Looking Ahead:
What Should the Telemedicine Regulatory and Payment Landscape Look Like After the Pandemic?

Statement by
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Before the Committee on Ways and Means, Subcommittee on Health
United States House of Representatives
April 28th, 2021

Thank you, Chairman Doggett, Ranking Member Nunes, and distinguished members of the subcommittee; I am honored to have been invited to testify before you on a topic of critical importance to Americans and their health.

My name is Dr. Ateev Mehrotra. I am a physician at the Beth Israel Deaconess Medical Center and an Associate Professor at Harvard Medical School. My research focuses on the impact of telemedicine. Has telemedicine improved people's ability to access care, in particular in rural communities? Has it improved the quality of care they receive? And what impact is telemedicine having on health care spending? In my research I have studied a wide range of clinical applications of telemedicine including mental illness, substance use disorders, stroke, contraception, and acute respiratory illness. I do this research because I hope telemedicine can help address the common complaint I hear as a physician, and what I am sure you hear from your constituents: that people across this nation often have difficulty accessing care in a timely manner.

CHANGES IN TELEMEDICINE USE DURING THE PANDEMIC [i]

The COVID-19 pandemic has driven a dramatic uptake of telemedicine. After decades of telemedicine being touted as the future of medicine, it has suddenly become commonplace. This growth has been in part facilitated by sweeping changes to regulations and payment across health care- Medicare, Medicaid, private insurers, and states. Telemedicine groups,[1] employer coalitions,[2] physicians,[3] as well as policymakers[4,5] have lauded these changes and called for some or all of them to be made permanent.[6] Should they be?

Before the pandemic there was a confusing labyrinth of payment and regulations for telemedicine. A provider who wanted to use telemedicine had to consider: (1) Medicare payment policy as well as numerous federal agency regulations; (2) state policy such as telemedicine parity laws, licensing board regulations, and state-specific Medicaid rules; and (3) private insurance rules and regulations. Despite this confusing landscape, the number of telemedicine video visits was steadily growing by roughly 30 to 50 percent per year.[7] In some rural communities, telemedicine was a common way Americans received care for mental illness.[8] However, outside rural areas, telemedicine was used for only a small fraction of visits.

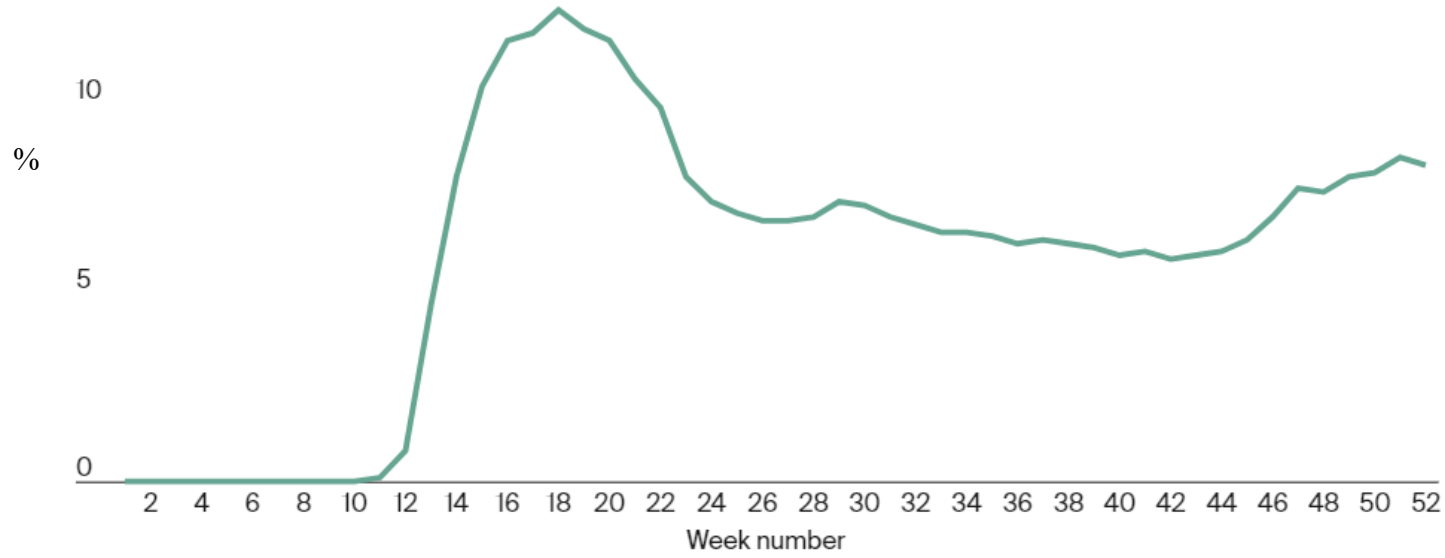
Then came COVID-19. Telemedicine is ideally suited to address some of the fundamental challenges posed by the pandemic.[9] For patients with COVID-19 or concerned that they have the virus, telemedicine can be used by providers to

