Title

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Publication Date

2023-04-24

DOI

10.1007/s11606-023-08190-8

Peer reviewed

Telehealth Policy, Practice, and Education: a Position Statement of the Society of General Internal Medicine

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ABSTRACT

Telehealth services, specifically telemedicine audio-video and audio-only patient encounters, expanded dramatically during the COVID-19 pandemic through temporary waivers and flexibilities tied to the public health emergency. Early studies demonstrate significant potential to advance the quintuple aim (patient experience, health outcomes, cost, clinician well-being, and equity). Supported well, telemedicine can particularly improve patient satisfaction, health outcomes, and equity. Implemented poorly, telemedicine can facilitate unsafe care, worsen disparities, and waste resources. Without further action from lawmakers and agencies, payment will end for many telemedicine services currently used by millions of Americans at the end of 2024. Policymakers, health systems, clinicians, and educators must decide how to support, implement, and sustain telemedicine, and long-term studies and clinical practice guidelines are emerging to provide direction. In this position statement, we use clinical vignettes to review relevant literature and highlight where key actions are needed. These include areas where telemedicine must be expanded (e.g., to support chronic disease management) and where guidelines are needed (e.g., to prevent inequitable offering of telemedicine services and prevent unsafe or low-value care). We provide policy, clinical practice, and education recommendations for telemedicine on behalf of the Society of General Internal Medicine. Policy recommendations include ending geographic and site restrictions, expanding the definition of telemedicine to include audio-only services, establishing appropriate telemedicine service codes, and expanding broadband access to all Americans. Clinical practice recommendations include ensuring appropriate telemedicine use (for limited acute care situations or in conjunction with in-person services to extend longitudinal care relationships), that the choice of modality be done through patient-clinician shared decision-making, and that health systems design telemedicine services through community partnerships to ensure equitable implementation. Education recommendations include developing telemedicine-specific educational strategies for trainees that align with accreditation body competencies and providing educators with protected time and faculty development resources.

KEY WORDS: medicare; telehealth; payment; access

Elaine C. Khoong and Stacie Schmidt are co-senior authors.

Prior Presentations: None.

Received January 24, 2023
Accepted March 23, 2023
Published online: 24 April 2023

J Gen Intern Med
DOI: 10.1007/s11606-023-08190-8

INTRODUCTION

Telehealth services expanded tremendously during the COVID-19 pandemic, when the Centers for Medicare and Medicaid Services (CMS) approved temporary waivers and flexibilities, enabling delivery of telemedicine (synchronous audio-video, or audio-only encounters) to patients in their homes, and outside of rural and geographic professional shortage areas. These waivers, initially tied to the Public Health Emergency (PHE), also allowed audio-only reimbursement and full payment parity for audio-video visits.[1] The Congress has passed legislation to temporarily extend some flexibilities through 2024.[2] However, permanent telehealth policy has not been established.

The impact of expanded telemedicine can be analyzed using the quintuple aim (patient experience, health outcomes, cost, clinician well-being, and equity).[3–5] Most studies suggest telemedicine has improved care experiences. Providers report high satisfaction with telemedicine,[6,7] and patients regardless of sociodemographic traits also have high satisfaction with telemedicine.[6,8–11] Early systematic reviews for specific scenarios found that telemedicine resulted in similar outcomes and cost to in-person care.[12–14] Multiple studies have reported higher appointment adherence with telemedicine, suggesting potential reduced costs associated with waste.[13,15,16] However, long-term data on clinical outcomes, costs, and equity remain unclear. These outcomes will depend on reimbursement policies and implementation strategies that influence how, when, and to whom telemedicine is delivered.

If properly supported, telemedicine can be a powerful tool that advances the quintuple aim. Without thoughtful policies, implementation strategies, and training, telemedicine can inadvertently facilitate less equitable, low-quality care. The PHE has provided an environment to identify policies that should be extended and areas where guidelines and infrastructure are needed.

