction in ambulance transports to the ED. This allowed ambulances to come back into service more quickly and be more available for legitimate transports.[112] A similar study found that telehealth reduced transportation from senior care facilities to EDs by 28 percent.[113] However, neither study quantified savings, and it is not clear if they accounted for the costs of creating and using telehealth systems to screen every patient.

Working-age persons with Blue Cross Blue Shield insurance with one or more telehealth contacts had considerably higher medical costs than those who had in-person visits only during the first four months of the pandemic (March to June 2020). But those with one or more telehealth visits were older, had a greater number of preexisting conditions, and used more services than those with in-person visits only — pharmacy costs per member, for example, were appreciably higher in the telehealth use group than the in-person only group.[114]

A small increase in total outpatient visits (telehealth and in-person) and costs was associated with higher telehealth usage during the second year of the pandemic, 2021-2022. Medicare patients of health systems with the most telehealth use (highest quartile of telehealth use) had an increase of 0.21 total outpatient visits per person per year compared with patients of systems with the lowest telehealth use (lowest quartile), a modest 2.7 percent relative increase. In contrast to the Blue Cross Blue Shield study above, the increase was greatest among patients *without* chronic illness or frailty. Patients in the high telehealth systems had a relative 2.7 percent decrease in ED visits but a relative 2.3 percent increase in hospitalizations. The result was a $248 increase (1.6 percent) in per patient per year spending in the high

111 MedPAC, "Mandated Report: Telehealth Services and the Medicare Program," pp. 487-488.

112 James R. Langabeer et al., "Cost-Benefit Analysis of Telehealth in Pre-Hospital Care," *Journal of Telemedicine and Telecare* 23, no. 8 (September 2017): 747-751, https://pubmed.ncbi.nlm.nih.gov/27913657/.

113 Suzanne M. Gillespie et al., "Reducing Emergency Department Utilization Through Engagement in Telemedicine by Senior Living Communities," *Telemedicine Journal and E-Health* 22, no. 6 (June 2016): 489-496, https://pubmed.ncbi.nlm.nih.gov/26741194/.

114 Weiner et al., "In-Person and Telehealth Ambulatory Contacts."

telehealth systems, driven largely by spending on inpatient admissions and pharmaceuticals. Curiously, while the authors note that patients in the high telehealth systems had greater adherence to prescribed medicines and better care continuity as measured by the share of their visits at their assigned primary care practice and health system, they do not explain why there was a costly increase in hospitalizations in the high telehealth group. Telehealth is usually promoted as a way to deter acute care.[115]

Telehealth can cut patients' costs by eliminating travel to and from appointments.[116] The problem is that instead of saving money by substitution (replacing more expensive visits to physician offices or EDs), telehealth may increase spending by new utilization (increased total number of visits). The introduction in the pre-pandemic period of direct-to-consumer telehealth, providing patient-initiated telephone or video access to a physician in a large group (300,000) of commercially insured patients, resulted in increased utilization and spending. Twelve percent of telehealth visits replaced visits to other providers, but 88 percent represented new utilization.[117] And another study found that patients with initial visits for acute respiratory infections were more likely to obtain downstream, follow-up care within seven days after direct-to-consumer telemedicine visits (10.3 percent) than after in-person visits (5.9 percent). The telehealth group had a very small decrease in ED visits but more subsequent office, urgent care, and telehealth visits.[118]

Other attempts to provide cheaper and more convenient types of care such as retail clinics and urgent care centers as alternatives to more costly ED or physician office visits have also increased overall utilization and costs. About 40 percent of visits to retail clinics substituted for visits to more costly venues. However, the majority of visits (58 percent) were for routine medical care that patients otherwise would not have sought. This increased overall utilization outweighed the savings of patients using cheaper retail clinics instead of expensive office and ED visits, resulting in a 20 percent increase in spending.[119] Similarly, an analysis of claims for 20 million patients in a nationwide insurance plan over 12 years, found a large increase in visits to urgent care centers associated with a small decrease in ED visits: An increase of 37 urgent care center visits was substituted for every decreased lower-acuity ED visit. Even though ED visits were approximately 10 times more expensive than urgent care center visits, the huge

115 Carter H. Nakamoto et al., "The Impact of Telemedicine on Utilization, Spending, and Quality, 2019-22," *Health Affairs Forefront*, April 17, 2024, https://www.healthaffairs.org/content/forefront/ahead-print-telemedine-s-impact-use-spending-and-quality-2019-22.

116 Krupal B. Patel et al., "Estimated Indirect Cost Savings of Using Telehealth Among Nonelderly Patients with Cancer," *JAMA Network Open* 6, no. 1 (2023), https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2800164; see also Snoswell et al., "Determining If Telehealth Can Reduce Health System Costs."