[i] Much of the content in this testimony is adapted from a Commonwealth Fund Issue Brief I wrote with colleagues Bill Wang and Gregory Snyder. https://www.commonwealthfund.org/publications/issue-briefs/2020/aug/telemedicine-post-pandemic-regulation

safely answer questions and make triage decisions. For patients without COVID-19, telemedicine can be used to treat chronic illness or other non-virus related care without putting the patient or provider at risk. Without telemedicine, some patients may defer necessary care due to fear of acquiring the virus at the clinic. Because these benefits were widely recognized, Medicare, states, and private insurers enacted a series of changes to encourage use of telemedicine.[10]

There was an immediate response by providers. In mid-March 2020 there was a sudden and sharp rise in the use of telemedicine (Exhibit 1). The pace of telemedicine adoption was dizzying; changes that might have taken decades occurred within weeks. Since the start of the pandemic, telemedicine has been key for maintaining American's access to their providers.[11]

Exhibit 1: *Number of telemedicine visits per week in 2020 as a percentage of the number of visits seen per week pre-pandemic*



SOURCE: Data come from Phreesia, a health information technology company, which works with 1,600 provider organizations representing more than 50,000 providers across all 50 states. Percentage represent the number of telemedicine visits in a given week divided by the number of all visits (telemedicine and in-person) in the baseline week of March 1st. More details are available here.[12]

THE KEY TENSION IN TELEMEDICINE POLICY

Speaking about the changes to telemedicine policy, former CMS Administrator Seema Verma said, 'I can't imagine going back.'[13] This idea has been echoed by Health and Human Services Secretary Xavier Becerra who noted, "[I] wholeheartedly believe that we're going to be doing an expansion of telehealth…Covid has taught us so much … If we don't learn from Covid how telehealth can help save lives, then we're in trouble."[14]

The question is what temporary changes should be made permanent and which should lapse. Given there are few regulations and payment policies specific to in-person visits, why do we even need telemedicine-specific policies? The concern is that in some circumstances telemedicine is *too convenient* and may encourage excessive use of care. For example, after an in-person visit, a physician could easily add a quick follow-up telemedicine visit that increases costs without any substantial improvement in health. This logic underlies why the Congressional Budget Office and others believe that broad telemedicine expansions will substantially increase health care spending.[15] In other words, telemedicine's ability to make care convenient and more accessible — the key to its enormous potential to improve the

health of many patients — may also be its Achilles' heel. The policy dilemma is how to expand telemedicine coverage in a manner that encourages high value uses of telemedicine while not substantially increasing spending.