The Society of General Internal Medicine (SGIM) is a member-based professional association of more than 3000 general internists committed to expanding access to healthcare, advancing equity, improving medical training, and creating a just system of care where all people can achieve optimal health. Our members practice general internal medicine and medical specialties in various settings, including the Veterans Health Administration (VA) where telemedicine has a longstanding footprint, urban safety-net clinics where telemedicine was first introduced during the PHE, and academic clinics where medical students and residents learn to deliver virtual care. Telemedicine utilization during the pandemic was highest among cognitive specialties including internal medicine, pediatrics, family medicine, and psychiatry.[7,17,18] For any field in which longitudinal relationships, counseling, shared decision-making, and chronic disease management are paramount, telemedicine is a critical tool that must be preserved.

In this position statement, we share case studies of patient-clinician telemedicine interactions in the ambulatory setting, identifying relevant literature to date and highlighting where key telehealth policies are needed. We provide recommendations on behalf of SGIM in three domains: policy, clinical practice, and education.

This position statement was developed by the SGIM Clinical Practice Committee, Health Policy Committee, and Education Committee, and was approved by SGIM Council on January 6th, 2023.

TELEMEDICINE THUS FAR: CASES AND DATA

Case 1: Access Across the Spectrum of Care

Mr. T is a 55 year-old man with diabetes, hypertension and prior stroke who has missed three in-person appointments. His primary care physician (PCP) offers an audio-video visit, at which point Mr. T reports that he has had multiple falls and is having trouble getting to his diabetes follow-up appointments. The PCP conducts a detailed medication reconciliation as Mr. T's wife displays bottles and discards multiple duplicates. During subsequent visits, the clinic's pharmacist reviews Mr. T's home blood sugar readings over the phone and titrates his insulin. An occupational therapist then conducts a virtual home safety assessment and recommends mobility aides for safe ambulation. Finally, the clinic's social worker arranges transportation so that Mr. T can attend a face-to-face appointment with the PCP, including a diabetic foot exam and immunizations.

This case highlights how telemedicine can benefit patients with complicated medication regimens, uncontrolled chronic diseases, and mobility or transportation challenges.

Telemedicine facilitates management of chronic diseases (e.g., hypertension, diabetes, heart failure) which require frequent visits and team-based care. Not all visits need in-person evaluation, especially if the patient conducts home monitoring (e.g., blood pressure, blood glucose, weight) which is a guideline-recommended component of high-quality care. Studies demonstrate improved quality of care for patients with diabetes who had at least one telemedicine visit compared to those with in-person only.[8,19]

Additionally, telemedicine visits are well-suited for detailed "brown bag" medication reconciliation.[20] Audio-video visits allow clinicians to visualize medications and how patients manage, store, and organize them in their home environment. Transitions of care are particularly risky; studies estimate that more than half of patients have a medication error at hospital discharge and nearly 1 in 5 experience an adverse drug event.[21] One study found that post-discharge telemedicine visits have higher completion rates than

in-person, and reduce inequities in attendance between black and white patients.[15]

Finally, in-person visits can be difficult for patients with mobility or socioeconomic challenges who lack reliable transportation. While telemedicine was available for rural patients prior to COVID-19, mobility and transportation challenges exist for patients outside of rural areas, who also benefit from telemedicine access.

Case 2: Telemedicine for Behavioral Health

Ms. R is a 32 year-old woman with an opioid use disorder. After brief incarceration for drug possession charges, she seeks treatment at a nearby recovery center. A counselor recommends medication therapy, but no physicians within the geographical area provide the necessary services. Furthermore, the recovery center has connected her to a vocational program requiring substantial time, so she is unable to travel to another area for treatment. She schedules an audio-video visit with a telemedicine based opioid therapy (TBOT) physician, who prescribes home buprenorphine induction and emails written instructions. The program follows her closely via regular audio-video visits when she is at her transitional housing center, and phone visits when she is at her vocational training program and unable to access the internet.