117 J. Scott Ashwood et al., "Direct-to-Consumer Telehealth May Increase Access to Care but Does Not Decrease Spending," *Health Affairs* 36, no. 3 (March 2017): 485-491, https://www.healthaffairs.org/doi/epdf/10.1377/hlthaff.2016.1130.

118 Kathleen Yinran Li et al., "Direct-to-Consumer Telemedicine Visits for Acute Respiratory Infections Linked to More Downstream Visits," *Health Affairs* 40, no. 4 (April 2021): 596-602, https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2020.01741.

119 J. Scott Ashwood et al., "Retail Clinic Visits for Low-Acuity Conditions Increase Utilization and Spending," *Health Affairs* 35, no. 3 (March 2016): 449-455, https://pubmed.ncbi.nlm.nih.gov/26953299/.

increase in urgent care visits more than offset the savings from fewer ED visits. Overall spending per enrollee increased by 45 percent.[120]

The dearth of good evidence makes it difficult to assess the impact of increased telehealth usage during the pandemic on overall utilization and costs. The total number of outpatient visits is likely increased as compared to pre-pandemic levels. And health systems that were high users of telehealth had small increases in total outpatient visits and spending among Medicare beneficiaries as compared with low telehealth users.[121] Telehealth for chronic conditions such as obesity, asthma, hypertension, and diabetes soared in the first six months of the pandemic (March-August 2020). Telehealth for these conditions declined substantially a year later (March-August 2021) but remained elevated over pre-pandemic levels. In-person visits returned to near normal in most areas.[122] Telehealth visits overall remain elevated but have returned to near pre-pandemic levels in many specialties.

The major exception is in mental health, where both telehealth and overall utilization remain elevated.[123] As was noted earlier, overall mental health claims have remained above pre-pandemic levels, increasing 83 percent between 2019 and 2023. The increase is entirely attributable to expanded telehealth claims.[124] Similarly, another study documented that during the acute phase of the pandemic (March 13, 2020, to December 17, 2020), there was a 22.3 percent increase in overall mental health utilization, resulting in a 29.5 percent increase in per capita expenditures. During the post-acute phase (December 18, 2020, to August 31, 2022), mental health visits continued to increase so that by the end of August 2022, overall mental health service utilization was 38.8 percent higher than before the pandemic, and per capita spending was 53.7 percent higher.[125]

The evidentiary problems are illustrated by CBO's recent statement that it needs more information on the impact of telehealth payment rates, substitution effects as the prevalence and disruptive effects of COVID have decreased, and downstream spending for different types of telehealth services in order to make accurate spending estimates of telehealth extension proposals.[126]

120 Bill Wang et al., "Urgent Care Centers Deter Some Emergency Department Visits but, on Net, Increase Spending," *Health Affairs* 40, no. 4 (April 2021): 587-595, https://www.healthaffairs.org/doi/10.1377/hlthaff.2020.01869.

121 Nakamoto et al., "The Impact of Telemedicine."

122 Justin Lo et al., "Outpatient Telehealth Use Soared Early in the COVID-19 Pandemic but Has Since Receded," Peterson-KFF Health System Tracker, February 10, 2022, https://www.healthsystemtracker.org/brief/outpatient-telehealth-use-soared-early-in-the-covid-19-pandemic-but-has-since-receded/.

123 Lo et al., "Telehealth Has Played an Outsized Role." See also Cantor et al., "Availability of Mental Telehealth Services in the US," and Cantor et al., "Telehealth and In-Person Mental Health Service Utilization and Spending."

124 LexisNexis Risk Solutions, "Mental Health Utilization Trends," May 15, 2024, https://risk.lexisnexis.com/insights-resources/research/healthcare-insights-brief-mental-health-utilization-trends.

125 Cantor et al., "Telehealth and In-Person Mental Health Service Utilization and Spending."

126 Cohen, "Medicare's Coverage of Telehealth."

FRAUD, WASTE, AND ABUSE

Fraud, waste, and abuse are significant problems in health care. In fiscal year 2023, improper payments — payments that should not have been made or were made in the incorrect amount — totaled $236 billion across all federal agencies. Three quarters represented overpayments. Medicare ($51.1 billion, or 22 percent of improper payments) and Medicaid ($50.3 billion, or 21 percent) were the two largest contributors to the total.[127] Not all improper payments involve fraud. Fraudulent payments are a subset of improper payments that are obtained through intentional misrepresentations.[128] Nonetheless, as much as 10 percent of total U.S. health care expenditures is lost annually due to fraud.[129]