Though the pandemic may still be with us for some time, the decision on post-pandemic telemedicine policy is urgent. After the initial surge of uptake, many physicians and health systems have moved away from telemedicine and returned to in-person visits — driven in part by uncertainty over telemedicine's long-term sustainability.[16] (Exhibit 1) To implement video telemedicine effectively in the long term, practices need to buy the right technology, invest in staff training, change clinical schedules, and help their patients obtain and navigate the necessary technology. Practices will only make this investment of time and money if they can recoup the investment over many years.

TWO OVERARCHING PRINCIPLES

What are the key principles in telemedicine policy? The first is that we should not try and formulate a single policy that covers all forms of telemedicine and patients — just as there can be no single policy of coverage all prescription drugs. In the same way different drugs yield different outcomes, telemedicine's benefits will vary across different clinical conditions, different forms of telemedicine, and different types of providers. For example, telemedicine for treatment of stroke could save lives. On the other hand, telemedicine visits for the common cold have little clinical benefit.

While much of the focus of debate on telemedicine policy is on video visits, the pandemic has led to a surge in other forms of telemedicine that have received less attention such as asynchronous visits (eVisits), consultations between providers (eConsults), remote patient monitoring, and simple messages from patients asking for advice. Across over 300 health systems that use the Epic electronic health record, there has been a ~40% increase during the pandemic in the number of messages that patients are submitting per day via patient portals asking for medical advice.[17]

Another important distinction in this debate is telemedicine provided by existing "brick and mortar" providers vs. direct-to-consumer telemedicine-only providers. While telemedicine-only providers may improve access for Americans, they also raise new concerns. Because they do not have to pay for office space and equipment, they have lower overhead costs than brick and mortar providers. Should that mean they are reimbursed differently? Also, prior to the pandemic, visits to direct-to-consumer telemedicine providers were increasing much more rapidly and there is concern that these companies may be more likely to lead to overuse of care.

The second principle is that policymakers should formulate their telemedicine policy decisions through the lens of value. In the case of telemedicine, value is the dollars per improvement in care outcomes and access. Improvements in access could decrease travel time, disruption to lives, and the need for childcare. Under the value framework, the questions are: What are the high-value applications of telemedicine? And how can policies encourage higher-value applications of telemedicine and discourage lower-value applications of telemedicine?

Value is dictated not only by the condition treated (for example, common cold vs. stroke), but also by the patient who is receiving care. Consider two patients with depression who can participate in a telemedicine visit. One lives in rural Alaska with no access to local providers and with substantial transportation barriers. Telemedicine could be the only way he can access care and improve his condition. The second patient lives in Anchorage, her depression is well controlled, she sees her psychiatrist every month, and she is on the right medications. There is minimal value in an additional telemedicine visit every two weeks for her depression. As described below, many telemedicine policies try and target the patient populations most likely to benefit from improved access.

Components of Value

In the context of telemedicine, value encompasses quality, costs, and access. I highlight important factors in each of these domains that policymakers should consider.

Quality. To date, most telemedicine research has focused on the equivalency of in-person visits and telemedicine visits. In general, randomized trials have supported the idea that telemedicine is of equal quality. For example, one trial compared telemedicine to in-person care and found they are equivalent using validated scales of depression severity.[18] There are also situations where increasing access to telemedicine can improve health. We have found that across over 600 hospitals, largely in smaller or rural communities, the introduction of telemedicine for the treatment of stroke improved quality and saved lives.[19]

However, my concern is that this research has been used to support the idea that *all* forms of telemedicine are safe and therefore should be reimbursed. Telemedicine video visits are limited by the inability to complete a full physical exam and obtain ancillary testing.[20] It is impossible to reliably diagnose an infant with an ear infection without looking at her ear drum; not surprisingly, telemedicine visits for ear infection result in overuse of antibiotics.[21] Though data comparing phone visits to video visits are limited, there are reasonable concerns that in many clinical situations the lack of visual input will result in inferior care through a phone visit. There are also concerns that telemedicine makes fraud easier to commit.[22,23]