Treatment for substance use disorders (SUDs), with challenges related to inadequate access to knowledgeable clinicians or need for frequent monitoring, has benefited immensely from the expansion of telemedicine. The opioid epidemic worsened during COVID-19.[22] Telemedicine is increasingly recognized as a vital component of the response and is associated with improved outcomes, including higher retention in care and lower likelihood of overdose.[23] Prior to the pandemic, TBOT for SUD was used in rural areas.[24] During the PHE, this model was introduced to other populations who benefit from low-barrier access, including transitional housing and those recently incarcerated.[25–27] Initial treatment with opiate agonist therapy requires frequent visits, which if required to be in-person, can inhibit engagement in job and recovery-related activities that facilitate improved outcomes. Telemedicine enables engagement in these critical activities and evidence-based medical treatment.

Similarly, individuals with behavioral health conditions such as depression and anxiety disorders often are unable to access care from a trained clinician, and benefit from frequent counseling/monitoring, for which face-to-face visits may be impractical or prohibitive. Telemedicine has substantially reduced barriers to access.[28,29]

The Congress has permanently expanded telemedicine for behavioral health beyond the PHE, including audio-only care when appropriate.[30] Separately, the Department of Health and Human Services has proposed to permanently expand telemedicine (including audio-only) for buprenorphine treatment from Outpatient Treatment Programs.[31] However, this does not apply for patients receiving methadone (which was never authorized during the PHE). As black patients are more likely to receive methadone,[32,33] these partial expansions exacerbate disparities stemming from practices and policies that are biased and racist in nature. Furthermore, a substantial portion of behavioral health and SUD treatment comes from primary care, including initial diagnosis and treatment, and ongoing management.[34] Yet the expanded billing codes enabling permanent behavioral health and SUD telemedicine payment are not applicable for primary care services which provide integrated, whole-person care concomitantly addressing SUD, behavioral health, other chronic diseases, and their substantial interplay. This distinction of covered services cripples the intended effect of these policies, as does the distinction between behavioral and physical health conditions. Chronic medical conditions such as hypertension and diabetes share similar features with depression and SUD treatment, i.e., frequent interactions, discussing patient-reported symptoms and readings, counseling, and medication titration, and are well suited for telemedicine care.

Case 3a: Audio-only—a Critical Tool to Improve Equity

Ms. R is a 47 year-old female with diabetes and multiple hospital admissions for diabetic ketoacidosis due to running out of medications, who is currently experiencing homelessness. Her PCP offers her a virtual visit. She does not have a working phone but is able to borrow her sister's. She is residing in a public outdoor setting without reliable internet access, so she opts for an audio-only appointment. During the call, the patient and PCP formulate a new treatment plan including mailing prescriptions to her sister's home and having a community health worker call her sister to coordinate connection to housing services. Six months later, she moved into an independent home, was taking her medications more regularly, and had no further hospital admissions.

Telemedicine uptake has been highest in neighborhoods with the most social deprivation,[35] and is a critical tool to reduce disparities. While synchronous audio-video visits can provide a richer clinical experience than audio-only, numerous barriers exist. As practicing internists in a variety of primary care settings, we have encountered countless situations where telephone was the only option to reach patients. Studies have demonstrated that patients without access to mobile devices or adequate broadband service, older patients, non-English speakers, and those without a private location (such as in smaller, multi-tenant dwellings) faced significant obstacles to the usage of audio-video visits.[36–38]

Digital redlining has been well described, with lower broadband availability in rural areas, low-income neighborhoods, and in Black and other racial and ethnic minority communities.[39] These patients are more likely to engage in audio-only appointments, while White patients living in higher-income areas are more likely to attend audio-video visits.[40–43] These digital inequities highlight the critical role that audio-only and simple technological solutions play in preserving access to care, especially for those already facing structural inequities.[44,45]

A 2021 survey found that in many cases audio-only visits were as likely as audio-video to resolve patients' issues.[46] Another study found that pharmacist-led audio-only medication reconciliation post-discharge reduced 30-day readmissions by 70%.[47] Phone visits also enable frequent collection of home data (e.g., blood pressure or glucose) and medication adjustments for chronic disease management.

The provision of audio-only services to populations affected by digital redlining and other broadband inequities can significantly improve access to care, positively influence upstream social drivers of health, and can help address longstanding health disparities that were amplified by the COVID-19 pandemic.