Telehealth policies during the pandemic led to increased access, increased utilization of telehealth services, and increased fraud, waste, and abuse in telehealth services.[130] The Department of Justice, for example, charged 36 defendants in 13 federal districts across the United States for more than a billion dollars in alleged fraudulent telemedicine.[131] But there are not yet studies that indicate that telehealth is uniquely vulnerable to fraud, waste, and abuse or that these occur more commonly in telehealth than in in-person services. The number of health care fraud offenders was essentially stable between 2018 and 2022.[132]

An HHS Inspector General analysis found that out of 742,000 providers who billed Medicare for telehealth services during the first pandemic year, 1,714 submitted billing with at least one of seven indicators associated with a higher risk of potential fraud, waste, and abuse. This suspect subset of providers had billed Medicare for telehealth services for approximately half a million beneficiaries and received more than $128 million in Medicare FFS payments (amounts paid to MA providers were not reported to Medicare). More than half of these providers were part of a medical practice that had at least one other provider whose billing posed a high risk, suggesting that certain practices encourage questionable billing procedures. But there was no follow-up investigation to determine if this small percentage

127 GAO, *Improper Payments: Information on Agencies' Fiscal Year 2023 Estimates*, March 26, 2024, https://www.gao.gov/products/gao-24-106927.

128 GAO, *Improper Payments and Fraud: How They Are Related but Different*, December 7, 2023, https://www.gao.gov/products/gao-24-106608.

129 EOS Intelligence, "A Ripple Effect of Healthcare Fraud in the USA," April 25, 2019, https://www.eos-intelligence.com/perspectives/life-sciences/a-ripple-effect-of-healthcare-fraud-in-the-usa/; see also National Health Care Anti-Fraud Association, "The Challenge of Health Care Fraud," https://www.nhcaa.org/tools-insights/about-health-care-fraud/the-challenge-of-health-care-fraud/.

130 Healthcare Fraud Prevention Partnership, *Exploring Fraud, Waste, and Abuse Within Telehealth*, May 2023, https://www.cms.gov/files/document/hfpp-white-paper-exploring-fraud-waste-abuse-within-telehealth.pdf-0.

131 U.S. Department of Justice, Office of Public Affairs, "Justice Department Charges Dozens for $1.2 Billion in Health Care Fraud," press release, July 20, 2022, https://www.justice.gov/opa/pr/justice-department-charges-dozens-12-billion-health-care-fraud.

132 U.S. Sentencing Commission, "Quick Facts: Health Care Fraud Offenses," https://www.ussc.gov/sites/default/files/pdf/research-and-publications/quick-facts/Health_Care_Fraud_FY22.pdf.

(0.2 percent) of telehealth providers was actually engaged in wrongdoing. And the report made no comparison to the level of fraud in in-person services.[133]

The closest the HHS Inspector General came to comparing telehealth and non-telehealth services came in an audit of Medicare FFS psychotherapy services during the first pandemic year[134] It "determined that 57 percent of the total amount that Medicare paid for psychotherapy services provided during our audit period was for services provided via telehealth (compared with less than 1 percent in calendar year 2019)."[135] It estimated that of the approximately $1 billion that Medicare paid for psychotherapy services during that year, providers received $580 million in "improper payments," with $348 million (60 percent) for telehealth services and $232 million (40 percent) for non-telehealth services. In other words, the level of improper payments was roughly the same in the telehealth and in-person billings. Nearly all the improper payments uncovered by the audit were not outright fraud. They were primarily documentation errors such as failure to record the time spent providing the service, incomplete or missing treatment plans, and missing signatures.

The Healthcare Fraud Prevention Partnership (HFPP) — a public-private partnership that is congressionally mandated and funded under the auspices of the CMS to identify and prevent fraud, waste, and abuse in health care — reported that the largest amount of telehealth fraud, waste, and abuse occurred through incorrect coding and billing practices such as billing for services that were unnecessary or never rendered, upcoding to a higher level of service than rendered, or routinely billing at the most expensive level of services. HFPP also found an uptick in billing for "Improbable Days" — billing for more than 24 hours in a single day — in April 2020 and early pandemic months. But this mirrored the increase in total provider telehealth days early in the pandemic and formed just 0.05 percent of total telehealth. Unfortunately, HFPP did not compare the rates of telehealth fraud to in-person fraud. Their publication never suggested that telehealth fraud was more common.[136]

WHAT SHOULD CONGRESS DO?

Congressional policymakers should carefully consider the experience with telehealth during and after the pandemic. While current proposals in Congress are specifically aimed at extending telehealth flexibilities for Medicare, they have broader policy implications. Private

133 HHS, Office of Inspector General, *Medicare Telehealth Services During the First Year of the Pandemic: Program Integrity Risks*, September 2022, https://oig.hhs.gov/oei/reports/OEI-02-20-00720.pdf.