Quality of telemedicine also depends on whether equipment is available to the patient. To be most effective, telemedicine often requires the addition of devices such as home oxygen monitors, electrocardiograms, and digital stethoscopes. For example, a video of a child's ear drum obtained by the parent via a video-enabled otoscope may allow a physician to accurately diagnose an ear infection. In "hospital-at-home" programs, telemedicine enhanced with home monitoring equipment is essential to enabling physicians to manage serious conditions such as pneumonia and heart failure within the home.[24]

Spending. Three factors drive telemedicine's impact on spending from the perspective of an insurance plan or Medicare.[25] The first is the proportion of telehealth encounters that are substitutive versus additive. Spending is reduced if lower-cost telemedicine visits substitute for costlier in-person ones. However, the convenience of telemedicine may induce new use. In previous work, we estimated that for telemedicine for treatment of low-acuity conditions, such as sinusitis, roughly 90 percent of visits are additive and only 10 percent are substitutive; in net, telemedicine for these conditions increased spending.[26]

The balance of substitution versus additive care will be driven primarily by the clinical condition. Conditions such as rashes and common colds are common, and most patients with these conditions do not get care. These are the conditions most prone to additive care. In contrast, acute conditions such as stroke or heart attacks, for which most already receive treatment, are less prone to increased utilization. Another driver of the balance between substitutive versus additive is how is telemedicine being used. Visits are more likely to be additive if telemedicine is used as a triage tool and if most patients still get a follow-up in-person visit — or if providers begin billing for follow-up phone visits, which previously they did not bill for.

The second consideration is the relative cost difference between a telemedicine visit and an equivalent in-person visit. If telehealth is reimbursed at a much lower rate than an equivalent in-person visit, increased use of care may not contribute to an overall increase in spending. This relative cost difference is particularly relevant to the ongoing debate about parity laws. Many states have passed laws mandating that telemedicine visits be paid at the same level as equivalent in-person visits. Although payment parity may spur more providers to adopt telemedicine, parity will lead to increased spending.

The third factor is downstream care. Telemedicine may decrease spending if it is deployed in settings where there is a costly and preventable downstream event, such as an emergency room visit, inpatient admission, or specialty referral. In these areas, telemedicine may reduce spending even if upfront use increases. For example, among older, sicker nursing

home residents, after-hours telehealth coverage may generate substantial savings by deterring costly emergency department transfers and inpatient admissions.[27]

Access. One erroneous belief is that if telemedicine is offered to the full population, it will largely be used by patients with difficulty accessing care. In fact, it may be the opposite. For example, when a company offered telemedicine to all its employees, those who used telemedicine for lower-acuity conditions tended to be younger than the rest of the population and live in an urban community with an ample supply of providers.[28] Older adults, the poor, communities of color, and patients who visit a community health center are all less likely to have the technology necessary to conduct a video visit.[29] Indeed, in some settings telemedicine may actually increase disparities in care.

A second access consideration is the *form* of telemedicine being used. Video-based telemedicine visits are harder to use and were relatively rare before the pandemic. In contrast, it was relatively common for patients to message with their providers via a patient portal.[30] Though not typically reimbursed before the pandemic, telephone calls, now called audio-only telemedicine visits, were obviously another common way Americans received care.

POTENTIAL POLICY LEVERS TO ENCOURAGE HIGH-VALUE AND DISCOURAGE LOW-VALUE USES OF TELEMEDICINE

Policymakers face a difficult challenge in designing an optimal payment and regulatory policy for telemedicine. I outline the different polices or the "tool kit" available.

One strategy is to move away from fee-for-service to alternative payment models such as full or partial capitation and bundled payments. These payment models put providers at financial risk if spending is too high. The assumption is that providers will only use telemedicine when it is cost-effective and therefore will adopt higher-value telemedicine applications. This assumption has driven Medicare's policy to allow accountable care organizations more freedom in using telemedicine.