Case 3b: Pitfalls—Bias and Double Standards

Ms. D is a 78 year-old black veteran who recently relocated. She does not have access to public transportation for an in-person intake and is offered a telephone visit. During the phone call, her new physician reviews her medical history and performs a medication reconciliation, but Ms. D does not feel that she has made a personal connection with her PCP. After the visit, she sends a patient portal message asking if the clinic offers audio-video visits. Upon review, an intake audio-video visit was not offered.

While audio-only access is critical for improving equity, audio-video visits allow for visual cues that enhance relationship-building, communication, and patient understanding, and they facilitate more accurate clinical assessments, and remain the standard of care.[48–50] While many studies have focused on patient-level barriers, one study found that practices and clinicians respectively contribute to 38% and 26% of variation in audio-video use in comparison to patient-level factors (9%).[41] This reinforces the importance of considering multiple levels (individual, family, community, systems) where barriers to digital health equity exist, including implicit bias by clinicians and ancillary staff (e.g., ageism and racism).[51] It also demonstrates the need for standardized decision support tools that ensure offering and provision of the appropriate service (audio-video, audio-only, or in-person visits).

Case 4: Inappropriate Use—the Need for Clinical Guidelines

Mr. A is a 19-year old male who develops abdominal discomfort. He starts taking over-the-counter ibuprofen and calcium carbonate. Subsequently, the pain worsens and he utilizes the urgent care video visit service offered by his insurance plan. The clinician prescribes him pantoprazole for possible dyspepsia and advises him to stop ibuprofen. That night, he wakes up with excruciating abdominal pain and calls 911. In the ED he is diagnosed with a perforated gastric ulcer.

Telemedicine is not clinically appropriate for all scenarios. Some require a physical exam and rapid diagnostic testing (e.g., new-onset chest pain, acute shortness of breath, or worsening abdominal pain). Health systems have begun to develop workflows to triage when patients should not be scheduled for telemedicine visits.[52] High-profile deaths after inappropriate virtual care[53] have highlighted the need to expedite the creation of clear standards.[54] Expanding education for trainees and staff clinicians to provide safe care that acknowledges increased diagnostic uncertainty is important to advancing high-quality telemedicine. Faculty development is critical, as most of today's educators have not received formal instruction on teaching "webside manner" or telemedicine-specific assessment tools, although these resources have since been developed.[55]

SGIM RECOMMENDATIONS

These cases highlight situations where telemedicine may facilitate achievement of the quintuple aim, particularly regarding improved care experience, equity, and better health from improved access. They also highlight ongoing challenges and uncertainty which must be studied and addressed. SGIM provides recommendations in three domains: policy and payment, implementation and clinical practice, and medical education.

Policy and Payment

Prior to the COVID-19 pandemic, payors largely viewed telemedicine as a substitute for in-person care in rural areas. Per CMS, "statute requires that telehealth services be so analogous to in-person care such that the telehealth service is essentially a substitute for a face-to-face encounter."[31] The PHE has demonstrated that telemedicine can do more than simply replace in-person encounters due to geographic barriers, including increasing equitable access and extending longitudinal primary care. SGIM strongly urges telemedicine payment and policy changes to preserve safe, high-quality care.

End Geographic, Originating Site, and Distant Site Requirements. Pre-pandemic requirements limited who could receive telemedicine services based on where patients

resided (rural, health professional shortage areas), where telemedicine services were received (not in the patient's home), and who provided the services (community health centers were excluded). Permanently ending these requirements would allow telemedicine services to be provided to anyone who needs them. We urge the Congress to pass legislation to permanently effect these changes.