134 HHS, Office of Inspector General, *Medicare Improperly Paid Providers for Some Psychotherapy Services, Including Those Provided via Telehealth, During the First Year of the COVID-19 Public Health Emergency*, May 2023, https://oig.hhs.gov/documents/audit/9636/A-09-21-03021-Complete%20Report.pdf.

135 HHS, Office of Inspector General, *Medicare Improperly Paid Providers*, footnote 70.

136 Healthcare Fraud Prevention Partnership, *Exploring Fraud, Waste, and Abuse Within Telehealth*.

insurers and state Medicaid programs often follow Medicare's lead on coverage policies. Extending Medicare telehealth flexibilities will likely influence these other payers' coverage decisions.

Overall telehealth utilization remains above pre-pandemic levels but in many medical areas is close to pre-pandemic levels. The fact that, outside of mental and behavioral health (including for substance use disorders), telehealth has not been heavily utilized during a period of unprecedented regulatory permissiveness suggests that patients and providers do not find telehealth as attractive as many policymakers had predicted.

There appears to be a small number of patient users who use large amounts of telehealth. Patients who utilized telehealth and continued to use it, generated more claims per person as time went on, particularly for mental health services. Yet, even at the peak of the pandemic, telehealth never surpassed in-person services. And despite the expectation that telehealth would be particularly important in rural areas and across state lines, telehealth, with the possible exception of mental health and substance abuse treatments, was more heavily utilized in urban areas and rarely for interstate services.

Nevertheless, telehealth played an important role as an alternative source of care in the opening months of the pandemic. It will likely be an important safety valve in future emergencies. Moreover, telehealth capabilities will likely evolve and improve in various applications, such as the remote capture of important medical data. Preserving telehealth will also be important for providing access to highly specialized services that are available in just a few places.

Telehealth appears best suited to providing services in areas where physical examination is not needed or is less important. Mental and behavioral health services are particularly well suited to telehealth for this reason. State Medicaid programs already provided mental and behavioral telehealth coverage and now Medicare does too.

The quality of telehealth care in other areas is less clear. Determining the quality and cost-effectiveness of telehealth in these other areas as either a substitute or an adjunct to in-person services is critical to informing future telehealth policy. Payment parity, for example, may impair telehealth's cost effectiveness and influence adoption among direct-to-consumer telehealth providers.

GAO recommended in September 2022 that CMS comprehensively assess the quality of telehealth services. GAO reports that CMS "disagreed with this recommendation and as of March 2024, had not taken action to implement it. We maintain the importance of

comprehensively assessing the quality of telehealth services to ensure that services are medically necessary, equitable, and lead to improved health outcomes."[137] CMS did not state a rationale for its disagreement with GAO, but CMS should implement GAO's sensible recommendation or, if it continues to refuse, be directed by Congress to do so.

The large and persistent increased utilization of telehealth for mental health care has led to an overall increase in utilization of and increased spending on mental health services. Utilization is up in other areas as well although to smaller extents. Whether this represents costly overutilization or is meeting previously unmet needs while providing health-enhancing services at a reasonable cost, must be determined.

Congress has already made many of the measures taken to facilitate telehealth in Medicare permanent for mental and behavioral health services — although it should be prepared to revisit permanent authorization if it proves to be wasteful overutilization. Some other flexibilities ended when the PHE ended, and others will expire at the end of 2024. There are currently multiple proposals to extend additional telehealth flexibilities with Medicare for two years or even permanently.

Congress should not make telehealth flexibilities outside of mental health permanent until there are answers to the important questions raised above. The risk of overutilization, increased costs, and decreased quality of care is too high. Private insurers who bear the risk of overutilization and increased costs will remain free to provide wide access to telehealth and could provide important information on telehealth quality and costs. This includes MA plans which had greater ability to provide telehealth services even before pandemic-era flexibilities.

Congress should consider temporary extensions in FFS Medicare for non-mental telehealth, but only if they are coupled with requirements to conduct research into the quality and cost effectiveness of telehealth. Until the evidence is in, patients and their providers should have the freedom to choose when and if to utilize telehealth services — provided there are strict controls to limit fraud, waste, and abuse in government programs.

137 Gene L. Dodaro, Comptroller General of the United States, *Medicare and Medicaid: Additional Actions Needed to Enhance Program Integrity and Save Billions*, testimony before the Subcommittee on Oversight and Investigations, Energy and Commerce Committee, House of Representatives, April 16, 2024, p. 23, https://www.gao.gov/assets/gao-24-107487.pdf.