Using capitated models is particularly important given the various forms of telemedicine available. For example, "virtual endocrinology" providers have introduced models in which patients are continuously monitored using internet-connected continuous glucose monitors and smart phone apps. Communication with patients on issues such as the adjustment of insulin occurs through a broad continuum of modalities from automated feedback on apps to glucometers and text messages. These other forms of telemedicine complicate the conversation about payment and regulations. While it seems feasible for Medicare to pay for a video visit or phone call, it is hard to envision Medicare paying for each message, portal exchange, or use of a smart phone app. Paying for each of these forms of telemedicine on a fee-for-service basis may substantially increase administrative costs. This is due to increased number of bills submitted and, more importantly, due to the complex requirements for when each form of telemedicine can be billed and to document that those requirements were met.

A second strategy is to leverage benefit design. Out-of-pocket costs in the form of copayments or coinsurance may deter low-value care. Introducing "time costs," or inconvenience, can also deter low-value care. For example, prior to the pandemic, Medicare required telemedicine visits to be hosted at a local clinic or other hosting provider, which places a time constraint on patients.

A third strategy is to limit coverage to certain types of care. Coverage decisions can be made based on the type of provider (primary care vs. specialist), the medical condition treated, or the patient population (rural patients, people with a disability, or those with a compromised immune system). Before the pandemic, there were coverage limitations across all these dimensions. Medicare has allowed physicians, typically primary care providers, to use telemedicine for care transitions.[31] The SUPPORT Act, FAST Act, and the Consolidated Appropriations Act of 2020, meanwhile, explicitly

expanded use of telemedicine for treatment of substance use disorder, acute strokes, and behavioral health conditions respectively. And Medicare has typically paid only for telemedicine visits in rural communities. Underlying these coverage choices is the hope that the resulting telemedicine visits will be of higher value.

A fourth strategy lies in setting payment rates for a telemedicine visit relative to an in-person visit. Telemedicine payment rates have been set below, equivalent to, and substantially above those for in-person visits. There are concerns that if payment rates for telemedicine visits are lower that an in-person visit then providers will abandon telemedicine.[32] However, I believe a provider's choice is driven by the relative margin (payment rate minus costs of delivering a visit) and how this differs between in-person versus telemedicine visits. Using this framework, telephone visits should be paid substantively less because phone visits are less costly to deliver.

A fifth strategy category is regulation. For example, there may be a policy that patients and providers have an initial in-person visit before offering telemedicine. In the Consolidated Appropriations Act of 2020, the Congress required an in-person visit before a provider could provide a telemedicine visit for a behavioral visit. This could, in theory, deter fraud and encourage greater continuity of care. It will also discourage use of direct-to-consumer telemedicine-only providers. However, the concern is that this will limit access for patients as they will not be able to access specialty care from providers outside their community. Other telemedicine regulations include limiting the number of telemedicine visits during a given time period; requiring providers to obtain informed consent or have a provider ("telepresenter") with the patient during the visit; limiting software to those that are HIPAA compliant; and requiring providers to have special telemedicine training.

Possibly the most important regulation is licensure and the requirement that all telemedicine providers (physicians, nurse practitioners, social workers) be licensed in the state where the patient is located. This creates a substantial barrier for both patients and providers. At times, a state-based system simply bucks common sense. I have heard stories of patients driving several miles to cross a state border to attend a primary care telemedicine visit from their car. These patients couldn't virtually attend the same appointment from home because their physician wasn't licensed in their state of residence. I do not believe state licensure encourages high-value telemedicine use.

RECOMMENDATIONS

How can we balance the goals of encouraging high-value telemedicine with addressing concerns about low-value telemedicine use and spending?