Audio-Only Evaluation and Management (E/M) Services Must Be Allowed Until Structural Barriers to Video Access Are Eliminated. Until all Americans have access to high-speed Internet, appropriate devices, and digital health literacy, audio-only services will remain critical to equitable delivery of healthcare. Even then, patient circumstances and preferences will favor audio-only at times. Many individuals who cannot currently access audio-video services belong to underserved communities that have a high burden of chronic diseases and have been historically discriminated against. Ending provisions for audio-only care will subject them to additional digital health discrimination. While the Congress and CMS have moved to preserve audio-only care for SUD and behavioral health, current provisions do not allow for comprehensive, whole-person care including management of concomitant chronic conditions to be addressed via audio-only in primary care settings. We urge the Congress to pass legislation to permanently expand the definition of telemedicine to include audio-only services. No modality of telemedicine should fully replace in-person care, but all forms of telemedicine should be an option for all patients.

Accurate Assessments of Whether Telemedicine Services Are Substitutive or Additive Must Be Employed When Estimating Utilization and Cost. Presently, the Congressional Budget Office scores telemedicine legislation as additive, stating the cost of reimbursing telemedicine would be in addition to all other services. The evidence-base and our experience do not support this. In some circumstances, such as post-discharge visits, telemedicine is fully substitutive.[15] Virginia Medicaid data also demonstrated overall telemedicine care was substitutive, with no increase in costs.[7,18] In other circumstances, telemedicine leads to improved access and may result in appropriate additional visits for previously foregone care, such as for improved chronic disease management and as a result of improved visit adherence rates. Estimates of cost must reflect the nuanced use of telemedicine that the evidence suggests. Additionally, as evidence emerges about the impact of telemedicine (e.g., whether telemedicine can reduce emergency department visits and hospitalizations), these factors should be considered. Finally, beyond the direct impact on federal healthcare spending, a broader societal view must be considered, including reduced fuel and transportation costs and greenhouse gas emissions with use of telemedicine.

New telemedicine Service Codes Must Be Developed to Allow Fair and Evidence-Based Reimbursement. Telemedicine is predominantly used in cognitive specialties through E/M services,[7] which have been inadequately reimbursed for decades in Medicare's Physician Fee Schedule.[56] Qualified professionals should be allowed to demonstrate the intensity of their medical decision-making within a robust set of Medicare E/M service codes that are appropriately reimbursed. We urge CMS to define new telemedicine service codes, including specific codes for audio-only services, which accurately reflect workload.

Even as payment shifts to value-based programs and prospective payments, accurate valuation of services remains foundational. Telemedicine is a key component of advanced delivery models, allowing patients greater access to clinician and ancillary support for robust disease management. The National Academy of Medicine report on Implementing High Quality Primary Care highlights the importance of paying for teams to provide care, not just physicians to provide services.[57] As such, virtual care provided by all team members, such as clinical pharmacists and diabetes educators, must be supported by telemedicine payment policy.

Broadband Internet Must Be Available for All. Policymakers must address structural barriers so that audio-video visits are an option for everyone. High-speed Internet is not currently accessible to all Americans. Policies outside of healthcare must be implemented to accelerate access, end digital redlining and ensure that broadband, a "super" determinant of health, is available to all.[58,59]

Implementation and Clinical Practice

SGIM makes the following recommendations for patient-centered clinical use at the individual patient level, and equitable telemedicine implementation at the health system level.

Appropriate Clinical Use

Audio-Only, Audio-Video, or In-Person Care Should Be Determined by Shared Decision-Making, Incorporating Patient Preferences and Clinical Appropriateness Some care, such as behavioral health counseling, titration of medications, or evaluation of simple acute conditions such as uncomplicated urinary tract infections, may be equally served by all modalities. Other care, such as device or insulin training, may only be appropriate for audio-video or in-person visits. Some cases will require in-person care, such as evaluation of new symptoms that require a physical exam. In other circumstances, such as exacerbation of chronic conditions, the appropriate modality of care will depend on the extent of the relationship and the resources available. For example, heart failure exacerbations may require physical examination and advanced diagnostics—or for patients with a home scale, pulse oximeter, and significant family support, virtual care to titrate diuretics and close follow-up may provide higher patient satisfaction and equal quality of care. Clinical guidelines must be developed and implemented, while still allowing for flexibility based on individual factors.

Telemedicine Should Be Used Within the Context of Longitudinal, Trusted Relationships and Should Extend This Relationship, Not Fragment Care In general, telemedicine visits should be used in conjunction with in-person visits, and not as the sole manner of care. However, this must be contextualized for specific patients. In some cases, such as transportation barriers, a harm-reduction approach may dictate more virtual care than otherwise considered optimal.

Equitable System-Level Implementation

Measure Equity. Healthcare systems should build data reporting infrastructure to monitor equitable implementation, including access to care and clinical outcomes of telemedicine services.

Design for Equity. Clinics and healthcare systems should design their virtual care offerings in partnership with patients and communities that experience disparities, thereby increasing the likelihood that virtual care programs equitably meet the needs of the community.

Implement for Equity. By measuring equity and forming community partnerships, clinics and healthcare systems should be well-positioned to identify potential pitfalls and implement strategies to mitigate barriers. The VA "Digital Divide" Consult service is an example of how to address patient-level barriers; this program provides a device and/or training to veterans and establishes agreements with Internet service providers to defer charges for low-income veterans.[60] Additionally, telemedicine services and modalities should be offered to all patients using standard processes to minimize implicit bias.

Telemedicine Education

Telemedicine education must encompass two distinct domains: providing appropriate resources and support to faculty/educators who themselves never received telemedicine-specific training, and adopting educational strategies/competencies for current trainees.

Implement Interactive Faculty Training on Telemedicine Skills. Many medical educators are novices in digital health and must first develop mastery of their own skills to teach and evaluate.[61,62] To mitigate well-known barriers in faculty engagement (e.g., time, costs), institutions must provide time and/or compensation for faculty development and adapt external educational telemedicine resources to the individual institution.[63]

Faculty development curricula can utilize interactive educational activities for active learning, including skills-targeted workshops and case-specific simulation.[64] The Telehealth Mini-Residency for Providers in development at the VA National Simulation Center employs multiple interactive strategies for faculty participants to incorporate diagnostic reasoning principles into the triage mindset, visit type selection, and adaptation of the virtual physical exam.[65]

Develop Telemedicine-Specific Educational Strategies for Trainees that Align with the Association of American Medical Colleges Telehealth Competencies and Accreditation Council for Graduate Medical Education Milestones 2.0. We recommend using the telehealth competencies developed by the Association of American Medical Colleges to guide educational strategies for medical students, residents, and faculty.[66] These include six domains related to patient safety, access and equity, communication, data collection, technology, and ethical practices (Appendix). In addition, the updated 2021 Accreditation Council for Graduate Medical Education Milestones 2.0 includes a road map of how trainees should be implementing telemedicine visits into their practice.[67]

CONCLUSION

The opportunity for patients to receive care in the virtual setting has been paradigm-shifting. Telemedicine has considerably increased access to care and early evidence supports its ability to advance the goals of the quintuple aim, including improving patient satisfaction, clinical outcomes, and health equity.

Policy steps must be taken at many levels to support telemedicine, including Congressional legislation to permanently end geographic and site restrictions and expanding the definition of telemedicine to include audio-only services. Additionally, CMS should create appropriate telemedicine E/M service codes for reimbursement. Policy outside of healthcare must also be developed to ensure the end of digital redlining practices, to ensure broadband internet availability for all.

At the implementation level, clinical guidelines and decision support tools must be adopted to promote the most appropriate and equitable use of telemedicine. Telemedicine should not be used in all scenarios, nor as the sole modality. However, within the context of longitudinal, trusted relationships, telemedicine can extend and enhance comprehensive care. Additionally, health systems must develop data-reporting infrastructure and community partnerships to measure, design and implement telemedicine strategies that are meaningful and equitable for the communities they serve.

Telemedicine educational strategies, competencies, and curricula must also be developed for training programs and continuing medical education, to ensure that future generations of physicians, as well as current physicians trained prior to the COVID-19 pandemic, can deliver high-quality, patient-centered telemedicine care that advances the goals of the quintuple aim.

Supplementary Information *The online version contains supplementary material available at https://doi.org/10.1007/s11606-023-08190-8.*

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Author Contribution *None*

Declarations:

Conflict of Interest: *All authors declare no conflict of interest.*

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