There is obviously no single optimal policy for telemedicine and, in some cases, we have little data to inform the policy decision. Unfortunately, I do not believe we can extrapolate from the care patterns seen in the pandemic to the care patterns we will observe after the pandemic. With those important caveats, I recommend the following:

1. Whenever possible encourage use of alternative payment models. Such payment models give providers the flexibility to use the full range of telemedicine tools (portal messages, video visit, eVisits, phone call, eConsults, telemonitoring) and in-person visits that are best suited for an individual patient and clinical scenario. Paying for just video visits may deter more innovative models such as the virtual endocrinology providers described above. Insurers do not have to address the complexity of how much each such encounter should be paid, and it can spur efficiency in care. Medicare has allowed telemedicine to be used under most of its alternative models, but the keys are to expand how many providers are paid under such a model and ensure the rules for alternative payment models facilitate telemedicine use. I am particularly enthusiastic about capitated payment models for primary care providers.
2. Make permanent nearly all regulatory waivers introduced during the pandemic, including requirements that providers: a) have an in-person visit before a telemedicine visit; b) host telemedicine visits at a clinical facility; c) obtain informed consent; and d) obtain special training. The prior regulatory framework across federal, state, and individual

plans added tremendous complexity. Despite the laudable reasons underlying these regulations, I believe they are both relatively blunt and ineffective. I have also called for physician licensure reciprocity such that a physician licensed in any state can provide care to a Medicare enrollee.[33]

3. Cover *all forms* of telemedicine for high-risk patient populations where access is likely difficult. Coverage can be expanded beyond rural communities to patients who are cared for in federally qualified health centers, community mental health centers, nursing homes, and for people who have substantial physical or mental disability.
4. For the rest of the population, cover telemedicine only where there is evidence of value or there is compelling need. Such selective coverage decisions could be either by condition or by provider. For example, I agree with the recent decision to permanently expand access to behavioral health in the Medicare program. To encourage continuity and financially support primary care, Medicare could implement policies by which a designated primary care provider will be paid for any form of telemedicine visit.
5. Given the uncertainty on the clinical and financial impact of telemedicine expansions, I believe the focus on short-term expansions versus permanent changes. Short-term expansions will facilitate adjustments in policy.
6. Pay for telephone calls (audio-only telemedicine visits) for only a time-limited period such as two years. While I recognize telephone calls may increase access for disadvantaged populations, I am concerned about a future with a two-tiered system where the poor and disadvantaged have phone calls and the wealthy have video visits. My hope would be that limiting payment for a short period will spur investment in broadband, technology, and training so that *all* Americans can have the capacity to have a video visit.
7. Pay for telemedicine visits at a lower rate than for in-person visits and therefore avoid telemedicine parity. While I recognize that implementing telemedicine does require significant investment in the short term, in the longer term a providers' marginal costs for telemedicine visits should be lower than for in-person visits, and reimbursement should reflect those lower costs. Lower payment rates could also spur more competition through new, more-efficient providers and may deter low-value uses of telemedicine.
8. Encourage consistency across insurers. If Medicare covers telemedicine for opioid-use disorder but private insurers or Medicaid do not, then substance use providers will be less likely to embrace telemedicine. For example, CMS can require Medicare Advantage plans to echo some of its coverage decisions in the fee-for-service program.

I acknowledge that the coverage decisions and payment choices recommended are by no means perfect. They will deter some effective forms of telemedicine and do add administrative burden. However, I believe they represent the best way to encourage high-value applications of telemedicine and encourage a necessary transformation of our health care system.

Many of my recommendations are consistent with the recommendations of others. For example, MedPAC has also advocated for removal of many regulatory requirements, short-term expansions of telemedicine for one to two years, selective expansion based on clinical benefit, and paying for telemedicine at a lower rate than in-person visits. Several states have also expanded telemedicine for only select clinical conditions and implemented only short-term reimbursement expansions.[34]

Again, let me thank Chairman Doggett, Ranking Member Nunes, and members of the subcommittee for allowing me to appear before you today to discuss this important issue. I would be happy to take your questions.

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